THE IMPERIAL GAZETTEER OF INDIA

VOL. XII

EINME TO GWALIOR

NEW EDITION

PUBLISHED UNDER THE AUTHORITY OF HIS MAJESTY'S
SECRETARY OF STATE FOR INDIA IN COUNCIL

OXFORD
AT THE CLARENDON PRESS
1908

HENRY FROWDE, M.A.
PUBLISHER TO THE UNIVERSITY OF OXFORD
LONDON, EDINBURGH
NEW YORK AND TORONTO

INTRODUCTORY NOTES

NOTES ON TRANSLITERATION

Vowel-Sounds

a has the sound of *a* in 'woman.'
ā has the sound of *a* in 'father.'
e has the vowel-sound in 'grey.'
i has the sound of *i* in 'pin.'
ī has the sound of *i* in 'police.'
o has the sound of *o* in 'bone.'
u has the sound of *u* in 'bull.'
ū has the sound of *u* in 'flute.'
ai has the vowel-sound in 'mine.'
au has the vowel-sound in 'house.'

It should be stated that no attempt has been made to distinguish between the long and short sounds of *e* and *o* in the Dravidian languages, which possess the vowel-sounds in 'bet' and 'hot' in addition to those given above. Nor has it been thought necessary to mark vowels as long in cases where mistakes in pronunciation were not likely to be made.

Consonants

Most Indian languages have different forms for a number of consonants, such as *d*, *t*, *r*, &c., marked in scientific works by the use of dots or italics. As the European ear distinguishes these with difficulty in ordinary pronunciation, it has been considered undesirable to embarrass the reader with them; and only two notes are required. In the first place, the Arabic *k*, a strong guttural, has been represented by *k* instead of *q*, which is often used. Secondly, it should be remarked that aspirated consonants are common: and, in particular, *dh* and *th* (except in Burma) never have the sound of *th* in 'this' or 'thin,' but should be pronounced as in 'woodhouse' and 'boathook.'

Burmese Words

Burmese and some of the languages on the frontier of China have the following special sounds:—

aw has the vowel-sound in 'law.'
ö and ü are pronounced as in German.
gy is pronounced almost like *j* in 'jewel.'
ky is pronounced almost like *ch* in 'church.'
th is pronounced in some cases as in 'this,' in some cases as in 'thin.'
w after a consonant has the force of *uw*. Thus, *ywa* and *pwe* are disyllables, pronounced as if written *yuwa* and *puwe*.

It should also be noted that, whereas in Indian words the accent or stress is distributed almost equally on each syllable, in Burmese there is a tendency to throw special stress on the last syllable.

General

The names of some places—e.g. Calcutta, Bombay, Lucknow, Cawnpore—have obtained a popular fixity of spelling, while special forms have been officially prescribed for others. Names of persons are often spelt and pronounced differently in different parts of India; but the variations have been made as few as possible by assimilating forms almost alike, especially where a particular spelling has been generally adopted in English books.

Notes on Money, Prices, Weights and Measures

As the currency of India is based upon the rupee, all statements with regard to money throughout the *Gazetteer* have necessarily been expressed in rupees, nor has it been found possible to add generally a conversion into sterling. Down to about 1873 the gold value of the rupee (containing 165 grains of pure silver) was approximately equal to 2*s*., or one-tenth of a £; and for that period it is easy to convert rupees into sterling by striking off the final cipher (Rs. 1,000 = £100). But after 1873, owing to the depreciation of silver as compared with gold throughout the world, there came a serious and progressive fall in the exchange, until at one time the gold value of the rupee dropped as low as 1*s*. In order to provide a remedy for the heavy loss caused to the Government of India in respect of its gold payments to be made in England, and also to relieve foreign trade and finance from the inconvenience due to constant and unforeseen fluctuations in exchange, it was resolved in 1893 to close the mints to the free coinage of silver, and thus force up the value of the rupee by restricting the circulation. The intention was to raise

the exchange value of the rupee to *1s. 4d.*, and then introduce a gold standard (though not necessarily a gold currency) at the rate of Rs. 15 = £1. This policy has been completely successful. From 1899 onwards the value of the rupee has been maintained, with insignificant fluctuations, at the proposed rate of *1s. 4d.*; and consequently since that date three rupees have been equivalent to two rupees before 1873. For the intermediate period, between 1873 and 1899, it is manifestly impossible to adopt any fixed sterling value for a constantly changing rupee. But since 1899, if it is desired to convert rupees into sterling, not only must the final cipher be struck off (as before 1873), but also one-third must be subtracted from the result. Thus Rs. 1,000 = £100 − ⅓ = (about) £67.

Another matter in connexion with the expression of money statements in terms of rupees requires to be explained. The method of numerical notation in India differs from that which prevails throughout Europe. Large numbers are not punctuated in hundreds of thousands and millions, but in lakhs and crores. A lakh is one hundred thousand (written out as 1,00,000), and a crore is one hundred lakhs or ten millions (written out as 1,00,00,000). Consequently, according to the exchange value of the rupee, a lakh of rupees (Rs. 1,00,000) may be read as the equivalent of £10,000 before 1873, and as the equivalent of (about) £6,667 after 1899; while a crore of rupees (Rs. 1,00,00,000) may similarly be read as the equivalent of £1,000,000 before 1873, and as the equivalent of (about) £666,667 after 1899.

Finally, it should be mentioned that the rupee is divided into 16 annas, a fraction commonly used for many purposes by both natives and Europeans. The anna was formerly reckoned as 1½*d.*; it may now be considered as exactly corresponding to 1*d.* The anna is again subdivided into 12 pies.

The various systems of weights used in India combine uniformity of scale with immense variations in the weight of units. The scale used generally throughout Northern India, and less commonly in Madras and Bombay, may be thus expressed: one maund = 40 seers; one seer = 16 chittaks or 80 tolas. The actual weight of a seer varies greatly from District to District, and even from village to village; but in the standard system the tola is 180 grains Troy (the exact weight of the rupee), and the seer thus weighs 2·057 lb., and the maund 82·28 lb. This standard is used in official reports and throughout the *Gazetteer*.

For calculating retail prices, the universal custom in India is to express them in terms of seers to the rupee. Thus, when prices change, what varies is not the amount of money to be paid for the

same quantity, but the quantity to be obtained for the same amount of money. In other words, prices in India are quantity prices, not money prices. When the figure of quantity goes up, this of course means that the price has gone down, which is at first sight perplexing to an English reader. It may, however, be mentioned that quantity prices are not altogether unknown in England, especially at small shops, where pennyworths of many groceries can be bought. Eggs, likewise, are commonly sold at a varying number for the shilling. If it be desired to convert quantity prices from Indian into English denominations without having recourse to money prices (which would often be misleading), the following scale may be adopted—based upon the assumptions that a seer is exactly 2 lb., and that the value of the rupee remains constant at 1*s.* 4*d.*: 1 seer per rupee = (about) 3 lb. for 2*s.*: 2 seers per rupee = (about) 6 lb. for 2*s.*; and so on.

The name of the unit for square measurement in India generally is the *bīgha*, which varies greatly in different parts of the country. But areas have always been expressed throughout the *Gazetteer* either in square miles or in acres.

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Einme (Thīgwin).—North-west township of Myaungmya District, Lower Burma, lying between 16° 34′ and 16° 55′ N. and 94° 52′ and 95° 18′ E., with an area of 315 square miles. The population was 41,979 in 1891 and 59,367 in 1901, distributed in 122 villages. The head-quarters are at Einme (population, 2,050), on a waterway connecting the Dagā and Myaungmya rivers. The township is level, well watered, and fertile throughout. More than one-third of the population is Karen, and the proportion of Christians is large. In 1903–4 the area under cultivation was 170 square miles, paying Rs. 2,51,000 land revenue.

Eksambe.—Village in the Chikodi *tāluka* of Belgaum District, Bombay, situated in 16° 32′ N. and 74° 40′ E. Population (1901), 5,970. The village is purely agricultural, and contains one boys' school with 90 pupils.

Eksar.—Alienated village of 701 acres in the Salsette *tāluka* of Thāna District, Bombay, situated in 19° 13′ N. and 72° 59′ E., about a mile north-west of Borivli station on the Bombay, Baroda, and Central India Railway. Population (1901), 1,906. In a mango orchard, on the west bank of a fine pond, is a row of six slabs of trap, four of them about 10 feet high by 3 broad, the fifth about 3 feet high by 3 broad, and the sixth about 4 feet high by 1 broad. All, except one which is broken, have their tops carved into funereal urns, with heavy ears and hanging bows of ribbon, and floating figures above bringing chaplets and wreaths. The faces of the slabs are richly cut in from two to eight level belts of carving, the figures in bold relief chiselled with much skill. They are Hindu *pālīyās* or memorial stones, and seem to have been set up in front of a temple which stood on the top of the pond bank, a site afterwards occupied by a Portuguese granary. Each stone records the prowess of some warrior either by land or sea.

[For a full description of these stones, which possess features of unusual interest, see *Bombay Gazetteer*, vol. xiv, pp. 57–9.]

Elephanta (or *Ghārāpuri*).—Island included in the Panvel *tāluka*

of Kolāba District, Bombay, situated in 18° 58′ N. and 73° E., in Bombay harbour, about 6 miles from Bombay City and 4 from the shore of the mainland. The island measures from 4 to 4½ miles in circumference, and consists of two long hills separated by a narrow valley; the superficial area varies from 6 to 4 square miles according as the tide is at ebb or flow. On the west side it furnishes building stone of medium quality, which is at present being extensively quarried by the contractors to the Bombay Port Trust for use in the new docks. The island was named Elephanta by the Portuguese, from a large stone elephant which stood near the old landing-place on the south side of the island. This elephant was 13 feet 2 inches in length, and about 7 feet 4 inches high; but its head and neck dropped off in 1814, and subsequently the body sank down into a shapeless mass of stones, which were removed in 1864 to the Victoria Gardens in Bombay. Near the point where the two hills approach each other, and not far to the south-east of the Great Cave, once stood the stone statue of a horse, described by an early writer as being 'so lively, with such a colour and carriage, and the shape finisht with that Exactness that many have rather fancyed it, at a distance, a living Animal, than only a bare Representation.' This statue has disappeared. Except on the north-east and east the hill-sides are covered with brushwood; in the hollows under the hill are clusters of mango, tamarind, and *karanja* trees. A broken line of palms stands out against the sky along the crest of the hill. Below is a belt of rice land. The foreshore is of sand and mud, bare and black, with a fringe of mangrove bushes. At one period, from the third to perhaps the tenth century, the island is supposed to have been the site of a city, and a place of religious resort. Some archaeologists would place here the Maurya city of Purī. The caves are the chief objects of interest: but in the rice-fields to the east of the northern or Shet landing-place brick and stone foundations, broken pillars, fallen statues of Siva, and other traces of an ancient city have been found. The landing-place is now on the north-west of the island.

The famous rock-caves are the resort of many visitors. Of these wonderful excavations, four are complete or nearly so; a fifth is a large cave now much filled up, with only rough masses of stone left to support the roof; and a sixth is merely the beginning of the front of what seems to have been intended for a very small excavation—possibly two or three cells for recluses. The most important and most frequently visited of these Brāhmanic rock-temples is the Great Cave, which is situated in the western or larger of the two hills of the island at an elevation of about 250 feet above high-water level. The entrance is reached by a winding path about three-quarters of a mile in length from the landing-place. The cave faces the north, and is entirely hewn out of a hard compact variety of trap rock. From the front entrance to the back it

measures about 130 feet, and its length from the east to the west entrance is the same. It does not, however, occupy the entire square of this area. What may be called the porticoes, or the three open sides, are only about 54 feet long and 16½ feet deep. Omitting these and the back aisle, immediately in front of three of the principal sculptured compartments, which is of about the same dimensions as each portico, the body of the cave may be considered as a square of about 91 feet each way, supported by six rows of columns, with six columns in each row, except at the corners, where the uniformity is broken on the west side to make room for the shrine, which occupies a space equal to that enclosed by four of the columns. There were originally 26 columns, with 16 half-columns; but 8 of the separate pillars have been destroyed, and others are much injured. As neither the floor nor the roof is perfectly horizontal, they vary in height from 15 to 17 feet. The most striking of the sculptures is the famous colossal three-faced bust, or *trīmurti*, at the back of the cave, facing the entrance. This is a representation of Siva in his threefold character of Creator, Preserver, and Destroyer; and all the other sculptures relate to the same god, the cave being, like every other Hindu rock-temple of Western India, a Saiva one. The *trīmurti* is 17 feet 10 inches in height; and a line drawn round the three heads at the level of the eyes measures 22 feet 9 inches in length. The length of the middle face (Brahma's) is 4 feet 4 inches; those of the others (Vishnu and Rudra) 4 feet 1 inch and about 5 feet. In 1865 this unique bust was mutilated by some 'barbarian clothed in the garb of civilization,' who broke off a portion of the noses of two of the faces; and since then some of the other sculptures in the temple have been similarly treated, so that it has been found necessary to place a sergeant and two native policemen to protect the cave. The *trīmurti* is guarded by two gigantic *dwārapālas* or 'doorkeepers' of rock, respectively 12 feet 9 inches and 13 feet 6 inches high; both figures are much defaced. The *lingam* chapel, on the right-hand side of the temple on entering, contains several *dwārapālas* and other figures; and two compartments on either side of the *trīmurti* are also ornamented with numerous sculptured groups. There are several other compartments in the Great Cave, all containing interesting sculptures. Further details will be found in the exhaustive account of Dr. Burgess (*The Rock Temples of Elephanta or Ghārāpuri*, Bombay, 1871), from which this article is chiefly condensed.

'The impression on the mind,' writes Dr. Burgess, 'may be imagined rather than described, when one enters the portico [of the Great Cave], passing from the glare and heat of tropical sunshine to the dim light and cool air of the temple, and realizes that he is under a vast roof of solid rock, that seems to be supported only by the ranges of massive columns that recede in the vistas on every side, some of which appear to have

split or fallen under the tremendous superincumbent weight. And the feeling of strange uncertain awe that creeps over the mind is only prolonged when in the obscure light we begin to contemplate the gigantic stony figures ranged along the walls from which they seem to start, and from the living rock of which they are hewn.'

De Couto describes the stone of the mountain where the temples have been carved as of a grey colour. The same traveller, writing at the beginning of the seventeenth century, continues:—

'But the whole body inside, the pillars, the figures, and everything else, was formerly covered with a coat of lime mixed with bitumen and other compositions, that made the temple bright and very beautiful, the features and workmanship showing very distinct, so that neither in silver nor in wax could such figures be engraved with greater nicety, fineness, or perfection.'

At the present time there is no trace of this coating.

The Second Cave, which is situated a short distance to the south-east of the Great Cave, faces east-north-east, and is 109½ feet in length, including the chapel at the north end. The façade, which was nearly 80 feet in length, is completely destroyed, and the cave is so full of *débris* and so ruined by water that no proper estimate can now be formed of the appearance it originally represented. It contains at present only one sculptured group. At the south end of the portico of this cave is a large block of rock not hewn away, above which is a hole through a thin partition of rock into one of the cells of the Third Cave. The proper entrance, however, is a little to the south. This cave is in an even more dilapidated condition than the second.

The Fourth Cave, now known to the natives as 'Sītā Bai's Devala,' is situated on the other hill of the island, and about 100 feet above the level of the Great Cave. It is in better preservation than those last mentioned, and had formerly a beautiful gate with a marble porch of exquisite workmanship; but these have now disappeared.

Sufficient data do not exist to enable us to fix with precision the date of the Elephanta caves. Tradition attributes them variously to the Pāndavas, to a king of Kanara named Bānāsur, and to Alexander the Great; and many not less unreasonable conjectures have been hazarded regarding them. Mr. Fergusson concludes (for reasons for which the reader is referred to his *Rock-cut Temples of India*) that the Great Cave was excavated in the tenth century A.D.; but Dr. Burgess, while admitting that there are grounds for this conclusion, is inclined to attribute them to the latter part of the eighth or to the ninth century. No inscription is now to be found in the caves. It is hoped, however, that the date and name of the excavator may yet be learned from a stone, taken to Europe about 1540 by the Portuguese Viceroy Dom João de Castro, which may one day be rediscovered and deciphered.

The Great Cave is still used on Saiva festivals, and especially by Hindus of the Baniā caste; and at the Sivarātri, the greatest of the Saiva festivals, just before the first new moon falling after the middle of February, a religious fair is held here. The view from the front of the Great Cave is very beautiful; and from the site of an old bungalow, not far from the porch, a fine prospect is commanded of Bombay harbour, with Butcher Island in the foreground. The island had a population of 480 in 1901.

Elgandal District[1].—Former District in the Warangal Division, Hyderābād State, lying between Adilābād and Nizāmābād on the north and north-west, Medak on the west, and Warangal on the south, while on the east the rivers Prānhita and Godāvari separated it from Chānda District and Bastar State of the Central Provinces. It had an area of 7,203 square miles, including *jāgīr* lands, and lay between 17° 14′ and 19° 15′ N. and 78° 30′ and 80° 25′ E. The area of the State and *Sarf-i-khās* or crown lands was 5,898 square miles. Changes made in 1905 will be referred to below. A range of hills, commencing at Gurrapalli, runs in a north-easterly direction as far as Jagtial, whence it proceeds to Vemalkurti near the Godāvari river. A second range, known as the Sunigram range, proceeds from Sunigram and Mallangūr parallel to the former range, at a distance of about 32 miles. The villages of Kuncherla, Minola, and Marmulagutta on this range are between 2,200 and 2,300 feet above the sea. A third range starts in the south-west corner of the District from the valley of the Māner river, and runs in a north-easterly direction. Intersecting the Sunigram range, it passes beyond Rāmgīr, where it is about 1,600 feet above the sea. This range ends near the river Godāvari. The most important river is the Godāvari, which enters the north-west corner of the District and flows for a distance of 176 miles within its limits, dividing it from Chānda and Bastar in the Central Provinces. Another important river is the Māner, which traverses the District from west to east as far as Kārlagunta, whence it flows due north till it falls into the Godāvari in the Mahādeopur *tāluk*. Its length in the District is about 145 miles. The Pranhitā, another tributary of the Godāvari, joins it in the Chinnūr *tāluk*. The Peddavāgu, 50 miles long, and the Chelluvāgu, 12 miles long, are also tributaries of the Godāvari, which they join on the southern or right bank.

Physical aspects.

The geological formations are the Archaean gneiss, the Cuddapah, Sullavai, and Gondwāna series, the latter including the Tālcher, Barākar, Kāmptee, Kota-Māleri, and Chikiāla formations. The

[1] Elgandal ceased to exist in its present form in 1905. The new District called Karīmnagar is briefly described in the paragraph on Population. *See also* KARĪMNAGAR DISTRICT.

Archaean series occupies most of the District, the remaining formations occurring at its eastern end[1].

Among the trees of the District may be mentioned teak, mango, ebony, custard-apple, tamarind, black-wood, *tarvar* (*Cassia auriculata*), *babūl* (*Acacia arabica*), *eppa* (*Hardwickia binata*), and *nallāmaddi* (*Terminalia tomentosa*).

All kinds of large game abound, including tigers, bears, leopards, wolves, hyenas, *sāmbar*, spotted deer, &c., while peafowl, jungle-fowl, partridges, and quails are also found. In the vicinity of tanks and rivers water-fowl, duck, teal, &c., are abundant.

The portions of the District near the Godāvari are malarious; but the remaining *tāluks* are healthy. The temperature in Karīmnagar and Jamikunta rises in May to 110°, while in the rest of the *tāluks* the maximum varies between 100° and 105°. During December it falls to 60°.

The annual rainfall for the twenty-one years ending 1901 averaged 33 inches, but considerable fluctuations are recorded. Thus in 1881 and 1900 only 15 inches, or less than half the average, was received.

History.

Nothing is known of the early history of the District; but it certainly formed part of the Warangal territory, and after the conquest of Telingāna by the Musalmāns, and the fall of Warangal, it was included successively in the Bahmani and the Kutb Shāhi kingdoms. Upon the conquest of Golconda, it was annexed to the empire of Delhi by Aurangzeb, but was again separated from it on the foundation of the Hyderābād State, early in the eighteenth century, by Asaf Jāh.

Places of archaeological interest comprise a number of forts, temples, and mosques. The fort at Elgandal is an ancient structure, and contains a mosque built by Zafar-ud-daula about 1754, with a minaret which oscillates if shaken. In the Jamikunta *tāluk* are the two forts of Bājgūr and Malangūr, said to have been built respectively 700 and 1,000 years ago, and the two temples of Gurshāl and Katkūr, the former built about 1229, during the reign of Rājā Pratāp Rudra of Warangal. Though now in ruins, its exquisite stone carving is still in a good state of preservation. A pillar outside the temple has an inscription in Oriya. The fort of JAGTIAL was built for Zafar-ud-daula in 1747, by French engineers. In the same *tāluk* is an old temple at Dharampuri on the right bank of the Godāvari. The old fort of Anantagiri in the Sirsilla *tāluk*, now in ruins, is built on a hill. Two mosques in the Mahādeopur *tāluk*, one at Kālesar and the other at Sonipet, were built by Aurangzeb, as was the mosque at Rājgopālpet in the Siddipet *tāluk*. Pratāpgiri fort, in the Mahādeopur *tāluk*, is said to have been built by Rājā Pratāp Rudra.

[1] W. King, *Memoirs, Geological Survey of India*, vol. xviii, part iii.

Population.

The number of towns and villages in the District is 1,523. The population at the last three enumerations was: (1881) 939,539, (1891) 1,094,601, and (1901) 1,035,582. The decrease during the last decade was due to cholera and distress during the famine of 1900. The important towns are JAGTIAL, KORATLA, MANTHANI, KARĪMNAGAR, the District head-quarters, and VEMALWĀDĀ. About 96 per cent. of the population are Hindus. Telugu is spoken by 90 per cent. and Urdū by 6 per cent. The following table exhibits the chief statistics of population in 1901:—

Tāluk.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Karīmnagar	869	1	160	122,874	141	−18·8	Not available.
Lakhsetipet	462	...	114	46,254	100	− 3·4	
Chinnūr	710	1	99	47,072	66	+ 7·0	
Sultānābād	205	...	105	88,436	431	+ 0·7	
Mahādeopur	759	1	124	55,655	73	+ 4·6	
Jamikunta	590	...	149	117,894	199	− 9·6	
Siddipet	670	1	131	88,850	133	− 3·2	
Sirsilla	874	...	154	103,372	118	− 7·9	
Jagtial	759	2	197	156,942	207	− 2·0	
Jāgīrs, &c.	1,305	1	283	208,233	159	− 3·6	
Total	7,203	7	1,516	1,035,582	144	− 5·4	18,324

In 1905 the Parkāl *tāluk* was added to the District from Warangal, while Chinnūr and Lakhsetipet were transferred to Adilābād (Sirpur Tāndūr), and Siddipet to Medak. In its present form the District, henceforth to be known as KARĪMNAGAR, comprises the seven *tāluks* of Karīmnagar, Sultānābād, Mahādeopur, Jamikunta, Parkāl, Sirsilla, and Jagtial.

The purely agricultural castes number 164,000, or about 16 per cent. of the total, the most important being Kunbīs (89,000), Mītaiwārs (28,000), and Velmas (21,000). The Brāhmans muster strong, being 221,000, or over 21 per cent. The Dhangars or shepherds number 89,000, excluding Hatkars (64,400) and Kurmas (21,800). The Sālas, or weaver caste, number 80,400; the Mālas, or village menials, 67,300; the Komatis, or traders, 39,600; and the Ausalas, or smith caste, 30,000. More than 35 per cent. of the population are engaged in agriculture.

A Wesleyan mission was started in 1884 at Karīmnagar, with a European missionary and a staff of native catechists, and has branches at Kottapali and Mānākondūr. The mission supports several schools and a dispensary. The Wesleyan mission at Siddipet, established in 1886, maintains nine schools. The Census of 1901 showed the Christian population as 214, of whom 212 were natives.

The soils consist of *chalka*, *masab*, and *regar*. The *regar* is utilized for *rabi* crops, the *masab* partly for garden crops and partly for *rabi*, while the *kharif* crops are raised on *chalka* lands, which occupy about three-fifths of the entire cultivated area. The existence of numerous tanks is a marked feature. The alluvial soils of the river valleys are very fertile.

Agriculture.

The tenure of lands is mainly *ryotwāri*. *Khālsa* and crown lands occupy 5,898 square miles, of which 1,244 were cultivated in 1901; cultivable waste and fallows covered 778 square miles, 3,018 were forest, and 858 were not available for cultivation. The staple food-crop is *jowār*, grown on 570 square miles, or 45 per cent. of the net area cropped. Next to it is rice with 169 square miles. The areas occupied by gram, cotton, pulses, and oilseeds were 11, 58, 225, and 197 square miles respectively.

No breed of cattle is characteristic of the District; those found are small, but are well suited for light ploughing in the *chalka* lands. Ponies of very inferior class are bred. The sheep and goats are of the ordinary kind.

The irrigated lands cover an area of 183 square miles. The principal sources of irrigation are 5,694 tanks, large and small, and 16,693 masonry and 6,323 unbricked wells, all in good repair. A staff of irrigation engineers is engaged in preparing estimates for the tanks in disrepair, which number over 1,750.

The District contains large tracts of forest, especially in the *tāluks* of Chinnūr, Mahādeopur, Lakhsetipet, and in parts of Jagtial and Sirsilla, all under the Forest department. The total area of forests is 3,018 square miles, of which 816 square miles are 'reserved,' and 2,202 square miles protected and unprotected forests. The trees include teak, ebony, rosewood, satinwood, *somi* (*Soymida febrifuga*), *tirman* (*Anogeissus latifolia*), *sandra* (*Acacia Catechu*), *kodsha* (*Cleistanthus collinus*), *eppa* (*Hardwickia binata*), *nallāmaddi* (*Terminalia tomentosa*), and *chinnangi* (*Lagerstroemia parviflora*), all of which produce good timber.

Forests.

Ironstone of very good quality is found almost everywhere, and is smelted by a primitive process for making ploughshares and other implements of husbandry. The Konasamudram and Ibrāhīmpatan steel is famous for the fine watered sword-blades that were formerly made from it. Steatite and talc are found in the vicinity of the iron mines throughout the District.

Silk *sārīs* and scarfs are made in the Siddipet and Jagtial *tāluks* and exported to Hyderābād. Coarse cotton cloth of every description is made in all parts and is extensively used by the people. The Sālas or Khatris, who number over 80,000, are engaged in weaving silk and cotton cloth. Coarse paper is manufactured at Koratla in the Jagtial *tāluk*,

Trade and communications.

and used by the *patwāris* for their village account-books. In Chinnūr, silk cloth is made from *tasar* cocoons, which is strong and durable. Silver filigree work of superior quality is turned out by the goldsmiths of Karīmnagar and Mānakondūr. Fine brass vessels are also made. There is a tannery at Karīmnagar, established in 1869; it employs 30 workmen and turns out leather to the value of Rs. 73,000 annually, which is exported to Madras.

The chief exports consist of rice, *jowār*, sesamum, mustard, castor-seed, tobacco, silk cloth, cotton, chillies, sheep, hides and leather, bones and horns, and brass vessels, which are sent to Warangal and Hyderābād. The principal imports are cotton and woollen cloth of European manufacture, glass-ware, refined sugar, jaggery, silver and gold, salt, opium, kerosene oil, and brass and copper sheets. The chief centres of trade are SIDDIPET, Peddapalli, Kamānpur, JAGTIAL, Ghambiraopet, and KARĪMNAGAR. The Komatis are the chief trading caste.

No railway passes through the District. There are 202 miles of road, of which 168 are gravelled, the rest being merely fair-weather roads. The principal route is the Karīmnagar-Kāzipet road. The other roads connect the District and *tāluk* head-quarters with one another.

Elgandal has generally been immune from famine, owing to its numerous tanks and wells and large forest tracts. In 1897, though the rainfall was about 28 inches, it fell at such inopportune periods and in such small quantities that the majority of the crops failed. Relief works were opened to alleviate the distress. The effects of the famine had not passed away when cholera supervened, and carried off a large number of people, as is evidenced by the decline of population at the Census of 1901. The great famine of 1900 did not affect this District very seriously.

Famine.

The District, as now constituted, is divided into four subdivisions for administrative purposes. The first consists of the *tāluks* of JAMIKUNTA and PARKĀL; the second of SULTĀNĀBĀD and MAHĀDEOPUR; the third of JAGTIAL and SIRSILLA; and the fourth of KARĪMNAGAR. Each of the first two is under a Second Tālukdār, and each of the other two under a Third Tālukdār. The First Tālukdār exercises a general supervision over all his subordinates. Each *tāluk* is under a *tahsīldār*.

Administration.

The First Tālukdār is the Chief Magistrate, as well as the Civil Judge of the District, and has a Judicial Assistant. The *tahsīldārs* preside in the subordinate civil courts. The Judicial Assistant is a joint-magistrate. The Second and Third Tālukdārs and the *tahsīldārs* exercise magisterial powers of the second and third class within their respective jurisdictions.

Up to 1866, villages and *tāluks* were leased out to revenue farmers, and in some instances collections were made from individual ryots, but

the State due was received in kind on a summary estimate. After the formation of the District, the *ryotwāri* system was adopted, and the lands were roughly measured, the assessment being fixed on the average of the previous ten years. The District has not yet been completely surveyed, and the old rates are still in force. The average assessment on 'dry' land is R. 1-0-0 (maximum Rs. 5-0-0, minimum Rs. 0-2-0), and on 'wet' land Rs. 12 0-0 (maximum Rs. 36-0-0, minimum Rs. 4-0-0). The land revenue and total revenue for a series of years are shown below, in thousands of rupees:—

	1881.	1891.	1901.	1903.
Land revenue .	13,79	22,60	24,39	18,28
Total revenue .	24,13	31,41	36,80	28,86

Owing to the changes in area made in 1905, the revenue demand is now about 22·6 lakhs.

The one-anna cess has been levied since 1903. *Tāluk* boards have been established at all *tāluk* head-quarters, except Karīmnagar, where there is a District board, which supervises the work of the *tāluk* boards as well as that of the Karīmnagar and other municipalities. Small municipal establishments are maintained at all the *tāluk* head-quarters.

The First Tālukdār is the head of the police administration of the District, with a Superintendent (*Mohtamim*) as his executive deputy. Under the latter are 10 inspectors, 75 subordinate officers, 608 constables and 25 mounted police, distributed among 36 *thānas* and 35 outposts. The District jail is at Karīmnagar, but prisoners whose terms exceed six months are sent to the Central jail at Warangal.

The District occupies a low position as regards the literacy of its population, of whom only 1·8 per cent. (3·3 males and 0·08 females) were able to read and write in 1901. The total number of pupils under instruction in State schools in 1881, 1891, 1901, and 1903 was 527, 2,948, 2,732, and 2,870 respectively. In 1903 there were 40 primary and 2 middle schools, with 27 girls under instruction in that year. The total expenditure on education in 1901 was Rs. 18,600, of which Rs. 1,836 was allotted to aided schools. The fee receipts amounted to Rs. 1,012 in the State schools and Rs. 227 in the aided schools.

There were five dispensaries in the District in 1901, with accommodation for 19 in-patients. The total number of out-patients treated was 39,514 and of in-patients 113, and the number of operations performed was 649. The expenditure amounted to Rs. 15,400. The number of persons vaccinated in the same year was 3,597, or 3·47 per 1,000 of the population.

Ellichpur District (*Elichpur*).—District of Berār, lying between 20° 50′ and 21° 47′ N. and 76° 40′ and 77° 54′ E., with an area of

2,605 square miles, which in 1905 was added to AMRAOTĪ DISTRICT. It was bounded on the north-west and north by the Tāpti river and the Betūl District of the Central Provinces; on the east by Amraotī; on the south by the Pūrna river and the Akot and Jalgaon *tāluks*; and on the west by the Nimar District of the Central Provinces. The area contains two entirely distinct natural divisions: the Melghāt *tāluk*, situated in the GĀWĪLGARH hill ranges, and the *tāluks* of Ellichpur and Daryāpur, situated in the PĀYĀNGHAT, or central valley of Berār. The scenery of these two tracts is described generally in the article on BERĀR. That portion of the District which lies in the plains is generally better wooded than the rest of the Pāyānghāt; and at the base of the hills the soil is stony, and the country is cut up by streams and small rivers which are liable to freshes in the rainy season. The blue range of hills relieves the scenery from the monotony which characterizes the landscape in other parts of the Pāyānghāt.

Physical aspects.

The river system consists of streams which rise in the Gāwīlgarh hills, and flow either northwards into the Taptī or southwards into the Purna, which is itself a tributary of the Taptī and drains the central valley of Berār. Towards the hot season all these streams dry up, save in parts where *dohos* hold a supply of water which lasts throughout the dry months of the year. These *dohos*, which are natural cavities worn out of the solid rock by the rush of water from above, are found chiefly in the hills. Lower down the water lies in large sheets.

The geology of that portion of the District which lies in the Pāyānghāt is described in the article on BERĀR. Here the Deccan trap is covered with a layer of alluvial black loam, which is everywhere, except at the base of the hills, of considerable depth. The Gāwīlgarh hills are formed chiefly of compact basalt, very much resembling that of the Giant's Causeway. It is found columnar in many places; and at Gāwīlgarh it appears stratified, the summits of several hills presenting a continued stratum of many thousand yards in length. The basalt frequently and suddenly changes into a wacke, of all degrees of induration, and of every variety of composition usually found among trap rock.

The forest vegetation of the Melghāt *tāluk* will be noticed under the head of Forests. In the plains and at the foot of the hills, the commonest trees are the tamarind, the *mahuā*, the mango, the *babūl*, and the *hiwar*. The weedy vegetation of cultivated lands resembles that of Central India and the Deccan. In the Melghāt orchids are fairly common; and, owing to the heavier rainfall, the ground vegetation is more luxuriant and more varied in colour than that of the plains. Wild balsams and other flowering plants are common.

The hill forests contain tigers, leopards, bears, bison, *sāmbar*, barking-

deer, and spotted deer. Peafowl abound, and the grey jungle-fowl (*Gallus sonneratii*) and spur-fowl are common. The plains are now so covered with cultivation that game is scarce. Hog, *nīlgai*, *chinkāra*, and antelope are, however, found. Of monkeys there are two kinds: the *langūr*, found in both the plains and the hills; and the small red monkey, found only in the hills.

The climate of the two *tāluks* in the plains resembles that of the rest of the Berār valley; but the country immediately under the hills is, as is usual in such tracts in India, malarious and unhealthy. The same may be said of the valleys of the Melghāt. On the higher plateaux of the Gāwīlgarh hills the climate is pleasant and temperate throughout the year, the mean temperature at the sanitarium of CHIKALDA in May, July, and December being 85·5°, 74·5°, and 65°.

The Melghāt receives more rain than any tract in the Province. The average for the six years ending 1901, which included two years of deficient rainfall, was 65 inches. The rainfall in the plains does not vary from that recorded elsewhere in the Berār valley. The rainfall at Ellichpur in 1901, which may be taken as a normal year, was just short of 26 inches. The District has been fortunate in escaping serious natural calamities other than famine.

History.

The history of the District centres in that of Ellichpur, the chief town, and the old fortress of Gāwīlgarh. Until the Assignment in 1853, when Amraotī became the administrative head-quarters of the province, Ellichpur was always regarded as the capital of Berār, although during Akbar's wars with Ahmadnagar, in the latter part of the sixteenth century, BĀLĀPUR, in Akola District, became, on account of its position, the head-quarters of the imperial army of the Deccan.

Ellichpur was included, immediately after the Assignment, in the District of East Berār, the head-quarters of which were at Amraotī; but in 1867 it was separated from Amraotī and became a District under the charge of a Deputy-Commissioner. Ellichpur at first included the *tāluk* of Morsi, which was, however, after a short time, retransferred to Amraotī.

The District contains some of the most interesting archaeological remains in Berār, which are described in the articles on ELLICHPUR TOWN and GĀWĪLGARH. They consist of the Gāwīlgarh fort with its buildings, especially the large mosque (1425), the Pīr Fath, or south-western gate (1488), and the bastion of Bahrām (1577). The shrine at Ellichpur, which bears the name of the mythical hero, Shāh Abdur Rahmān, is probably the tomb of Fīroz Shāh Bahmani's general, who was slain at Kherla in 1400. There is an old building at Ellichpur, locally known as Bārkul. It is believed that it dates from the time of the Khiljī Sultāns of Delhi, and its name is said to be a corruption of *bārgāh-i-kull*, or 'hall of public audience.'

Population.

The number of towns and villages in the District is 794. The population at each of the last enumerations has been: (1867) 278,629, (1881) 313,412, (1891) 315,616, (1901) 297,403. The decline in 1901, which was due to the famine of 1899–1900, does not entirely represent actual diminution of population, but is partly accounted for by the northward emigration of Korkūs from the Melghāt into the Central Provinces. The District was divided into the three *tāluks* of ELLICHPUR, DARYĀPUR, and MELGHĀT. The head-quarters of the first two are at the places from which they take their names, and of the last at CHIKALDA. The six towns are ELLICHPUR TOWN, PARATWĀDA (the civil station), ANJANGAON, KARASGAON, SIRASGAON, and CHĀNDŪR BĀZĀR.

The following table gives, for each *tāluk*, particulars of area, towns and villages, and population in 1901 :—

Tāluk.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Ellichpur .	469	5	214	146,035	311	– 0·2	9,958
Daryāpur .	505	1	244	114,698	227	– 15·5	5,723
Melghāt . .	1,631	....	330	36,670	22	– 6·2	580
District total	2,605	6	788	297,403	114	– 7·0	16,261

Ellichpur is the most densely, and Melghāt, with a population of no more than 22 to the square mile, the most sparsely populated *tāluk* in Berār. More than 78 per cent. of the population are Hindus. The vernacular of the District is Marāthī, but Urdū is more commonly spoken than in other Districts, owing to the influence of the Muhammadan town of Ellichpur. The Korkūs of the hills have their own language, which is a Mundā dialect; and the small and rapidly disappearing tribe of Nihāls formerly spoke a language of their own which is believed, though on insufficient authority, to have exhibited Dravidian affinities. They now speak Korkū, and the Nihālī language is probably completely lost.

Kunbīs (68,000) are by far the most numerous caste in the District. Next to them in numbers come Mahārs (36,000) Musalmāns (30,000), Korkūs (25,000), and Mālīs (25,000). Brāhmans number no more than 7,700. Ethnologically the Korkūs and the Nihāls (1,800) are the most interesting tribes in the District. The Gāwīlgarh hills are the home of both. The former are a tribe of hill and forest men speaking a Mundā dialect; and the latter are a rapidly disappearing tribe, who seem to have held, in comparatively recent times, the position of helots among the Korkūs, though it may be doubted whether they were always

subordinate to them. Ellichpur is mainly an agricultural District; but the proportion (67 per cent.) of those who live by agriculture to the whole population is lower than in any other District in the province, and the percentage of those who live by industries (16) is higher.

There are two Christian missions: one of the Roman Church, under the management of the Order of St. Francis of Sales, and the Korkū and Central Indian Hill Mission, which is a Protestant mission. Both missions did excellent work in the two recent famines in the Melghāt. The Roman Catholic mission owns a small village, Mariampur, near Chikalda. Of the 363 Christians enumerated in 1901, 285 were natives, of whom 215 were Roman Catholics.

Agriculture.

The Melghāt differs as much from the rest of the District in agricultural conditions as it does in climate and altitude. Agricultural conditions in the plains are similar to those prevailing throughout the Berār valley. Here the soil is a rich black loam of considerable depth, except in the tract at the base of the hills, which is principally forest land. In the hills the soil, except in the valleys, is poorer and shallower than that in the plains, and the country is chiefly covered with forests; but where cultivation is found, the heavier rainfall compensates in some measure for the comparative poverty of the soil.

The tenures are almost entirely *ryotwāri*. *Jāgīr*, *ijāra*, and *inām* lands, which are found chiefly in the Melghāt, cover only 124½ square miles out of 2,617. The chief agricultural statistics in 1903–4 are shown below, areas being in square miles:—

Total.	Cultivated.	Irrigated.	Cultivable waste.	Forest.
2,617	1,085¼	5	46	1,389

The staple food-grain is *jowār* or great millet, varied in the hills by *kodo* (*Paspalum frumentaceum*) and *rāl* (*Panicum sativum*). The area under *jowār* was 286 square miles, and 'other cereals,' including *kodo* and *rāl*, occupied 26½ square miles in the hills. Rice and wheat were formerly grown in the Melghāt more extensively than at present; in 1903–4 they occupied only 3⅔ and 7 square miles. The latter covered 77 square miles in the plains. The areas under cotton, pulses, and oil-seeds were 496, 85, and 45 square miles. These crops, except pulses, which occupy nearly equal areas in the hills and the plains, are grown chiefly in the plains. It has been said that the tea plant thrives on the higher plateaux of the Melghāt, but it is not grown there now. Excellent coffee is grown in private gardens at Chikalda, but its cultivation on a large scale has not been attempted.

The extension of the area of holdings has only amounted to 4·6 per cent. in the last thirty-three years. There is, however, no room for

extension in the plains, where practically the whole of the arable land is already occupied. In the hills a considerable area has gone out of cultivation since the famine of 1899–1900. It is not likely that cultivation will ever be much extended in this tract, more than 85 per cent. of which is forest. Little or nothing has been done towards the improvement of agricultural products. On the contrary, the fine, long-stapled cotton for which Berār was formerly famous has practically disappeared, its place being taken by a coarser, short-stapled variety which is more prolific and demands less attention than the old variety. The ryots have availed themselves less freely of the Loans Acts than those of any District in Berār, except Wun, where famine has been less severe than elsewhere. In the three years following the famine of 1899–1900 only Rs. 72,000 was disbursed, and it is only since that year that the people have applied for advances.

The Umarda, or smaller variety of the Berāri breed of cattle, was formerly the principal breed in the District; but since recent years of scarcity and famine large numbers of animals of the Nimāri, Hoshangābādi, and Mālwi breeds have been imported. Buffaloes are principally of the Nāgpuri breed, but a few of the Mālwi breed have been imported. Ponies bred locally are weedy animals of little value; and sheep and goats are poor, except in the larger towns, where good milch goats of the Gujarāti breed are kept.

The area of land irrigated in 1903–4 was less than 5 miles, of which nearly all was watered from wells and was situated in the *tāluks* in the plains. Irrigation is almost entirely confined to chillies, garden produce, and tobacco. Leathern buckets drawn with a rope and pulley by cattle working down an inclined plane are universally used for lifting the water.

Forests.

Forests cover 56 per cent. of the whole District, and their area is about twice as great as in any other District of Berār. About half the area is real forest land, as distinguished from *rannas* and grazing lands with patches of scrub and small trees which usually make up the greater part of the technical forest area. All the forests, except 38 square miles of grazing land and 95 acres of *ramna*, are confined to the Melghāt. They contain the usual trees of Central India, the commonest being *Boswellia*, teak, *Ougeinia*, *Adina*, *Stephegyne*, *Schreibera*, and various species of *Terminalia*. The woody climbers met with are species of *Bauhinia*, *Combretum*, and *Millettia*. In ravines and valleys a bamboo (*Dendrocalamus strictus*) occurs.

Trade and communications.

Arts and manufactures are unimportant, as in other Districts of Berār. Cotton and silk fabrics are woven and dyed, principally at Anjangaon, and cotton carpets are woven at Ellichpur. The largest industry is the preparation of cotton for the market, and the District contains ten ginning factories and one press, all worked by steam.

The chief imports are grain and pulse, salt, and sugar; and the chief exports are raw cotton, grain and pulse, oilseeds, and forest produce. The cotton, grain and pulse, and oilseeds are exported from Ellichpur by road to Amraotī or Badnera, whence they are dispatched by rail to Bombay; and exports from Daryāpur go by road to Murtazāpur on the railway.

There is no railway in the District. The total length of metalled roads is 73 miles, and of unmetalled roads 40 miles. The former are in charge of the Public Works department and the latter of the District board. The principal road is the Chikalda-Amraotī road, which passes through Ellichpur town, and has a length in the District of 49 miles. An important road from Ellichpur to Daryāpur via Anjangaon is under construction.

Famine.

The two *tāluks* in the plains are neither more nor less fortunate than the rest of Berār in respect of their liability to famine, and they have suffered from all famines which have fallen upon the province. A famine orphan school was established at Ellichpur by the fifth Sultān of the Bahmani dynasty, Muhammad (sometimes, but erroneously, called Mahmūd) Shāh, who reigned from 1378 to 1397, and in whose reign a severe famine occurred. The emperor Shāh Jahān also, in the fourth year of his reign, established a poorhouse at Ellichpur, where food was distributed to the famine-stricken. Sir William Sleeman, in his *Rambles and Recollections*[1], mentions that Ellichpur suffered from the famine of 1837–8. The Melghāt is, owing to the comparative poverty of its soil and the thriftlessness of the Korkū cultivator, far more liable to famine. In 1896–7, when the greater part of Berār suffered only from scarcity, famine conditions prevailed here, and in the famine of 1899–1900 the *tāluk* suffered very severely. At the height of the distress, in July, 1900, 25,216 persons were on relief works and 33,194 in receipt of gratuitous relief in the District, and it is estimated that 60 per cent. of the cattle died. In both famines the Forest department rendered signal service.

Administration.

The District is divided into the three *tāluks* of Ellichpur, Daryāpur, and Melghāt, at the head-quarters of each of which there is a *tahsīldār*, and since 1905 Ellichpur and Melghāt have formed a subdivision of Amraotī. The superior staff of the District consists of the usual officers.

In Ellichpur, as in other Districts of Berār, the Deputy-Commissioner was the District Judge; but here he was District Judge in more than name, for he exercised, and was not empowered to delegate, the ordinary original civil powers of a District Judge in the Melghāt, where the *tahsīldār* exercises the powers of a subordinate civil judge. The existing machinery for the administration of justice is described in the article on AMRAOTĪ DISTRICT. Serious crime is not common, but dacoi-

[1] Vol. i, p. 190 (ed. 1893).

ties, cattle-thefts, and burglaries fluctuate considerably in numbers with the state of the season. The Korkūs, though behind other classes of the population in education, and somewhat addicted to strong drink, exhibit no marked criminal propensities.

According to the *Ain-i-Akbarī*, the land revenue demand in the *parganas* which till lately formed Ellichpur District amounted to 13·2 lakhs; and at the time of the Assignment in 1853 the demand in the same area had fallen to 5·6 lakhs, owing to wars, maladministration, and famines. In 1903–4 the assessment on all land available for cultivation amounted to 12·4 lakhs, or rather less than Akbar's assessment, though it is certain that cultivation is more extended now than it was in the sixteenth century. The two *tāluks* in the plains were first surveyed and assessed, after the Assignment, between the years 1868 and 1873, the settlement being made in each case for thirty years. Before its expiration revised assessment lists were prepared, but the new rates were not introduced until 1903–4. The assessment per acre varies from Rs. 2–11–0 to 2 annas, with an average of Rs. 1–11–3. Rice land is assessed at a maximum rate of Rs. 6 per acre, and land irrigated from streams and tanks, of which the area is only 23 acres, at a maximum combined land and water rate of Rs. 8 per acre. Land irrigated from wells sunk before the original settlement is assessed at the maximum 'dry' rate for land in the same village; but where wells have been made subsequently the cultivator is allowed the full advantage of the improvement, and the land is treated in all respects as 'dry' land. The average extent of a holding in the plains is $14\frac{3}{4}$ acres. The Melghāt has never been regularly surveyed, and a system of assessment is in force based on the number of yokes (pairs of bullocks) employed. The maximum, minimum, and average rates per yoke are Rs. 8, Rs. 3, and Rs. 5. As a measure of relief, following on the famine of 1899–1900, one-half of the land revenue was remitted for a period of three years in this *tāluk*.

Collections on account of land revenue and revenue from all sources have been, in thousands of rupees:—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue	9,16	9,19	10,42	11,28
Total revenue	12,50	13,37	14,16	15,66

Beyond the two municipal areas of Ellichpur town and civil station, the local affairs of that portion of the District which lies in the plains are administered by the District board, with the two *tāluk* boards subordinate to it. The expenditure of these boards in 1903–4 amounted to Rs. 87,000, of which Rs. 14,000 was spent on education, and Rs. 41,000 on public works, chiefly roads and buildings. The chief

sources of income were Provincial rates, the bazar cess, and assessed taxes. The local affairs of the Melghāt are managed by the Deputy-Commissioner and the *tahsīldār*.

The District Superintendent has control over the police under the Deputy-Commissioner. The number of police stations is 15, and there are four outposts. The police force numbers 367, under three inspectors, one for each *tāluk*. The only jail in the District is that at Ellichpur, which contained in 1903–4 a daily average of 27 prisoners.

Education.

Ellichpur stands first among the six Districts of Berār in regard to the literacy of its population, of whom 5·4 per cent. (10·4 males and 0·3 females) were able to read and write in 1891. Its superiority would be still more marked but for the Melghāt, which in point of education is more backward than any other part of the province. In 1903–4 the District contained 79 public, 65 aided, 5 unaided, and 4 private schools, with a total of 7,738 pupils, of whom 5,950 attended public schools and 334 were girls.

One of the secondary and nine of the primary schools were Hindustāni schools for Muhammadan boys, five were girls' schools—three for Hindu and two for Muhammadan girls—and two were schools for children of aboriginal tribes in the Melghāt. All schools, except nine, were aided from public funds. The great majority of pupils under instruction were only in primary classes, and no girls had advanced beyond that stage. Of the male population of school-going age 13 per cent. were in the primary stage of instruction, and of the female population of the same age 0·75 per cent. Among Musalmāns the percentage of pupils of each sex to the male and female population of school-going age was 24 and 2·6. At the special schools in the Melghāt, 34 aborigines were under instruction. The total expenditure on education in 1903–4 was Rs. 57,268, of which Rs. 5,575 was provided from Local and municipal funds.

The District possesses 3 hospitals and 4 dispensaries, containing accommodation for 79 in-patients. In 1903 the number of cases treated was 47,000, of whom 603 were in-patients, and 1,533 operations were performed. The expenditure was Rs. 15,000, the greater part of which was met from Provincial revenues.

Vaccination has made much progress, and the people generally seem to be aware of its usefulness. In 1903–4 the number of persons successfully vaccinated was 31·7 per 1,000, the mean for the province being 36·6. Vaccination is compulsory only in the two municipalities.

In August, 1905, when the six Districts of Berār were reconstituted, Ellichpur ceased to exist as a separate District and was incorporated in Amraotī, of which District it now forms the Ellichpur subdivision.

[*Tāluk Settlement Reports*: Major R. V. Garrett, *Daryāpur* (1897); F. W. Francis, *Ellichpur* (1898); C. Bagshaw, *Melghāt* (1899).]

Ellichpur Subdivision.—Subdivision of Amraoti District, Berār, consisting of the ELLICHPUR and MELGHĀT *tāluks*.

Ellichpur Tāluk.—Formerly the head-quarters *tāluk* of Ellichpur District, but since August, 1905, a *tāluk* of Amraotī District, Berār, lying between 21° 9′ and 21° 24′ N. and 77° 23′ and 77° 53′ E., with an area of 469 square miles. The population fell from 146,215 in 1891 to 146,035 in 1901, but its density, 311 persons per square mile, is higher than in any other *tāluk* in Berār. The *tāluk* contains 214 villages and five towns: ELLICHPUR (population, 26,082), the head-quarters, PARATWĀDA (10,410), KARASGAON (7,456), SIRASGAON (6,537), and CHĀNDŪR BĀZĀR (5,208). The demand for land revenue in 1903–4 was Rs. 5,17,000, and for cesses Rs. 41,000. The *tāluk* lies in the Pāyānghāt, and is bounded on the north by the Gāwilgarh hills.

Ellichpur Town.—Head-quarters of the Ellichpur *tāluk* of Amraotī District, Berār, situated in 21° 16′ N. and 77° 33′ E. The population in 1901 numbered 26,082, of whom 18,440 were Hindus, 7,244 Musalmāns, 231 Jains, and 136 Animists. Until August, 1905, Ellichpur was the head-quarters of a District of the same name.

The town of Ellichpur has an interesting history. Local legend ascribes its foundation to the eponymous Rājā Il, said to have been a Jain who came from the village in Ellichpur District now known as Khān Zamānnagar, in Samvat 1115, corresponding to A.D. 1058. The legend represents him as a powerful independent Rājā; but from all that is known of the history of Berār at this period it seems that the province formed part of the kingdom of Somesvara I, of the restored Chālukya dynasty. The absurdities of the legend of the war of Rājā Il with Shāh Abdur-Rahmān Ghāzi, a hero of the 'headless horseman' type, said to be, like Sālār Masūd of Bahraich, a nephew of Mahmūd of Ghaznī, are sufficient to cast a doubt on the very existence of Rājā Il; and it is not improbable that the whole story is a corruption of the Pachpirya legends of Northern India.

The first mention of Ellichpur in authentic history is made by Baranī, who describes it as being, towards the end of the thirteenth century A.D., 'one of the famous cities of the Deccan.' The city, and the district of which it was the capital, were assigned to Alā-ud-dīn after his first expedition to Deogiri in 1294, but still remained under Hindu administration, the revenues being remitted to Delhi. On the final fall of Deogiri in 1318, the city, with the rest of Berār, came under the direct administration of the Muhammadan conquerors. During the rule of the Bahmani Sultāns of the Deccan it was the capital of the *taraf* or province of Berār. Muhammad Shāh (1378–97), the fifth king of that dynasty, established here an orphanage after the famine which occurred during his reign. Fīroz Shāh, the eighth king, halted at Ellichpur in 1400 while his generals undertook a successful expedition

against the Gond kingdom of Kherla; and Ahmad Shāh Walī, the brother and successor of Fīroz, halted with his army at the provincial capital, while the forts of Gāwīlgarh and Narnāla were being built and repaired between 1425 and 1428. From 1490 to 1572 Ellichpur was the capital of Berār under the kings of the Imād Shāhi dynasty[1]. On the overthrow of that dynasty by Murtazā Nizām Shāh of Ahmadnagar in the latter year, the town again became a provincial capital. In the early days of the Mughal occupation of Berār its importance declined, owing to the selection of Bālāpur as the seat of the provincial governor; but it soon regained its position as the capital of the imperial *Sūbah* of Berār. It again lost most of its local prestige when Asaf Jāh, the first Nizām, in 1724 became virtually the independent ruler of the Deccan, and the city was placed under a governor subordinate to the viceroy. The first governor appointed was Iwaz Khān, who ruled for five years (1724–8), and was succeeded by Shujāat Khān (1729–40), who quarrelled with the Marāthā, Raghujī Bhonsla, fought with him near Bhugaon, and was killed in the battle. The victor plundered the Ellichpur treasury. Sharif Khān next succeeded and held office from 1751 to 1762. He claimed equality with the Nizām, who consequently deposed him. The Nizām's son, Alī Jāh Bahādur, was then appointed governor; but he administered by his deputy, Ismail Khān, the Afghān, the first of a succession of Afghān governors. The next in succession was Salābat Khān, who, though he remained only two years at Ellichpur, did much to improve the city. He enlarged the palace, made a public garden, and extended the ancient water-channels. He was a brave soldier, and, on war breaking out between the Nizām and Tipu Sultān, he was ordered to join the army, and distinguished himself in the field. He also saw service at the battle of Kardla, and was with General Wellesley's army in 1803. His son, Nāmdār Khān, received, besides his father's *jāgīr* of two lakhs, another of like value at Ellichpur, and succeeded his father as governor of Berār, with the title of Nawāb, holding the governorship till his death in 1843. He is said to have been placed by his father under the special protection of General Wellesley; and he received a separate *jāgīr* for the payment of the Ellichpur Brigade. After some years he fell into arrears and gave up the greater part of his *jāgīr*, retaining only a rental of £3,500. He was succeeded by his nephew, Ibrāhīm Khān, who lived until 1846, when his widow's father, Ghulām Hasan, was allowed to inherit the estate and the title of Nawāb on payment of a *nazarāna* of 7 lakhs.

[1] The kings of this dynasty were:—

1. Fathullāh Imād-ul-mulk	1490–1504
2. Alā-ud-dīn Imād Shāh	1504–29
3. Daryā Imād Shāh	1529–60
4. Burhān Imād Shāh	1560–72

This sum he borrowed from a local banker, at whose suit the palace and other property of the Nawāb at Ellichpur were attached. The family is now extinct.

There is at Ellichpur a well-known *dargāh* or burial shrine, which bears the name of the mythical warrior, Abdur-Rahmān, already mentioned. Though the shrine is certainly not the resting-place of a nephew of Mahmūd of Ghaznī, it is by no means modern. It is said to have been built by one of the Bahmani Sultāns more than four hundred years ago, and may thus have been erected by Ahmad Shāh Walī during his visit to Ellichpur, in the belief that Mahmūd's nephew actually perished here; but as the legend of Dulhā Rahmān, as the saint is popularly known, connects this shrine with another at Kherla, where the hero's head is said to be buried, the more probable supposition is that it was erected by Fīroz Shāh to the memory of one of his captains slain at Kherla in 1400. The *urs* or anniversary ceremony of the mythical Abdur-Rahmān is celebrated annually by a fair on the 10th of Rabi-ul-awal. The old palace of the Nawābs is a building of little historical interest, but some of the tombs are handsome.

The municipality of Ellichpur was created in 1869, and the receipts and expenditure for the ten years ending 1901 averaged Rs. 19,000. In 1903–4 the income was Rs. 14,669, mainly derived from taxes; and the expenditure was Rs. 24,171, the principal heads being conservancy and public works. The municipality has not undertaken any new works of importance, but it maintains the old system of water-supply. The trade in cotton is considerable, the commodity being conveyed to Amraotī by road (32 miles). Cotton carpets are woven locally. There are excellent metalled roads connecting Ellichpur with Amraotī and with Chikalda via Ghatang (30 miles). Considerable quantities of forest produce are brought from the Melghāt for sale in the weekly market. The more important public buildings are at the civil station of PARATWĀDA, 2 miles distant. In the town are several relics of the Nawābs, such as gardens, wells, mosques, &c., besides several ginning factories.

Ellora (*Verūl*).—Village in the District and *tāluk* of Aurangābād, Hyderābād State, situated in 20° 21′ N. and 75° 10′ E., about 15 miles north-west of Aurangābād city. Population (1901), 1,095. Near the village is a handsome temple of red stone erected by Ahalyā Bai, the Rānī of Indore (1767–95), which is considered a good specimen of modern Hindu architecture (Burgess). Ellora is famous for its rock-temples and caves, which extend along the face of a hill for a mile and a quarter, and are divided into three distinct series—Buddhist, Brāhmanical, and Jain—and are arranged chronologically. They are excavated in the scarp of a large plateau, and run nearly north and south for about a mile and a quarter, the scarp at each end of this

interval throwing out a horn towards the west. The Buddhist caves, twelve in number, are situated at the south end; the Indra Sabha or Jain group, consisting of five caves, lies at the other extremity of the series; the Brāhmanical caves, which number seventeen, are between the other two series. In age the caves vary from about the fifth to the ninth or tenth century, and important inscriptions have been found in them. Among the most interesting objects at Ellora is the Kailās temple, one of the most wonderful and interesting specimens of architectural art in India.

'Unlike any of the preceding cave-temples,' says Dr. Burgess, 'Kailās is a great monolithic temple, isolated from surrounding rock, and carved outside as well as in. It stands in a great court averaging 154 feet wide by 276 feet long at the level of the base, entirely cut out of the solid rock, and with a scarp 107 feet high at the back. In front of this court a curtain has been left, carved on the outside with the monstrous forms of Siva and Vishnu and their congeners, and with rooms inside it. It is pierced in the centre by an entrance passage, with rooms on each side. Passing this, the visitor is met by a large sculpture of Lakshmi over the lotuses, with her attendant elephant. There are some letters and a date on the leaves of the lotus on which she sits, but illegible, and probably belonging to the fifteenth century. On the bases of the pilasters on each side have been inscriptions in characters of the eighth century. As we enter, to right and left is the front portion of the court, which is a few feet lower than the rest, and at the north and south ends of which stand two gigantic elephants—that on the south much mutilated. Turning again to the east and ascending a few steps, we enter the great court occupied by the temple, whose base measures 164 feet from east to west, by 109 feet where widest from north to south. In front of it, and connected by a bridge, is a *mandapa* for the Nandi, and on each side of this *mandapa* stands a pillar or *dvajdand*—'ensign staff'—45 feet high, or with what remains of a *trisula* of Siva on the top, a total height of about 49 feet.'

This temple was built by Krishna I, the Rāshtrakūta king of Malkhed (760–83).

[*Archaeological Survey Reports of Western India*, vol. v.]

Ellore Subdivision.—Subdivision of Kistna District, Madras, consisting of the ELLORE and YERNAGŪDEM *tāluks*.

Ellore Tāluk.—*Tāluk* on the northern border of Kistna District, Madras, lying between 16° 34′ and 17° 13′ N. and 80° 53′ and 81° 24′ E., with an area of 778 square miles. The population in 1901 was 181,035, compared with 171,985 in 1891. It contains one town, ELLORE (population, 33,521), the head-quarters; and 206 villages. The demand on account of land revenue and cesses in 1903–4 amounted to Rs. 4,69,000. The *tāluk* is sparsely populated; for, although the southern part of it lies within the influence of the irrigation systems of the Kistna and Godāvari rivers, the northern and

greater portion is covered with hills and jungle. On the south the *tāluk* borders the COLAIR LAKE. Two small streams, the Tammileru and Ramileru, run through it, and are used to a certain extent for irrigation.

Ellore Town.—Head-quarters of the subdivision and *tāluk* of the same name in Kistna District, Madras, situated in 16° 43′ N. and 81° 7′ E., on the East Coast Railway, 304 miles from Madras, and at the junction of canals from the Godāvari and Kistna rivers. The population in 1901 was 33,521, of whom Hindus numbered 29,098, Muhammadans 3,977, and Christians 443.

About 8 miles north of Ellore, at Pedda Vegi, are extensive remains which are supposed to mark the site of the capital of the Buddhist kingdom of VENGI. After overrunning the country in 1470, the Muhammadans drew upon the ruins of the old city for materials for their fort at Ellore. The town was afterwards taken from the Gajapati kings of Orissa by Krishna Deva of Vijayanagar in 1515, but was recovered by the Kutb Shāhi Sultān of Golconda. His lieutenant then withstood a prolonged siege by the Hindu chieftains from north of the Godāvari. With the fall of Rājahmundry in 1572 Ellore became the capital of the *Sarkār* of the same name; and its history is thenceforward uneventful. It was for some time a cantonment for the Company's troops, but was early abandoned.

Ellore is situated on the border of the swamps round the COLAIR LAKE, and its climate is excessively hot. It is the chief market for the surrounding country, and has a large trade in grain. There are two tanneries near the town and a rice factory. Saltpetre, manufactured on a small scale in the neighbouring villages, is refined here. In the suburb of Tangellamūdi, separated from Ellore by a stream called the Tammileru, the noted Ellore carpets are made. This industry, a very old one, is carried on solely by Muhammadans. Although it is now principally confined to cheap carpets of foreign design for export, well-woven carpets of old patterns can still be obtained. Both wool and dyes are prepared locally.

Ellore was constituted a municipality in 1866. During the ten years ending 1902–3 the municipal receipts and expenditure averaged Rs. 33,000 and Rs. 36,000 respectively. The income in 1903–4 was Rs. 48,000, derived principally from the taxes on houses and lands (Rs. 15,000) and tolls (Rs. 11,000); the expenditure was Rs. 49,000, of which the main items were conservancy (Rs. 11,000) and roads (Rs. 12,000). A municipal hospital is maintained, in which there are 24 beds for in-patients. The principal educational institution is the Church of England Mission's high school, founded in 1854 on the model of that at Masulipatam, to which a primary class is attached. The two together have an attendance of about 490. There is also a branch of the Church of England Zanāna Mission.

Eminābād. Town in the District and *tahsīl* of Gujrānwāla, Punjab, situated in 32° 2′ N. and 74° 16′ E., 8 miles south-east of Gujrānwāla town, on the North-Western Railway and the direct road to Amritsar. Population (1901), 6,494. The original town is said to have been founded by Sālivāhan, Rājā of Siālkot, and was once called Saiyidpur. Sher Shāh destroyed it in the tenth century and built Shergarh, which was itself destroyed and its Afghān garrison expelled under Akbar by Muhammad Amīn, after whom the new town was called. The Mughal emperors made Eminābād the capital of a *mahāl* in the Lahore *Sūbah*. They were dispossessed in 1760 by Sardār Charat Singh. Ranjīt Singh gave the town in *jāgīr* to Rājā Dhyān Singh of Jammu, and it has never lost its connexion with that State, several of whose prime ministers have been natives of Eminābād. A Sikh temple, the Rohri Sāhib, commemorates the penance of Bāba Nānak, when he made his bed on a heap of stones (*rohrī*). The municipality was created in 1867. The income during the ten years ending 1902–3 averaged Rs. 3,500, and the expenditure Rs. 3,300. The income in 1903–4 was Rs. 3,000, chiefly from octroi; and the expenditure was Rs. 3,200. The town possesses an unaided Anglo-Sanskrit high school and also a Government dispensary. It is of no commercial importance.

Enamākkal Lake.—A shallow lake in the Ponnāni *tāluk* of Malabar District, Madras, lying between 10° 26′ and 10° 36′ N. and 76° 1′ and 76° 14′ E. It covers about 25 square miles, the major portion of which lies within the limits of Native Cochin, and is remarkable for the peculiar rice cultivation carried on in its bed. On the western side the lake is protected by a masonry dam from tidal influences. As soon as the dry season has set in, artificial dams of bamboo and mud are raised to a height of 4 or 5 feet all over the lake, and the water is baled out of each partition by means of Persian wheels and steam pumps into channels, which form waterways high above the cultivation on either side. The soil of the lake is a very fine silt, and excellent rice crops are raised.

English Bāzār.—Head-quarters of Mālda District, Eastern Bengal and Assam, consisting of a series of trading villages lining the right bank of the Mahānandā, situated in 25° 0′ N. and 88° 9′ E. Population (1901), 13,667. Being an open elevated site on the river bank in a mulberry-growing country, it was chosen in 1676 as the site of one of the Company's silk factories. The Dutch and the French also had settlements here, and the residence of the Civil Surgeon was formerly a Dutch convent. The East India Company's factory was of considerable importance during the last quarter of the seventeenth century, and its 'Diaries and Consultations' from 1685 to 1693 are preserved in the India Office under the title of 'Maulda and Englesavade.' The town

is still known as Angrezābād. In 1770 English Bāzār was fixed upon for a Commercial Residency, and retained its importance until the discontinuance of the Company's private trade. An extensive trade in grain is now carried on. English Bāzār was constituted a municipality in 1869. The income during the decade ending 1901–2 averaged Rs. 16,000, and the expenditure Rs. 15,000. In 1903–4 the income was Rs. 19,000, of which Rs. 5,000 was derived from a tax on persons (or property tax), and Rs. 4,000 from a conservancy rate; and the expenditure was Rs. 16,000. The largest building is the public *kacheri* or courthouse, the former Commercial Residency, which is regularly fortified, and within its walls are all the public offices. The District jail has accommodation for 110 prisoners. A small embankment protects it from the inundations of the Mahānandā.

Ennore.—Village in the Ponneri *tāluk* of Chingleput District, Madras, situated in 13° 13′ N. and 80° 19′ E., on the shore of the Bay of Bengal and on the Madras Railway. Population (1901), 3,192. Its proper name is Kattivākkam. It was once a favourite resort for Europeans from Madras, and contains several bungalows, built on the strip of land between the sea and the backwater, in which they used to stay; but it has ceased to have any attractions, owing to the prevalence in recent years of virulent malarial fever. Ennore is now only a fishing village and a centre of salt manufacture. The sand-dunes along the coast at this point, which cover an area of about 20,000 acres, have been almost all taken up by private persons and converted into casuarina plantations. This tree yields rapid returns, attaining, in favourable localities, its full growth in about fifteen years; and as there is a large and increasing demand for firewood in Madras, the enterprise has reached such proportions as to change materially the physical aspect of long stretches of the coast in this neighbourhood.

Eran.—Village in the Khurai *tahsīl* of Saugor District, Central Provinces, situated in 24° 6′ N. and 78° 11′ E., at the junction of the Bīna and Reutā rivers, 6 miles from Bāmora station on the Indian Midland section of the Great Indian Peninsula Railway. Population (1901), 171. A most interesting collection of archaeological remains is to be seen on some high ground near the village. There were at one time several small Vaishnava temples, but these are now in ruins. The principal statue is a colossal *Varāha*, or figure of the boar-incarnation of Vishnu, 10 feet high and 15 feet long. A garland of small human figures is sculptured on a band round the neck, and the figure bears an inscription of the White Hun king Toramāna. From a record of Samudra Gupta on a stone close by, it is inferred that this is one of the oldest Brāhmanical statues in India, and the coins found here show that the place was inhabited before the Christian era. Another remarkable object is a great stone column, 47 feet high, standing before the temples,

which bears an inscription of Budha Gupta, dated in A.D. 484–5. Another inscription, on a pillar now turned into a *lingam*, records perhaps the earliest known *satī* immolation in India.

[J. F. Fleet, *Gupta Inscriptions* (1888), pp. 18, 88, 91, and 158.]

Erandol Tāluka.—*Tāluka* of East Khāndesh District, Bombay, lying between 20° 44′ and 21° 9′ N. and 75° 9′ and 75° 31′ E., with an area of 458 square miles. There are three towns, ERANDOL (population, 11,885) and DHARANGAON (14,172) being the largest; and 195 villages. The population in 1901 was 105,840, compared with 105,808 in 1891. The density, 231 persons per square mile, is above the District average. The demand for land revenue in 1903–4 was 3 lakhs, and for cesses Rs. 20,000. The soil is part of the fertile Tāpti valley. Mango groves are scattered all through the *tāluka*. Besides water-supply from the rivers, there were 2,213 wells used for irrigation in 1902–3. The annual rainfall averages nearly 29 inches.

Erandol Town.—Head-quarters of the *tāluka* of the same name in East Khāndesh District, Bombay, situated in 20° 55′ N. and 75° 20′ E., on the Anjāni river, 36 miles east of Dhūlia. Population (1901), 11,885. Erandol is connected by metalled roads with the towns of Dhūlia and Dharangaon (7 miles north-west), and the railway station of Mhasvād (9 miles south-east). It is a place of some antiquity, and was formerly celebrated for its manufacture of coarse native paper, an industry which still survives to a limited extent. There is a considerable trade in cotton, indigo, and grain, the chief market being Jalgaon, a station 27 miles north-east. The town has one cotton-ginning factory. A fine stone quadrangle in the town, known as Pāndav's *vāda*, contains the remains of a strongly built enclosed mosque, richly carved, and constructed of old Hindu materials. About 5 miles south-east of the town on the top of a hill is the beautiful tank of Padmālya, near which is a temple of Ganpati. The municipality dates from 1866. The municipal income during the decade ending 1901 averaged Rs. 9,100. In 1903–4 the income was Rs. 9,600. The town contains a Subordinate Judge's court, a dispensary, and five schools with 743 pupils, of which one, with 60 pupils, is for girls.

Erinpura.—Cantonment in the north-east of the State of Sirohi, Rājputāna, situated in 25° 9′ N. and 73° 4′ E., on the left bank of the Jawai river, about 6 miles from Erinpura Road station on the Rājputāna-Mālwā Railway. Population (1901), 3,206. Erinpura is the head-quarters of the 43rd (Erinpura) Regiment, which has detachments at Abu, Bīkaner, and Pachbhadār. By the treaty of 1818 the Mārwār Darbār was bound to furnish a contingent of 1,500 horse for the service of the British Government when required; but the force thus supplied by it in 1832 proved so useless that the obligation was commuted in 1835 to an annual payment of 1·2 lakhs towards the maintenance of

a corps, which was raised in 1836 and styled the Jodhpur Legion. It was located on the site of the present cantonment, which Captain Downing, the commandant, named Erinpura after the island of his birth. The Legion consisted of three troops of cavalry and eight companies of infantry, with two 9-pounder guns; and three companies of Bhīls were added in 1841. With the exception of the latter the corps mutinied in 1857; and shortly after the Erinpura Irregular Force was raised, with the Bhīl companies as a nucleus. This force was composed of a squadron of cavalry, mainly Sikhs, numbering 164 of all ranks, and eight companies of infantry, numbering 712. Bhils and Mīnās were mostly enlisted in the infantry, the object being to afford occupation to the local tribes and thus wean them from their lawless habits. From the end of 1870 to 1881 the commandant was in political charge of Sirohi, and detachments were on several occasions sent out to assist the police in patrolling the disturbed tracts and arresting dacoits. In 1895 the strength of the squadron was reduced from 164 to 100 of all ranks; in 1897 the force, which had till then been under the Foreign Department of the Government of India, was placed under the Commander-in-Chief, and in 1903 it was renamed the 43rd (Erinpura) Regiment. At the present time the squadron consists of Sikhs and Musalmāns from the Punjab, while the infantry are mainly composed of Rājputs, Mīnās, Mers, and Musalmāns.

Ernād.—*Tāluk* in Malabar District, Madras, adjoining the Nīlgiris, and lying between 10° 57′ and 11° 32′ N. and 75° 49′ and 76° 33′ E. with an area of 979 square miles. It contains 54 *amsams*, or parishes. The population increased from 343,775 in 1891 to 357,142 in 1901. The land revenue demand in 1903–4 amounted to Rs. 3,40,000. The only places of importance besides the head-quarters (MANJERI) are the military station of MALAPPURAM, and the villages of FEROKH, NILAMBŪR, and TIRŪRANGĀDI. The *tāluk* is made up of hills clothed with forest. The eastern portion includes the valley of NILAMBŪR, which produces the finest teak and other timber in the District. The centre contains several smaller ranges separating more level valleys. The coast portion is more gently undulating, and is intersected in all directions by low ground in which rice is extensively cultivated.

Ernagūdem.—*Tāluk* of Kistna District, Madras. *See* YERNAGŪDEM.

Ernākulam.—Capital of Cochin State, Madras, situated in 9° 59′ N. and 76° 17′ E., on a backwater, 2 miles east of, and opposite to, British Cochin and the bar. Area, 5 square miles; population (1901), 21,901, consisting of 11,197 Hindus, 9,357 Christians, 935 Musalmāns, and 412 Jews. Ernākulam is the terminus of the Cochin State Railway and is rapidly growing in population and importance. The chief public buildings and institutions are the Darbār Hall, where the British Resident pays his state visits to the Rājā, the office of the Dīwān and

the Chief Court, the Rājā's College, containing more than 700 students, the General Hospital with 68 beds, the Central jail with accommodation for 200 prisoners, the St. Albert's high school managed by the Verapoli Mission, the St. Teresa's Convent with an orphanage and girls' school attached to it, the palace of the Romo-Syrian Bishop, and the Carmelite monastery. There are also four Catholic churches in the town. Its trade, which is not very considerable, is chiefly in the hands of the Konkanis and the Jews. The Residency is picturesquely situated on an island close to Ernākulam. It was originally a Dutch factory, built in 1774, but several additions and improvements have since been made to it.

Erode Subdivision (*Irōdu*).—Subdivision of Coimbatore District, Madras, consisting of the *tāluks* of ERODE, BHAVĀNI, DHĀRĀPURAM, and KARŪR.

Erode Tāluk.—Eastern *tāluk* of Coimbatore District, Madras, lying between 11° 2′ and 11° 27′ N. and 77° 22′ and 77° 55′ E., with an area of 598 square miles. The population in 1901 was 275,460, compared with 247,008 in 1891. There are 198 villages, and only one town, ERODE (population, 15,529), the head-quarters. The demand for land revenue and cesses in 1903–4 amounted to Rs. 5,07,000, a higher figure than in any other *tāluk*. Erode is a gently undulating plain with no hills of importance and but little forest, sloping gradually to the Cauvery river, which bounds it on the east. It is rather bare of trees, and in the valley of the Cauvery the climate is hot and close. The irrigated land is of a good class, much of it being fed by the Kalingarāyan channel from the Bhavāni river. Wells are also unusually plentiful. The rainfall averages 27 inches at Erode, but it is variable and partial. *Cambu* is the chief cereal, and much cotton is raised.

Erode Town.—Head-quarters of the *tāluk* of the same name on the eastern border of Coimbatore District, Madras, situated in 11° 21′ N. and 77° 43′ E., 243 miles from Madras at a junction of the Madras and South Indian Railways, and close to the bank of the Cauvery. Population (1901), 15,529. It seems to have been long an important place. Early in the seventeenth century the Jesuit Fathers established a station here. In Haidar's time it is said to have contained 3,000 houses, which would be equal to a population of 15,000 souls; but in consequence of successive Marāthā, Mysore, and British invasions the town became almost utterly deserted. It was taken from Madura by Mysore troops in 1667, and from Haidar by the British in 1768, only to fall into his hands again at the end of the same year. It was retaken in General Medows's expedition of 1790, but was abandoned on Tipū's advance. It does not appear to have been a place of any real strength. As soon as the peace was signed in 1792 the people returned, and within a year it had 400 houses and a population of over 2,000. It was

garrisoned by the Company at first; but the troops were withdrawn in 1807, and in 1877 the old fort was levelled as a famine-relief work.

Erode is a well-built town and is the head quarters of the divisional officer, the Assistant Superintendent of police, a District Munsif, a stationary sub-magistrate, a *tahsīldār*, and the Public Works department subdivisional officer. It was constituted a municipality in 1871. The municipal receipts and expenditure during the ten years ending 1903 averaged Rs. 18,000. In 1903–4 they were Rs. 23,000, most of the income being derived from the house and land taxes. Surveys and levels for a drainage scheme have been taken. A water-supply scheme has been investigated, but has not been begun owing to want of funds. The antiquities of the town include two ancient temples which contain inscriptions in Tamil and Grantha characters. Its chief industries are a cotton-press and the making of carts. It is also the trade centre of this corner of the District.

Etah District (*Eta*).—District in the Agra Division of the United Provinces, lying between 27° 18′ and 28° 2′ N. and 78° 11′ and 79° 17′ E., with an area of 1,737 square miles. It is bounded on the north by the river Ganges, separating it from Budaun; on the west by Alīgarh, Muttra, and Agra; on the south by Agra and Mainpurī; and on the east by Farrukhābad. Bordering on the Ganges lies a broad stretch of alluvial land, known as the *tarai*, reaching to the old high bank of the river. Below this is the stream called the Būrhigangā, or old bed of the Ganges, which had become blocked in places by spits of sand, but has been deepened and straightened by the Irrigation department, and now carries off drainage. The rest of the District is situated in the upland plain of the Doāb, and its physical features depend chiefly on the rivers which cross it from north-west to south-east. The largest of these is the KĀLI NADĪ (EAST), or Kālindrī, as it is generally and more correctly called in this District. It has a deep and well-defined channel, but occasionally brings down disastrous floods. The other rivers are the Isan, Arind, and Sengar (also called the Isan here), which are dry in the hot season. The central tract contains a few marshes or *jhīls*.

Physical aspects.

The District consists entirely of Gangetic alluvium; and *kankar* or calcareous limestone, and saline efflorescences on the soil, are the only minerals found.

The flora presents no peculiarities. Trees and groves are comparatively scarce; the mango, *nīm* (*Melia Azadirachta*), tamarind, and *jāmun* (*Eugenia Jambolana*) are perhaps the commonest trees. The only jungle is composed of *dhāk* (*Butea frondosa*) or *babūl* (*Acacia arabica*). The reeds found in the *tarai* are used extensively for thatching and for making rope.

Etah was formerly noted for sport, and hog and antelope are still

fairly common. Wild cattle have now become very rare, and the improvements to the Būrhigangā have lessened the attractions for wild-fowl. Wolves are occasionally seen, and jackals, though occurring in many parts, are comparatively rare.

The absence of large marshes and the common occurrence of barren areas and sandy soil, together with the facilities for drainage, make the climate of Etah, except south of the Kālī Nadī, dry and healthy; but dust-storms are frequent in the hot season. In winter the cold is sometimes intense, though frost is rare. The annual rainfall for the District averages 29 inches, varying from 25 in the Jalesar *tahsīl* in the west, to 34 in the Alīganj *tahsīl* in the east.

History.

The early history of the District is altogether uncertain. Ancient mounds along the Kālī Nadī point to the presence of important towns early in the Christian era. Tradition says that Ahīrs and Bhars were followed by Rājputs, and the District must have formed part of the kingdom of Kanauj. When that kingdom was conquered by Muhammadans, Etah came under Muslim rule, and was governed from Koil, Biānā, or Kanauj. Patiālī, in the north of the District, was the principal town; and it was visited by Ghiyās-ud-dīn Balban about 1270, who chastised the lawless peasantry in the neighbourhood, and left a garrison to keep open the roads and protect caravans and merchants. Constant expeditions were required in later years, and in the fifteenth century the District suffered from the struggle between Delhi and Jaunpur, being taken and retaken by the rival armies. Bahlol Lodī died at Sakīt in 1489 from wounds received in a battle with the Rājputs. Under Akbar, raids against the refractory Hindus continued, and in the eighteenth century the District fell into the hands of the Bangash Nawābs of Farrukhābād; but even these never obtained a firm hold. Later it was shared between the Nawāb of Oudh and the Nawāb of Farrukhābād, and was acquired by the British in 1801–2, when the present area was distributed among the surrounding Districts. After many territorial changes a subdivision was formed in 1845, on account of the lawlessness of the outlying portions, which included most of the present District; and Etah became a separate charge in 1856.

The succeeding year saw the outbreak at Meerut which quickly developed into the Mutiny of 1857. As soon as the troops in garrison at Etah received intelligence of the revolt at Alīgarh, the whole body left the station without any disturbance. As there was no place of strength in the town and no force with which to defend it, the Magistrate found it necessary to withdraw until the mutineers from Mainpurī and Etāwah had passed through. After a gallant but unsuccessful attempt to hold Kāsganj, the whole District was abandoned on June 7, and the officers reached Agra in safety. Damar Singh, Rājā of Etah, then set

himself up as an independent ruler in the south of the District. As usual, however, rival claimants appeared in various quarters; and towards the end of July the rebel Nawāb of Farrukhābad practically took possession of the country for some months. On the approach of General Greathed's column from Delhi, the rebels retired, and Mr. Cocks was appointed Special Commissioner for Etah and Alīgarh. The force at his disposal, however, was quite insufficient to restore order, and the rebels still continued to hold Kāsganj. It was not till December 15 that Colonel Seaton's column attacked the rebels at Gangīri in Alīgarh District, and after totally routing them, occupied Kāsganj. By the middle of 1858 order was completely restored, and peace has not since been disturbed.

The District contains several ancient sites, though these have not been fully explored. Atranjī Khera and Bilsar have at different times been identified with the Pi-lo-shan-na visited by Hiuen Tsiang in the seventh century[1]. At Bilsar were found two pillars with inscriptions of Kumāra Gupta, dated in A.D. 415–6[2]. The village of Nūh Khera has extensive mounds containing relics of the Buddhist period, and it is still regarded by several of the gipsy tribes as their head-quarters. Patiālī, Sarai Aghat, and SORON are other places of great antiquity, while the chief Muhammadan buildings are found at MĀRAHRA and Sakīt.

There are 18 towns and 1,466 villages in the District. Population has fluctuated considerably during the last thirty years. The number at the last four enumerations was as follows: (1872) 829,118, (1881) 756,523, (1891) 701,679, and (1901) 863,948. The great decrease between 1872 and 1891 was due to the deterioration of the land owing to flooding about 1884; but there is some reason to believe that the figure for 1872 was over-estimated, and it is probable that the population did not alter much between 1872 and 1881. There are four *tahsīls*—ETAH, KĀSGANJ, ALĪGANJ, and JALESAR—the head-quarters of each being at a place of the same name. The principal towns are the municipalities of KĀSGANJ, JALESAR, SORON, and ETAH, the District head-quarters, and the 'notified area' of MĀRAHRA. The table on the next page gives the chief statistics of population in 1901.

Population.

Hindus form 88 per cent. of the total and Musalmāns nearly 11 per cent. The density of population is about the same as that of the surrounding Districts, but the rate of increase between 1891 and 1901 was the highest in the United Provinces. This was due to recovery after previous bad seasons due to flooding. Western Hindī is spoken by almost the entire population, the prevailing dialect being Braj.

[1] A. Cunningham, *Archaeological Survey Reports*, vol. i, p. 269, and vol. xi, p. 13.

[2] J. F. Fleet, *Gupta Inscriptions*, p. 42.

Tahsil.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Etah . .	492	4	463	259,773	528	+ 14·4	6,160
Kāsganj . .	492	6	468	265,216	539	+ 38·4	6,016
Aliganj . .	526	6	379	205,560	391	+ 26·9	2,900
Jalesar . .	227	2	156	133,399	588	+ 10·2	3,567
District total	1,737	18	1,466	863,948	497	+ 23·1	18,643

The most numerous castes among Hindus are: Chamārs (leather-workers and labourers), 114,000; Ahīrs (graziers and cultivators), 88,000; Lodhas (cultivators), 88,000; Rājputs, 80,000; Brāhmans, 63,000; and Kāchhīs (cultivators), 62,000. The District contains several gangs of wandering tribes, such as Hābūrās and Nats. Among Muhammadans are found Shaikhs, 15,000; Pathāns, 12,000; Fakīrs, 7,000; and Rājputs, 6,000. The agricultural population forms nearly 69 per cent. of the total—a high proportion. Rājputs, Brāhmans, and Kāyasths are the principal landholders, while Rājputs, Brāhmans, Lodhas, Ahīrs, and Kāchhīs are the chief cultivators.

Of the 4,268 native Christians in 1901, more than 3,700 were Methodists. The American Methodist Mission, to which these belong, is controlled from Agra, each *tahsīl* forming a circuit. The American Presbyterian Church commenced work in the District in 1843, but has only recently appointed a minister here. There are also branches of the Church Missionary Society at Soron and Kāsganj.

Agriculture.

The District comprises three natural tracts. The *tarai*, lying between the Ganges and its old high bank, south of the Būrhigangā, contains rich fertile soil in its lower parts, while the higher ridges are bare sand. It is especially liable to injury from floods or from waterlogging. Between the Būrhigangā and the Kālī Nadī lies an area which consists of a light sandy soil, flanked by strips of high sandy uplands near the rivers, but changing near the centre to loam and barren *ūsar*. This tract also has suffered much in the past from waterlogging, and, where cultivation is relaxed, from the growth of the grass called *kāns* (*Saccharum spontaneum*). Along the south bank of the Kālī Nadī stretches another line of high sandy soil, beyond which is a rich plain of fertile loam interspersed with *ūsar* plains.

The tenures are those usually found in the United Provinces. Out of 2,500 *mahāls*, about 1,500 are *zamīndāri* and 1,000 *pattīdāri* or *bhaiyāchārā*, the last class being very few in number. The main agricultural statistics for 1898–9[1] are given in the following table, in square miles:—

[1] Later figures are not available, owing to settlement operations.

Tahsīl.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Etah . . .	492	274	171	41
Kāsganj . . .	492	347	108	76
Alīganj . . .	526	287	85	134
Jalesar . . .	227	148	87	15
Total	1,737	1,056	451	266

The areas in square miles under the principal food-crops in the same year were: wheat (332), barley (147), *bājra* (140), *jowār* (123), maize (113), and gram (99). Cotton occupied 48 square miles, sugar-cane 27, indigo 23, and poppy 12.

There has been some improvement in agricultural methods during the last thirty years. This has chiefly taken the form of an increase in the double-cropped area. Wheat has largely taken the place of barley, and maize is more extensively grown. The cultivation of indigo largely extended at one time, but is now practically non-existent. A most important change has been the opening of the Fatehgarh branch of the Upper Ganges Canal, accompanied by the improvement of drainage throughout the District. The cultivators take advances readily under the Agriculturists' Loans Act in adverse seasons, whether wet or dry; more than 1½ lakhs was lent between 1891 and 1904. The amount lent under the Land Improvement Act was only Rs. 90,000, more than half of which was advanced in 1896–7.

The breed of cattle is of the ordinary inferior type found throughout the Doāb; but in the Jalesar *tahsīl* the animals are a little better. An attempt has been made to improve the breed of horses and ponies, and since 1894 a Government stallion has been kept. Private persons also maintain two good stallions. The sheep and goats are inferior.

In the *tarai* irrigation is usually unnecessary, though wells can be readily made when required. The rest of the District is served by the Fatehgarh and Bewar branches of the Lower Ganges Canal, and by the Cawnpore and Etāwah branches of the Upper Ganges Canal. The main channel of the Lower Ganges Canal crosses the Kālī Nadī at Nadrai, near Kāsganj, by a magnificent aqueduct which was carried away by a flood in 1885, but has been rebuilt. Wells can be made in the whole of this tract, except in the high sandy ridges near the rivers, but are often of little use where the subsoil is sandy. In 1902–3 the total area irrigated was 461 square miles, of which wells supplied 254, canals 176, tanks or *jhīls* 18, and rivers 13. In dry years the rivers are used more extensively.

Block *kankar* or calcareous limestone is found in the uplands, and the nodular form occurs in all parts of the District. Saltpetre, salt, and sulphate of soda are found in saline efflorescences.

The chief industries carried on are cotton-weaving, sugar-refining, glass-making, and the preparation of saltpetre and sulphate of soda.

Trade and communications.

Cotton is woven as a hand industry all over the District. Sugar refineries conducted by native methods are found chiefly in the towns near the *tarai*, where sugar-cane is largely grown. About 250 factories prepare crude saltpetre, the average out-turn at each being approximately 100 maunds. There are also eight refineries, which produce an annual out-turn of nearly 8,000 maunds of refined saltpetre. Sulphate of soda is made at about 80 factories, each producing 200 maunds annually. In 1903 a cotton-press employed 128 hands, and three cotton-gins 795 hands. Five other factories have been opened since.

Etah has a considerable export trade in agricultural produce. Cotton, wheat, barley, pulses, millet, opium, and sugar are the chief items; but saltpetre and country glass are also exported. The imports include piece-goods, metals, and salt. Most of the foreign traffic is carried by the railway, but a great deal passes by road to and from the adjacent Districts. There is a little traffic on the canal with Alīgarh, Mainpurī, and Cawnpore. Kāsganj and Jalesar are the chief trading centres, and Soron is noted as a place of pilgrimage.

The Cawnpore-Achhnerā Railway crosses the District from east to west. A branch line, connecting Kāsganj with Soron on the Būrhigangā, meets at the latter place a branch of the Rohilkhand and Kumaun Railway, which passes across the Ganges to Budaun and Bareilly. The East Indian Railway runs close to the western border of the Jalesar *tahsīl*. The total length of metalled roads is 140 miles, and of unmetalled roads 488 miles. The metalled roads are all in charge of the Public Works department; but the cost of maintaining 87 miles is charged to the District board, which is also in charge of the unmetalled roads. Avenues of trees are maintained on 165 miles. The grand trunk road runs through the District from south-east to north-west, and other metalled roads lead to Agra, Muttra, Mainpurī, and to the Ganges.

The memory of the famines of 1783–4 and of 1803 long survived in this District. In 1837–8 famine was again severe, and many deaths occurred in spite of relief measures, while the prices of all grain doubled. The next great famine occurred in 1860–1, and was known to the peasantry by the graphic title of 'seven seer famine,' as the cheapest food sold at the rate of seven seers per rupee. In 1868–9 the District escaped from famine, though visited by drought and scarcity; and in 1877–8 canal-irrigation saved a large area of the crops, but distress was felt among the crowds of immigrants who poured in from the tracts south of the Jumna. Before the next famine of 1896–7 canal-irrigation had been largely extended,

Famine.

and, though relief works were opened, the numbers who came to them were small.

Administration.

The Collector is assisted by a member of the Indian Civil Service (when available) and by four Deputy-Collectors recruited in India. A *tahsīldār* is stationed at the head-quarters of each *tahsīl*.

There are three Munsifs, and the whole District is included in the civil and criminal jurisdiction of the Judge of Alīgarh, sessions cases being usually tried by the Additional Judge. Crime is very heavy in Etah, and murders, dacoities, and cattle-thefts are common, besides the more ordinary offences. Cases under the Opium and Excise Acts are also frequent. Female infanticide was formerly rife, but no portion of the population is now under surveillance.

The nucleus of the District was formed out of the surrounding Districts in 1845, and its early fiscal history belongs to Farrukhābād, Budaun, Alīgarh, and Mainpurī. The earliest settlements after acquisition by the British were for short terms, and were based merely on a consideration of the previous demands and a rough estimate of the condition of villages. The first regular settlement under Regulation IX of 1833 was carried out in the Districts named above before Etah became a separate unit, and the revenue assessed was about 7·2 lakhs, excluding the Jalesar *tahsīl*, which was added later. A subsequent revision was made at first by various Collectors, in addition to their ordinary District work, and later by Settlement officers, between 1863 and 1873. The methods adopted varied, but agreed in selecting rates of rent for each class of soil, and valuing the 'assets' at those rates, modified by the circumstances of individual villages. The demand so fixed amounted to 9·3 lakhs. In 1879 the Jalesar *tahsīl* was transferred from Agra to this District, the revenue on which amounted to 2·9 lakhs. After heavy rainfall in 1884–6 there was great deterioration in the *tarai* and central tract, and a large area fell out of cultivation and became overgrown with *kāns* (*Saccharum spontaneum*). By 1893 the revenue had been reduced by Rs. 57,000. The latest revision was made between 1902 and 1905. Although the revenue was slightly raised to 12·4 lakhs, much relief has been afforded by a redistribution of the demand, which now amounts to 48 per cent. of the net 'assets.'

Collections on account of land revenue and total revenue have been, in thousands of rupees:—

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue . .	10,87	9,90	11,33	10,93
Total revenue . .	14,32	13,85	16,39	16,67

There are four municipalities—KĀSGANJ, JALESAR, SORON, and

ETAH and one 'notified area,' MARAHRA, besides thirteen towns administered under Act XX of 1856. Beyond the limits of these, local affairs are managed by the District board, which had an income of Rs. 96,000 in 1903–4, chiefly from rates. The expenditure on roads and buildings was Rs. 51,000.

There are 17 police stations; and the District Superintendent of police commands a force of 4 inspectors, 83 subordinate officers, and 322 men, besides 200 municipal and town police, and more than 1,500 rural and road police. The District jail contained a daily average of 267 prisoners in 1903.

Etah takes a low place as regards literacy, and in 1901 only 2·2 per cent. of the population (3·8 males and 0·2 females) could read and write. The number of public schools fell from 155 in 1880–1 to 139 in 1900–1: but the number of pupils increased from 4,306 to 4,585. In 1903–4 there were 229 public schools with 7,179 pupils, of whom 620 were girls, besides 129 private schools with 1,314 pupils. Most of the schools are primary; three are managed by Government, and 136 by the District or municipal boards. Out of a total expenditure on education of Rs. 34,000 in 1903–4, Local funds contributed Rs. 28,000 and fees Rs. 2,500.

There are 10 hospitals and dispensaries, with accommodation for 90 in-patients. In 1903 the number of cases treated was 76,000, of whom 800 were in-patients, and 2,600 operations were performed. The expenditure was Rs. 11,000, chiefly met from Local funds.

About 30,000 persons were successfully vaccinated in 1903–4, representing a proportion of 35 per 1,000 of population. Vaccination is compulsory only in the municipalities.

[S. O. B. Ridsdale, *Settlement Report* (1874); *District Gazetteer* (1876, under revision).]

Etah Tahsīl.—Central *tahsīl* of Etah District, United Provinces, comprising the *parganas* of Etah-Sakīt, Sonhār, and Mārahra, and lying between 27° 20′ and 27° 47° N. and 78° 25′ and 78° 56′ E., with an area of 492 square miles. Population increased from 227,030 in 1891 to 259,773 in 1901. There are 463 villages and four towns, the largest of which are ETAH (population, 8,796), the District and *tahsīl* head-quarters, and MĀRAHRA (8,622). The demand for land revenue in 1903–4 was Rs. 4,06,000, and for cesses Rs. 66,000. The density of population, 528 persons per square mile, is above the District average. This *tahsīl* is bounded on the north and east by the Kālī Nadī, while the Isan flows across the southern portion. A small alluvial tract lies on the bank of the Kālī Nadī, from which a gentle slope leads to the upland area. The edge of the slope is sandy, but most of the *tahsīl* is a fertile area which, however, tends to become sandy in the east and is interspersed with stretches of *ūsar* land.

Ample irrigation is afforded by the main channel of the Lower Ganges Canal and its Bewar branch, and by the Cawnpore and Etāwah branches of the Upper Ganges Canal. The Irrigation department has done much to improve the drainage. In 1898–9 the area under cultivation was 274 square miles, of which 171 were irrigated. Wells supply more than double the area served by canals.

Etah Town.—Head-quarters of the District and *tahsīl* of the same name, United Provinces, situated in 27° 34′ N. and 78° 41′ E., on the grand trunk road, 19 miles from Kāsganj station on the Cawnpore-Achhnerā Railway. Population (1901), 8,796. The town is said to have been founded in the fourteenth century by Sangrām Singh, a Chauhān Rājput descended from Prithwī Rāj of Delhi. His descendants occupied the surrounding territory until the Mutiny, when Rājā Damar Singh rebelled. Etah derives its importance chiefly from the presence of the civil station, removed here from Patiālī in 1856 on account of its more central position. The principal market-place, Mayneganj, which has been recently improved and enlarged and is the property of the municipality, perpetuates the name of Mr. F. O. Mayne, C.B., a former Collector. Westward lies the new town with the principal public buildings, a fine temple, school, municipal hall, *tahsīli*, dispensary and hospital, and the District offices. The site is low and was formerly subject to floods; but a cutting to the Isan river, effected by Mr. Mayne, partially remedied this evil, and an effective drainage scheme has been undertaken by the municipality, through the Canal department. The American Methodist and Presbyterian Missions are both represented. Etah has been a municipality since 1865. During the ten years ending 1901 the income and expenditure averaged Rs. 12,500. In 1903–4 the income was Rs. 21,000, chiefly from octroi (Rs. 14,000); and the expenditure was Rs. 23,000. There is a good deal of road traffic through the town, and eight commodious *sarais* provide for this. The *tahsīlī* school has about 200 pupils, and the municipality maintains one school and aids nine others with 340 pupils.

Etaiyāpuram.—*Zamīndāri* estate and town in Tinnevelly District, Madras. *See* ETTAIYĀPURAM.

Etāwah District (*Itāwā* or *Itāwa*).—District in the Agra Division of the United Provinces, lying between 26° 22′ and 27° 1′ N. and 78° 45′ and 79° 45′ E., with an area of 1,691 square miles. It is bounded on the north by Mainpurī and Farrukhābād; on the east by Cawnpore; on the south by Jālaun; and on the west by the State of Gwalior and Agra District. Etāwah lies entirely in the Gangetic plain, but its physical features vary considerably and are determined by the rivers which cross it. Chief of these is the Jumna, which forms part of the western boundary,

Physical aspects.

and then flows across the western portion of the District to the southern boundary, where it separates Etāwah from Jālaun. The area north-east of the Jumna is a level tract of extremely fertile soil, intersected by small rivers, the Pāndū, the Arind, with its tributaries the Ahneya and Puraha, and the more important Sengar, with its tributary the Sirsā. In this area the stretch of rich cultivation is interrupted by patches of barren soil called *ūsar*, and by swamps or *jhīls*. The banks of both the Sengar (in the lower reaches) and the Jumna are high and fissured by deep ravines, increasing in wildness and extent as the rivers flow eastward. West of the Jumna the character of the country changes completely. The river Chambal forms part of the western boundary of the District, and after a winding course across part of it falls into the Jumna near the southern boundary, and south-west of it the Kuārī also divides Etāwah from the State of Gwalior. The area between the Jumna and Chambal presents, for the most part, a scene of wild desolation, which can hardly be equalled in the plains of India. In the central tract a small area of level upland is found; but in the north-west and south-east the network of ravines which borders both the rivers meets in an inextricable maze. The finest view of this desolate wilderness is obtained from the fort at Bhareh, which stands near the junction of the Chambal and Jumna, and within a few miles of the junction of the Kuārī, Sind, and Pahūj. South-west of the Chambal lies a tract as inhospitable as that just described, but with ravines of a less precipitous nature.

The District consists entirely of Gangetic alluvium, and the chief mineral product is *kankar* or limestone. This occurs in both nodular and block form, especially in the ravines. Reefs of *kankar* obstructing the navigation of the Jumna were removed many years ago, when some interesting mammalian remains were discovered[1].

The flora is that of the plains generally. A large jungle once existed in the north-east, but has been largely cut down and cultivated, and only patches of *dhāk* (*Butea frondosa*) remain. The chief trees growing wild are varieties of acacia, especially the *babūl* (*Acacia arabica*), and the District is fairly well wooded. Near the town of Etāwah a portion of the Jumna ravines was enclosed as a fuel and fodder reserve, but this has been leased to a Cawnpore tannery as a *babūl* plantation. Elsewhere the ravines are generally covered merely with grass and thorny brushwood, or are entirely bare.

Leopards are occasionally seen in the wild tract south of the Jumna, and a tiger was shot in the Reserve in the Fisher Forest in 1902. Wolves are becoming rare, and hog are commonest near the ravines and in the jungle near the north of the District. The antelope and *nīlgai* are found in the Doāb, and 'ravine deer' (gazelle) near the rivers.

[1] *Journal, Asiatic Society of Bengal*, vol. ii, p. 622.

Duck, teal, and snipe abound in the cold season. The larger rivers contain turtles, crocodiles, and the Gangetic porpoise, besides a great variety of fish.

The climate is that of the Doāb generally. From April to the break of the monsoon hot west winds are usual, but the District is regarded as healthy. The annual rainfall averages 32 inches. Only slight variations occur in different parts, but the north-east receives a little more than the west. Considerable fluctuations are recorded from year to year. In 1868–9 the fall was less than 15 inches, while a year earlier it was nearly 50.

Numerous mounds still show the ancient sites of prehistoric forts throughout the District, which long formed a main stronghold of the Meos, the Ishmaelites of the Upper Doāb. In their hands it doubtless remained until after the earliest Muhammadan invasion, as none of the tribes now inhabiting its borders has any traditions which stretch back beyond the twelfth century of our era. Etāwah was probably traversed both by Mahmūd of Ghazni and by Kutb-ud-dīn on their successful expeditions against the native dynasties; but the memorials of these events are indistinct on all local details. It is clear, however, that the Hindus of Etāwah succeeded on the whole in maintaining their independence against the Musalmān aggressors: for while some of the neighbouring Districts have a number of influential Muhammadan colonies, only a thin sprinkling of Shaikhs or Saiyids can be found among the territorial families of Etāwah. The Rājputs seem to have occupied the District during the twelfth century. Etāwah town lies on one of the old routes through Northern India, and became the seat of a Muhammadan governor; but the histories teem with notices of raids conducted with varying success by the Saiyid generals against the 'accursed infidels' of Etāwah. The Hindu chiefs were generally able to defend their country from the invaders, though they made peace after each raid by the payment of a precarious tribute. Early in the sixteenth century Bābar conquered the District, together with the rest of the Doāb; and it remained in the power of the Mughals until the expulsion of Humāyūn. His Afghān rival, Sher Shāh, found this portion of his dominions difficult to manage, and stationed 12,000 horsemen in and near the neighbouring *pargana* of Hatkānt (now the Bāh *tahsīl* in Agra District), who dealt out such rude measures of justice as suited the circumstances of the place and the people. Akbar included parts of Etāwah in his *sarkārs* of Agra, Kanauj, Kālpī, and Erachh. But even that great administrator failed to incorporate Etāwah thoroughly with the dominions of the Delhi court. Neither as proselytizers nor as settlers have the Musalmāns impressed their mark so deeply here as in other Districts of the Doāb. During the decline of the Mughal power, Etāwah fell at first into the hands of the

History.

Marāthās. The battle of Pānīpat dispossessed them for a while, and the District became an apanage of the Jāt garrison at Agra. In 1770 the Marāthās returned, and for three years they occupied the Doāb afresh. But when, in 1773, Najaf Khān drove the intruders southward, the Nawāb Wazīr of Oudh crossed the Ganges, and laid claim to his share of the spoil. During the anarchic struggle which closed the century, Etāwah fell sometimes into the hands of the Marāthās, and sometimes into those of the Wazīr; but at last the power of Oudh became firmly established, and was not questioned until the cession to the East India Company in 1801. Even after the British took possession many of the local chiefs maintained a position of independence, or at least of insubordination; and it was some time before the revenue officers ventured to approach them with a demand for the Government dues. Gradually, however, the turbulent landowners were reduced to obedience, and industrial organization took the place of the old predatory régime. The murderous practice of *thagī* had been common before the cession, but was firmly repressed by the new power. In spite of a devastating famine in 1837, which revolutionized the proprietary system by dismembering the great *talukas* or fiscal farms, the District steadily improved for many years under the influence of settled government. The Mutiny of 1857 interrupted for some months this progress.

News of the outbreak at Meerut reached Etāwah two days after its occurrence. Within the week, a small body of mutineers passed through the District and fired upon the authorities, upon which they were surrounded and cut down. Shortly after, another body occupied Jaswantnagar, and, although a gallant attack was made upon them by the local officials, they succeeded in holding the place. On May 22 it was thought desirable to withdraw from Etāwah town; but the troops mutinied on their march, and it was with difficulty that the officers and ladies reached Barhpura. There they were joined by the first Gwalior Regiment, which, however, itself proved insubordinate on June 17. It then became necessary to abandon the District and retire to Agra. The Jhānsi mutineers immediately occupied Etāwah, and soon passed on to Mainpurī. Meanwhile many of the native officials proved themselves steady friends of order, and communicated whenever it was possible with the Magistrate at Agra. Bands of rebels from different quarters passed through between July and December, until on Christmas Day Brigadier Walpole's column re-entered the District. Etāwah station was recovered on January 6, 1858; but the rebels still held the Shergarh *ghāt*, on the main road to Bundelkhand, and the whole south-west of the District remained in their hands. During the early months of 1858 several endeavours were made to dislodge them step by step; but the local force was not sufficient to allow of any extensive operations. Indeed, it was only by very slow degrees that order was

restored; and as late as December 7 a body of plunderers from Oudh, under Fīroz Shāh, entered the District, burning and killing indiscriminately wherever they went. They were attacked and defeated at Harchandpur, and by the end of 1858 tranquillity was completely restored. Throughout the whole of this trying period the loyalty exhibited by the people of Etāwah themselves was very noticeable. Though mutineers were constantly marching through the District, almost all the native officials remained faithful; and many continued to guard the treasure, and even to collect revenue, in the midst of anarchy and rebellion. The principal *zamīndārs* also were loyal almost to a man.

The District is rich in ancient mounds, though none has been explored. Mūnj and Asai Khera in the Etāwah *tahsīl* have been identified with places visited by Mahmūd of Ghazni, but with doubtful accuracy (see ZAFARĀBĀD). At the latter place a number of Jain sculptures, dated between the ninth and twelfth centuries, have been discovered. Several copperplate grants of Gobind Chand of Kanauj, dated early in the twelfth century, have been found at different places. The most striking building in the District is the Jāma Masjid at Etāwah town, built by altering an ancient Hindu or Buddhist structure.

Population.

There are 6 towns and 1,474 villages. Population has increased considerably during the last thirty years. The number of inhabitants at the last four enumerations was as follows: (1872) 668,641, (1881) 722,371, (1891) 727,629, and (1901) 806,798. The District is divided into four *tahsīls*—ETĀWAH, BHARTHANA, BIDHŪNA, and AURAIYĀ—the head-quarters of each being at a place of the same name. The principal town is the municipality of ETĀWAH, the administrative head-quarters of the District. The following table gives the chief statistics of population in 1901:—

Tahsīl.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Etāwah . .	426	2	353	216,142	507	+ 9·1	8,055
Bharthana . .	416	2	300	191,141	459	+ 12·4	5,101
Bidhūna . .	433	...	413	206,182	476	+ 9·9	5,310
Auraiyā . .	416	2	408	193,333	465	+ 12·3	5,829
District total	1,691	6	1,474	806,798	477	+ 10·9	24,295

About 94 per cent. of the total are Hindus and less than 6 per cent. Musalmāns, the latter proportion being the lowest in any District of the Doāb. The absence of large towns and the barren area in the south-

west cause a low density. The increase between 1891 and 1901 was large, as the District escaped from serious famine, and the number was augmented by immigration. Almost the whole population speak Western Hindī, the prevailing dialect being Kanaujiā.

Among Hindus the most numerous castes are Chamārs (leather-workers and labourers), 107,000; Ahīrs (graziers and cultivators), 103,000; Brāhmans, 97,000; Rājputs, 69,000; Kāchhīs (cultivators), 51,000; Lodhas (cultivators), 48,000; Baniās, 29,000; and Koris (weavers), 27,000. It has already been stated that Muhammadans form a very small part of the total. The principal tribes are Pathāns, 11,000, and Shaikhs (many of whom are descended from converted Hindus), 16,000. The agricultural population forms 70 per cent. of the total, while 7 per cent. are supported by general labour and 6 per cent. by personal services. Brāhmans and Rājputs each hold about one-third of the land in proprietary right. Brāhmans, Rājputs, and Ahīrs occupy the largest areas as tenants; but Kāchhīs and Lodhas are the best cultivators. Ahīrs are the founders of many new hamlets, as they prefer to have waste land as pasturage for their cattle, and are more ready to migrate than most castes.

There were 198 native Christians in 1901, of whom 62 were Presbyterians. The American Presbyterian Church has had a mission here since 1863, with two out-stations.

Agriculture.

The District contains four natural divisions affecting cultivation. The tract north-east of the Sengar is known as the *pachār*. The soil is a rich loam, interspersed with large tracts of *ūsar* and marshes or *jhīls*, and produces fine crops of wheat and sugar-cane. South-west of the Sengar, and reaching to the high ground in which the Jumna ravines begin, lies an area known as the *ghār*, the soil of which is a red sandy loam. Water is at a great depth, and there are no *ūsar* plains and no *jhīls*. The extension of canal-irrigation has made this the most fertile tract in the District, and there is now little difference between it and the *pachār*. The uplands and ravines of the Jumna are called the *karkha*. The uplands are similar to the *ghār*, but the ravines are barren. Along the Jumna rich alluvial land is found in places where the river does not approach the high bank. The area between the Jumna and Chambal and south-west of the Chambal, called *pār*, is largely uncultivated. Where the ravines do not meet, the table-land is composed of good loam. The Chambal alluvium is black soil resembling the *mār* of Bundelkhand, and is fertile: but there is little of it. Where the ravines contain good soil, this is protected by terraces and embankments, as in the Kumaun hills.

The tenures are those usually found in the United Provinces. Out of 4,282 *mahāls*, 2,030 are held *zamīndari* and 1,252 *pattīdāri* or

bhaiyāchārā; but the last class of tenure is very rare. The main agricultural statistics in 1903–4 are given below, in square miles:—

Tahsil.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Etāwah . . .	426	221	96	99
Bharthana . .	416	213	103	96
Bidhūna . . .	433	204	116	61
Auraiyā . . .	416	238	82	105
Total	1,691	876	397	361

The chief food-crops, with their area in square miles, in the same year were: wheat (179), gram (144), *jowār* (93), barley (135), and *bājra* (150). Cotton covered 68 square miles and poppy 34.

There has been no extension of the cultivated area in the last thirty years. The area twice cropped has, however, nearly doubled, and is now about a fifth of the cultivated area. The cultivation of cotton and sugar has decreased, but on the other hand the area under maize and rice is higher than in 1872. In the west of the District drainage was obstructed by the railway and by the Bhognīpur branch of the canal, but has been improved. Advances under the Agriculturists' Loans Act have been taken freely in adverse seasons. Thus in the wet years, 1890–2, Rs. 61,000 was advanced, and in the scarcity of 1896–7 Rs. 22,000. In ordinary years the advances are usually less than Rs. 1,000. About Rs. 47,000 was advanced in 1896–7 under the Land Improvement Loans Act; but in favourable seasons very few applications are received.

The District has no particular breed of cattle or horses. No attempts have been made to improve the indigenous strains, and the best cattle are imported. The buffaloes are, however, noted for milch purposes. Sheep and goats are reared in considerable numbers between the Jumna and Chambal, and have a considerable reputation in the Doāb. The goats, in particular, are purchased and kept to give milk.

The *pachār* or tract north-east of the Sengar is irrigated by the Etāwah branch of the Lower Ganges Canal, and the *ghār* or red-soil area between the Sengar and the Jumna by the Bhognīpur branch of the same canal. In 1903–4 canals irrigated 276 square miles, wells 105, and tanks and other sources 16. Wells are most common in the *pachār*, and are hardly used for irrigation in the *karkha* or the *pār* area.

Calcareous limestone or *kankar* is found in many parts of the District, both in nodules and in block form. The hardest variety is obtained from the ravines, where it has been washed free from earth.

There are very few manufactures in the District. A little cotton cloth is woven in many villages, and finer kinds were formerly made at Etāwah town. Crude glass is made at a few places, and Jaswantnagar is noted for brass-work. Indigo is still made in 35 factories, employing about 1,700 hands: and 8 cotton-gins, 3 of which contain presses, employ about 1,000. There is also a small sandal-oil factory at Sarai Mahajnau.

Trade and communications.

Cotton, *ghī*, gram, and oilseeds form the principal exports. Much of the *ghī* comes from the State of Gwalior, and is sent to Calcutta and Bombay, while cotton is exported to Cawnpore, Bombay, and Calcutta. The imports are chiefly piece-goods, metals, drugs, and spices. There was formerly considerable traffic on the Jumna, but this has now ceased. Many fairs and markets are held in the District.

The East Indian Railway passes through the centre of the District from south-east to north-west, and extensions to tap the trade of the rich *ghār* tract are under consideration. There are 89 miles of metalled and 443 miles of unmetalled roads, all of which are maintained at the cost of Local funds, though the former are managed by the Public Works department. The old imperial road from Agra to Allahābād runs through the District, but very little of it has been metalled. The chief trade route is the road from Farrukhābād to Gwalior, which is metalled, and good feeder-roads have been made to the principal railway stations. Avenues of trees are maintained on 305 miles.

The District has suffered repeatedly from famine. Immediately after the commencement of British rule, drought and hailstorms caused much distress in 1803–4. Minor famines occurred in 1813–4, 1819, and 1825–6. The great famine of 1837–8 was most severely felt, and led to the breaking up of many large estates. In 1860–1 and in 1868–9 Etāwah escaped as compared with other Districts. In 1877–8, though the rains failed almost completely, the canal commanded a large area and saved the harvest. Prices were high and relief works were opened, but famine was not severe. The famine of 1896–7 was felt in the *kharka* and *pār* tracts. Relief works were necessary, and the daily number on them rose to nearly 18,000 in February, 1897. Revenue was remitted to the extent of Rs. 59,000.

Famine.

The ordinary District staff consists of a Collector, a Joint Magistrate belonging to the Indian Civil Service, and three Deputy-Collectors recruited in India. There is a *tahsīldār* at the head-quarters of each *tahsīl*. Two Executive Engineers in charge of divisions of the Lower Ganges Canal and an officer of the Opium department are stationed at Etāwah town.

Administration.

There are two regular District Munsifs; but Etāwah is included in the Civil and Sessions Judgeship of Mainpurī. On the whole, crime is lighter than in other Districts of the Agra Division; dacoities and cattle-theft are, however, common. Female infanticide was formerly rife, but is rarely suspected now.

A District of Etāwah was formed at the cession in 1801; but it included large areas now in adjoining Districts, and was administered from Mainpurī. Many changes took place, and in 1824 four subdivisions were formed. In 1840 the District took its present shape. The first settlement of 1801–2 was based on the accounts of the celebrated Almās Alī Khān, an officer of the Oudh government, and it was followed by other short-term settlements lasting three to five years. The demand at each of these was based on the previous demand, and on general considerations, such as the area under cultivation and the ease or difficulty with which collections were made. A large part of the District was held on *talukdārī* tenures: but many of the *talukdārs* gave much trouble to the administration, and some of them were forcibly ejected after open rebellion. The early settlements were oppressive, and cultivation decreased and tenants emigrated. The famine of 1837–8 completed the ruin of the *talukdārs*, whose estates were settled with the resident cultivators. Operations were commenced on a more systematic principle under Regulation VII of 1822: but progress was extremely slow, and when the first regular settlement was begun in 1833 by Mr. (afterwards Lord) John Lawrence under Regulation IX of 1833, 100 villages had not been settled. The demand fixed in 1841 amounted to 13·1 lakhs, and was a reduction of over 10 per cent. on the previous demand. The next revision was made between 1868 and 1874. The land of each village was classified according to its soil, and suitable rent rates for each class of soil were assumed. These rates were selected from rents actually paid, and the 'assets' of each village were calculated from them. The recorded 'assets' were rejected, partly as being incorrect, and partly because rents had not been enhanced as much as it was thought they might have been. The new revenue was fixed at 13·3 lakhs, which represented 50 per cent. of the assumed 'assets.' At present the demand falls at an incidence of Rs. 1-7-0 per acre, varying from Rs. 1-6-0 to Rs. 1-9-0 in different parts of the District. It was expected that the actual 'assets' would rise to the assumed 'assets' within fifteen years. The question of a revision was considered in 1900, when it was decided that the settlement should be extended for a further ten years, as no increase of revenue was expected, and the existing demand was not so unequal as to require redistribution.

Collections on account of land revenue and total revenue are given in the table on the next page, in thousands of rupees.

The only municipality is that of Etāwah, but five smaller towns are administered under Act XX of 1856. Outside these, local affairs are managed by the District board, which had an expenditure of 1·4 lakhs in 1903–4, of which Rs. 64,000 was spent on roads and buildings.

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue .	13,28	13,34	13,30	13,23
Total revenue .	14,66	18,24	19,08	19,18

The District Superintendent of police has a force of 4 inspectors, 85 subordinate officers, and 344 men, besides 135 municipal and town police, and 1,500 village and road police. There are 19 police stations. The District jail contained a daily average of 231 prisoners in 1903.

Education is not very advanced. Only 3 per cent. of the population (5 males and 0·3 females) could read and write in 1901. The number of public schools fell from 147 in 1880–1 to 119 in 1900–1; but the number of pupils rose from 3,809 to 5,096. In 1903–4 there were 160 public schools with 6,447 pupils, of whom 294 were girls, besides 114 private schools with 1,214 pupils. Of the public schools, 3 are managed by Government and 107 by the District and municipal boards, the rest being under private management. The total expenditure on education was Rs. 45,000, of which Rs. 31,000 was derived from Local funds and Rs. 9,000 from fees.

There are 8 hospitals and dispensaries, with accommodation for 75 in-patients. The number of cases treated in 1903 was 45,000, of whom 602 were in-patients, and 2,700 operations were performed. The expenditure was Rs. 11,000, chiefly met from Local funds.

About 25,000 persons were successfully vaccinated in 1903–4, representing a proportion of 31 per 1,000 of the population. Vaccination is compulsory only in the municipality.

[C. H. T. Crosthwaite and W. E. Neale, *Settlement Report* (1875); *District Gazetteer* (1876, under revision).]

Etāwah Tahsīl.—North-western *tahsīl* of Etāwah District, United Provinces, conterminous with the *pargana* of the same name, lying between 26° 38′ and 27° 1′ N. and 78° 45′ and 79° 13′ E., with an area of 426 square miles. Population increased from 128,023 in 1891 to 216,142 in 1901. There are 353 villages and two towns: ETĀWAH (population, 42,570), the *tahsīl* head-quarters, and JASWANTNAGAR (5,405). The demand for land revenue in 1903–4 was Rs. 3,18,000, and for cesses Rs. 51,000. The density of population, 507 persons per square mile, is a little above the District average. The *tahsīl* contains portions of the four natural tracts found in the District. North-east of the Sengar river lies the *pachār*, a fertile loam tract which, however,

contains marshes and patches of barren land or *ūsar*. A tract called *ghār* lies south of the Sengar, with a soil which, though lighter, is very fertile when irrigated. The Jumna ravines, known as *karkha*, and the area between the Jumna and Chambal, called *pār*, are generally barren and there is little alluvial land. In 1903–4 the area under cultivation was 221 square miles, of which 96 were irrigated. The Etāwah and Bhognīpur branches of the Lower Ganges Canal supply more than half the irrigated area, and wells most of the remainder.

Etāwah Town.—Head-quarters of the District and *tahsīl* of the same name in the United Provinces, situated in 26° 46′ N. and 79° 1′ E., on the East Indian Railway, at the junction of the road from Farrukhābād to Gwalior with the old imperial road from Agra to Allahābād. Population (1901), 42,570, of whom 28,544 are Hindus and 12,742 Musalmāns. The city dates back to a period before the Musalmān conquest, but nothing is known of its early history. It became the seat of a Muhammadan governor, and was repeatedly attacked and plundered in the troublous times after the death of Fīroz Shāh Tughlak, when its Hindu chief raised the standard of revolt. Under Akbar it was the chief town of a *pargana*, and is mentioned in the *Ain-i-Akbarī* as possessing a brick fort. A century later Etāwah was famous as a banking and commercial centre; but in the eighteenth century it suffered much from Rohilla and afterwards from Marāthā raids. For its later history and events of the Mutiny, see ETĀWAH DISTRICT. The Jāma Masjid is a fine building constructed from a Hindu temple, with a massive front or propylon resembling those of the great mosques at JAUNPUR. There are also some fine Hindu temples and bathing *ghāts*, and a great mound with a ruined fort. The town is situated among the ravines of the Jumna, to the banks of which the suburbs extend. Humeganj, a handsome square, called after a former Collector, Mr. A. O. Hume, C.B., contains the public buildings and forms the centre of the city. It includes a market-place, *tahsīlī*, mission-house, police station, and male and female hospitals. The Hume high school, built chiefly by private subscriptions, and one of the first to be founded in the United Provinces, is a handsome building. The north and south sides of the square form the principal grain and cotton markets. The civil station lies about half a mile north of the town. Besides the ordinary District staff, two Executive Engineers and an officer of the Opium department have their head-quarters here. Etāwah is also the chief station of the American Presbyterian Mission in the District. The municipality was constituted in 1864. During the ten years ending 1901, the income averaged Rs. 37,000 and the expenditure Rs. 36,000. In 1903–4 the income was Rs. 55,000, chiefly from octroi (Rs. 41,000); and the expenditure was Rs. 59,000. There are no important manufactures, but cotton cloth is woven, and the town

is noted for a special sweetmeat. In 1903 seven cotton gins and presses employed 805 hands. Trade consists largely in the export of *ghī*, gram, cotton, and oilseeds. The municipality maintains four schools and aids eight others, with a total attendance of 814 pupils in 1904.

Etāwa.—Town in the Khurai *tahsīl* of Saugor District, Central Provinces, situated in 24° 12′ N. and 78° 14′ E., 2 miles from Bīna railway junction. Population (1901), 6,418. Etāwa is not a municipality, but a town fund is raised for sanitary purposes. The opening of the branch line from Bīna to Katnī has greatly increased the importance of Etāwa, and it is a thriving place. It contains vernacular middle and girls' schools, as well as schools and a dispensary supported from missionary funds.

Ettaiyāpuram Estate.—A *zamīndāri* in Tinnevelly District, Madras, situated in the Ottappidāram *tāluk* in the north-east of the District. Its area is nearly 570 square miles, and it comprises 374 villages with a population (1901) of 154,000. The principal castes are all Telugus by race. The ancestors of the *zamīndār* originally came from CHANDRAGIRI in North Arcot District. Kumāramuttu Naik, the fourteenth in descent, migrated to Madura owing to the disturbances in the north consequent on the invasion of Alā-ud-dīn Khiljī. The exile was kindly received by the Pāndyan king, who granted him extensive lands. Later on Kumāramuttu was sent down to quell disturbances in Tinnevelly. He accordingly proceeded to Sāttūr and built a fort there, the remains of which can be seen at the present day on the south bank of the Sāttūr river. The present town of Ettaiyāpuram (population, 8,788), the head-quarters of the *zamīndāri*, is said to have been founded in 1567. Muttu Jaga Vīra Rāma Naik, the thirty-first *zamīndār*, had a standing army of 6,000 men and rendered help to the British Government during the Poligār wars of 1799–1801, receiving, in recognition of his services, four out of the six divisions into which the forfeited estates of the vanquished *poligārs* were divided. The estate consists mainly of black cotton soil. Out of a cultivable area of 6,000 acres of 'wet,' and 250,000 acres of 'dry' land, nearly 5,000 acres and 240,000 acres respectively are under cultivation, the 'wet' land being watered by more than 90 tanks. The rainfall averages 33 inches. About 10,000 acres are set aside as game preserves, in which antelope, hares, and partridges abound. Jaggery (coarse sugar) is made from the palmyra palm in large quantities, and half the cotton grown in Tinnevelly District comes from this estate.

The estate is held under permanent *zamīndāri* tenure, and yields an income of more than $3\frac{1}{4}$ lakhs, while the annual *peshkash*, or permanent assessment paid to Government, amounts to Rs. 1,16,000. About 100 miles of road are maintained by the estate, and it contributes Rs. 1,000

annually towards the upkeep of two Local fund hospitals at Ettaiyāpuram and Nāgalāpuram. There is a high school for boys and a girls' school at Ettaiyāpuram town.

Ettaiyāpuram Town.—Chief place in the *zamīndārī* of the same name in the Ottappidāram *tāluk* of Tinnevelly District, Madras, situated in 9° 9′ N. and 78° E., 10 miles from Koilpatti station on the South Indian Railway. Population (1901), 8,788. Local affairs are managed by a Union *panchāyāt*. There is a hospital and a high school, and it also contains the residence of the *zamīndār*.

Everest, Mount.—The highest known point on the earth's surface, situated in the Nepāl Himālayas (27° 59′ N., 86° 56′ E.). Its altitude is 29,002 feet above sea-level; and the name of Everest was assigned to it by Sir Andrew Waugh in 1856, in honour of Sir George Everest, his predecessor as Surveyor-General of India, no native name for the peak being traceable. The question of the identity of Everest with the peaks known as Gaurī Sankar has been constantly discussed, and at length satisfactorily disposed of by the observations recently taken in the neighbourhood of Kātmāndu by Captain Wood, R.E. He has conclusively proved that the name Gaurī Sankar is applied to the two highest peaks of the only conspicuous mountain group visible from Kātmāndu city, and that these are no less than 36 miles west of Everest, which is not visible from the valley of Kātmāndu and is in no way conspicuous from the hills surrounding the valley.

Faizābād (1).—Capital of Badakhshān, in Afghānistān, situated in 37° 8′ N., 69° 47′ E.; 3,920 feet above the sea. It stands on the right bank of the Kokcha stream, which flows in a rocky, trench-like bed, successive ridges of hills rising behind the town to a height of at least 2,000 feet. Utterly destroyed by Murād Beg in 1829, it was still in ruins when visited by Captain Wood in 1837. It was restored by Faiz Muhammad Khān, when governor of Badakhshān in 1865. Ney Elias, who was there in 1866, writes:—

'The town of Faizābād is one of the most uninteresting spots to be found even in Central Asia. It contains probably some 4,000 inhabitants, chiefly Tājiks. A bazar is held twice a week, and on these occasions a fairly large gathering of people from the neighbouring districts takes place; but during the remainder of the week the place lies torpid, the majority of the shops being shut. The chief trade is probably with Kolāb, whence Russian cotton manufactures, sugar, cutlery, crockery, candles, &c., and Bokhāra silks are brought: and these are the wares that, in addition to country produce, chiefly fill the shops. English manufactures are rare, but still they are to be seen—chiefly cotton prints and muslins—together with Indian-made *lungīs* or turbans and common *kamkhwāb*, all of which come from Peshāwar by way of either Kābul or Chitrāl. Sanitary arrangements there are none; and this, combined with severe heat in summer, great cold in winter,

and usually a deadly stillness in the atmosphere, seems to produce conditions that render outbreaks of epidemics of frequent occurrence.'

It is hardly surprising that, in a town which has been rebuilt within the last forty years, no remarkable buildings exist.

Faizābād (2).—Division, District, *tahsīl*, and city in the United Provinces. *See* FYZĀBĀD.

Faizpur.—Town in the Yāval *tāluka* of East Khāndesh District, Bombay, situated in 21° 10′ N. and 75° 52′ E., 72 miles north-east of Dhūlia. Population (1901), 10,181. Faizpur is famous for its cotton prints and its dark blue and red dyes. About 250 families dye thread, turbans, and other pieces of cloth, and print cloth of all sorts. A weekly timber market is held, and it is also one of the chief cotton marts in Khāndesh. The municipality, established in 1889, had an average income during the decade ending 1901 of Rs. 6,500. In 1903–4 the income was Rs. 7,100. The town contains five schools, with 564 pupils, of which one, with 57 pupils, is for girls.

Fālākāta.—Village in the Alīpur subdivision of Jalpaiguri District, Eastern Bengal and Assam, situated in 26° 31′ N. and 89° 13′ E., on the east bank of the Mujnai river within a mile of the Cooch Behār boundary. Population (1901), 287. Fālākāta is an important market, at which some of the best jute, tobacco, and mustard grown in the Duārs are sold. It lies on the main road between Jalpaiguri and Alīpur, and the river is navigable to this point by boats of 2 tons throughout the year. An annual fair lasting for a month is held in February. Agricultural produce and stock are exhibited for prizes, and the fair is visited by a large number of Bhotiās and by merchants from all parts.

Falam Subdivision.—Central subdivision of the Chin Hills, Burma, bounded on the north by the Tiddim and on the south by the Haka subdivision. The population in 1901 was 36,858, largely Tashon Chins, inhabiting 173 villages, of which FALAM, containing 625 houses, is the largest and most important.

Falam.—Head-quarters of the Chin Hills, Burma, situated in 22° 56′ N. and 93° 44′ E., on a spur above the Manipur river, 5,300 feet above sea-level, and distant 108 miles from Kalewa, and 72 from Kalemyo on the Myittha, with which it is connected by a good mule road. In the early days of the occupation of the Chin Hills, Falam post was built on a spur overlooking the Tashon village of Falam. Owing to the unhealthiness of the site, however, the station was moved to where it now stands, 5 miles to the west of Falam village. Roads have been made in the station and trees planted. The water-supply is obtained from springs west of the station, and at present reaches the different buildings through open wooden ducts, soon to be replaced by iron pipes. The bazar lies to the east of the residential quarter. The

regular inhabitants numbered 911 in 1901, besides a large floating population.

False Point.—Cape, harbour, and lighthouse in the Kendrāpāra subdivision of Cuttack District, Bengal, situated in 20° 20′ N. and 86° 47′ E., on the north of the Mahānadī estuary. It takes its name from the circumstance that it was often mistaken by ships for Point Palmyras one degree farther north. Ships have to anchor in a comparatively exposed roadway, and loading and unloading can only be carried on in moderately fair weather. A considerable export of rice, however, still takes place to Mauritius and Ceylon chiefly in sailing ships, valued in 1903–4 at 19·65 lakhs, while the export to the Madras Presidency amounted to over a lakh. The lighthouse stands in 20° 19′ 50′ N. and 86° 47′ 30′ E.

Faltā.—Village in the Diamond Harbour subdivision of the District of the Twenty-four Parganas, Bengal, situated in 22° 17′ N. and 88° 7′ E., on the left bank of the Hooghly river, nearly opposite to its junction with the Dāmodar. Faltā is the site of an old Dutch factory, and it was to this place that the English retreated after the capture of Calcutta by Sirāj-ud-daula in 1756. A fort is situated here, which mounts heavy guns. The steamers plying between Calcutta and Tamlūk in the Midnapore District call at Faltā.

Farāsdānga.—A French settlement or *loge* on the outskirts of BALASORE TOWN, Bengal. The settlement was established towards the close of the seventeenth century, but much of the land comprised within it has been washed away, and its total area is now only 38 acres. This plot of land is under the authority of the Administrator of Chandernagore, and is leased out annually by public auction.

Farīdābād.—Town in the Ballabgarh *tahsīl* of Delhi District, Punjab, situated in 28° 25′ N. and 77° 20′ E., 16 miles from Delhi, near the Delhi-Muttra road and on the Delhi-Agra branch of the Great Indian Peninsula Railway. Population (1901), 5,310. The town was founded in 1607 by Shaikh Farīd, Jahāngīr's treasurer, to protect the high road from Delhi to Agra. It is of no commercial importance. The municipality was created in 1867. The income during the ten years ending 1902–3 averaged Rs. 5,900, and the expenditure Rs. 5,800. In 1903–4 the income was Rs. 6,800, chiefly derived from octroi; and the expenditure was Rs. 6,400. The chief educational institutions are the Victoria Anglo-vernacular middle school (unaided), a vernacular middle school maintained by the municipality, and the English station school (middle). There is a Government dispensary.

Farīdkot State.—Native State in the Punjab, under the political control of the Commissioner of the Jullundur Division, lying between 30° 13′ and 30° 50′ N. and 74° 31′ and 75° 5′ E., in the south of Ferozepore District, with an area of 642 square miles. Population (1901),

124,912. It contains two towns, FARĪDKOT (population, 10,405), the capital, and KOT KAPŪRA (9,519); and 167 villages. The country is a dead level, sandy in the west, but more fertile to the east, where the Sirhind Canal irrigates a large area.

The ruling family belongs to the Sidhū-Barār clan of the Jats, and are descended from the same stock as the Phūlkiān houses. Their occupation of Farīdkot and Kot Kapūra dates from the time of Akbar, though quarrels with the surrounding Sikh States and internal dissensions have greatly reduced the patrimony. Throughout the Sikh Wars Rājā Pahār Singh loyally assisted the British, and was rewarded by a grant of half the territory confiscated in 1846 from the Rājā of Nābha, while his ancestral possession of Kot Kapūra, which had been wrested from Farīdkot in 1808, was restored to him. During the Mutiny, his son Wazīr Singh, who succeeded in 1849, rendered active assistance to the British and was suitably rewarded. The present Rājā, Brij Indar Singh, is a minor, and the administration is carried on by a council under the presidency of an Extra-Assistant Commissioner, whose services have been lent to the State for the purpose. The council is, during the minority of the Rājā, the final court of appeal, but sentences of death require confirmation by the Commissioner. The Rājā is entitled to a salute of 11 guns. The State receives, at a reduced duty of Rs. 280 per chest, an allotment of 18 chests of Mālwā opium annually, each chest containing 1·25 cwt. The duty so paid is refunded, with the object of securing the co-operation of the State officials in the suppression of smuggling. The Imperial Service troops consist of one company of Sappers; and the local troops number 41 cavalry, 127 infantry, and 20 artillerymen, with 6 serviceable guns. The State maintains a high school at Farīdkot town and a charitable dispensary. The total revenue amounted in 1905–6 to 3·6 lakhs.

Farīdkot Town. - Capital of the Farīdkot State, Punjab, lying in 30° 40′ N. and 74° 49′ E., 20 miles south of Ferozepore, on the Ferozepore-Bhatinda branch of the North-Western Railway. Population (1901), 10,405. The fort was built about 700 years ago by Rājā Mokulsi, a Manj Rājput, in the time of Bāwa Farīd, who gave it his name. The town contains the residence of the Rājā of Farīdkot and the public offices of the State. It has a considerable trade in grain, and possesses a high school and a charitable dispensary.

Farīdnagar. Town in the Ghāziābād *tahsīl* of Meerut District, United Provinces, situated in 28° 46′ N. and 77° 41′ E., 16 miles south-west of Meerut city. Population (1901), 5,620. It was founded by Farīd-ud-dīn Khān in the reign of Akbar. It is administered under Act XX of 1856, with an income of about Rs. 1,600, and contains a primary school.

Farīdpur District.—District in the Dacca Division of Eastern

Bengal and Assam, lying between 22° 51′ and 23° 55′ N., and 89° 19′ and 90° 37′ E., with an area of 2,281 square miles. It is bounded on the north by the Padmā or main stream of the Ganges; on the east by the Meghnā; on the west by the Garai river, with its continuation the Madhumatī and its branch the Bārāsia, which separate it from the Districts of Nadiā and Jessore; and on the south by Backergunge.

Physical aspects.

This District is essentially a fluvial creation, and exhibits the later stages in the formation of the Gangetic delta. In the north and east the land is comparatively well raised, and is high and dry except during the rains; but the level sinks towards the south, and, on the confines of Backergunge, the whole country is one vast marsh intersected by strips of high land, the deposits of the rivers that have at different times flowed through the tract. The marshes are slowly but steadily silting up, and are being reclaimed for cultivation. The inhabitants build their houses on the higher land of the river banks or on mounds from 12 to 20 feet high laboriously thrown up during the dry months, and in the rains these homesteads alone rise above the waste of waters topped with grass or rice.

With the exception of the MEGHNĀ, the river system is that of the PADMĀ, one branch of which in the lower reaches is called the Kīrtināsā or 'destroyer of antiquities,' owing to the ravages it has wrought among the palaces, temples, and monuments of Rājā Rāj Ballabh of Rājnagar, one of the old capitals of Eastern Bengal. This and the MADHUMATĪ, the Garai, and the Ariāl Khān are large rivers, navigable throughout the year by trading boats of 4 tons burden; but there are numerous minor ramifications, the principal of which are the Chandnā, the Bhubaneswar, the Marā (or 'dead') Padmā or Pālang, and the Nayā Bhāngni (or 'new cut'). The interior is drained by a network of small waterways, such as the Kumār, the Sītālakhya, another Marā Padmā, and the Jakhlā, all of which flow ultimately into the Ariāl Khān. The southern marshes, known as the Nasībshāhi, the Atādānga, and the Kājaliā swamps, are drained by the Ghāgar or Saildaha river, which falls into the Madhumatī.

The District consists of recent alluvium, composed of sandy clay and sand along the course of the rivers and fine silt consolidating into clay in other parts of the river plain, while in the marshes beds of impure peat commonly occur.

Almost all the trees and plants common to Lower Bengal grow here. Marsh plants and weeds are found in great variety and luxuriance, and in the south the surface of the marshes either shows huge stretches of inundated rice, or is covered with matted floating islets of sedges and grasses and various water-lilies, the most striking of these being the *makana* (*Euryale ferox*). The artificial mounds on which habitations

are situated are, where not occupied by gardens, densely covered with a scrub jungle of semi-spontaneous species, with a few taller trees, among which the commonest is the *jiyal* (*Odina Wodier*), and the most conspicuous the red cotton-tree (*Bombax malabaricum*). Palms are common, the chief species being the date-palm (*Phoenix acaulis*) in the north, and the betel-nut (*Areca Catechu*) in the south. Mangoes of an inferior quality abound and plantains are grown round every house, both on the mainland and the river flats, while dense clusters of bamboos surround and overshadow every village. Tall casuarinas (*Casuarina muricata*) mark the sites of old indigo factories and line the roads.

Leopards still lurk in the jungles in the north and west of the District, and occasionally a tiger breaks cover from the Sundarbans and takes refuge in the southern marshes. Wild hog devastate the crops, especially in the Farīdpur, Bhūshanā, and Ainpur *thānas*. Crocodiles, both of the man-eating and fish-eating varieties, swarm in the large rivers, which teem with fish, the *hilsa* being an important article of export to Calcutta.

Humidity ranges high from April to October. The mean temperature remains at 83° from April to September, but falls during the cold season to 66°, the mean minimum being lowest (53°) in January. Rainfall commences early in the hot season; the average is 8·5 inches in May, 12·2 in June, 11·8 in July, 11·5 in August, and 8·1 in September, the total for the year being 66 inches. The District is always inundated when the rivers rise in the rainy season, but the floods seldom cause more than local damage: and they are in fact beneficial, as they cover the country with a rich alluvial deposit, which is gradually raising the level of the swamps.

History.

Very little is known of the earlier history of Farīdpur. The eastern subdivision of Mādārīpur was once an apanage of BIKRAMPUR, and the District was subsequently included in the ancient kingdom of Banga (called Samatata by Hiuen Tsiang) which has given its name to the modern Province of Bengal. Its people are described in the Raghubansa as living in boats, and they were clearly the ancestors of the Chandāls, who are still very numerous in this part of the country. Farīdpur passed under Muhammadan rule with the rest of Eastern Bengal at the beginning of the fourteenth century, and in 1582, at the time of Todar Mal's settlement, it appears to have been included within the *sarkār* of Muhammadābād or Bhūshanā. In the reign of Jahāngīr a number of chiefs, most of whom were Hindus, known to local tradition as the Bāra ('twelve') Bhuiyās, established independent principalities in East Bengal: and among them two brothers, Chānd Rai and Kedār Rai, extended their sway from Rājābāri in the District of Dacca to Kedārbāri, now in the Pālang *thāna* of Farīdpur,

where a deep ditch and the remains of a road known as Kāchkigurā Road mark the site of their residence or fort. The remains of a fort of Rājā Sītā Rām Rai, another of the Bhuiyās, can still be seen at Kilābāri in the Bhūshanā *thāna*; he was overthrown by the Mughals in a pitched battle at a place still known as Fatehpur ('town of victory'). For two centuries after the Muhammadan advent, the country was overrun by the Maghs or Arakanese, and their depredations drove the people into the inaccessible marshes, where protective moats are still to be seen at Ujāni in Maksūdpur and at Kotwālīpāra. Up to 1790 the present District was included in the tract known as Dacca Jalālpur, with the exception of the present *thāna* of Bhūshanā and part of Maksūdpur which were included in Jessore, and the Gopīnāthpur *pargana* which belonged to Backergunge. The separate existence of the District dates from 1811, when courts were built at Farīdpur, and the tract east of the Chandnā was transferred from Jessore. Subsequently, when the territory east of the Padmā was given up to Dacca, the District became known as Farīdpur. About this time Gopīnāthpur was received from Backergunge, and there were various subsequent changes of jurisdiction, the Mādārīpur subdivision being transferred from Backergunge in 1874, and the Krokīchar outpost from Dacca in 1895. The river Padmā has of late years been steadily encroaching towards Dacca and receding from this District, which has thus received a large accession of area.

Population.

The population increased from 1,530,288 in 1872 to 1,660,037 in 1881, to 1,823,715 in 1891, and to 1,937,646 in 1901. Malarial fever is prevalent, especially in the north and west of the District, and the decrease in the rate of progress in the last decade was due to the growing unhealthiness of this tract.

The chief statistics of the Census of 1901 are shown below :—

Subdivision.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Farīdpur . .	860	1	2,299	712,226	828	+ 6·8	36,604
Goalundo . .	428	...	1,178	319,285	746	− 9·2	16,995
Mādārīpur . .	993	1	1,806	906,135	913	+ 12·5	46,267
District total	2,281	2	5,283	1,937,646	849	+ 6·2	99,866

The two towns are FARĪDPUR, the head-quarters, and MĀDĀRĪPUR. The density of population is greater than in any other part of East Bengal, except Dacca District; the most crowded areas lie in the Mādārīpur subdivision. The whole of the Goalundo subdivision and

the Bhūshanā *thāna* in the head-quarters subdivision belong to a decadent tract, where the population is diminishing; and there is an equally unhealthy area in the Pālang *thāna* to the east of the Mādārīpur subdivision, which, however, has received extensive alluvial accretions. Several other *thānas*, such as Sibchar and Bhānga, have grown in the same way, and possess an area considerably in excess of that with which they are credited in the records of the Survey department, and on which the Census calculations of density were based. A number of immigrants from Dacca, whose houses on the north bank of the Padmā have been destroyed by the erosion of the river, have crossed to the Farīdpur side, and there is an annual influx of earth-workers, *pālki*-bearers, and other unskilled labourers from Bihār and the United Provinces. A similar exodus takes place from Farīdpur to Backergunge. The vernacular spoken consists of the dialects known as Eastern or Musalmāni, and East-Central, Bengali. Nearly 62 per cent. of the inhabitants are Muhammadans and, as elsewhere, the proportion is steadily increasing: they now number 1,199,351, and Hindus 733,555.

The vast majority of the Muhammadans are Shaikhs (1,113,000), though Jolāhās (58,000) are also numerous, doubtless in the main the descendants of converted Chandāls or Namasūdras, who are still so numerous that they include more than three-sevenths of the whole Hindu population. These people, who are chiefly found in the Mādārīpur subdivision and in the southern marshes, are among the hardiest and most healthy of the Hindus, and are struggling hard to improve their social status, which is at present a very low one. Brāhmans (51,000) and Kāyasths (85,000) are most numerous in the Mādārīpur and Pālang *thānas*, formerly part of the Bikrampur *pargana*; the men of these castes emigrate in large numbers in search of clerical employment. Sāhās (36,000), the great mercantile caste, are also numerous. Nearly $1\frac{1}{2}$ millions, or 77 per cent. of the District population, are dependent upon agriculture for their livelihood, 12 per cent. on industry, 1 per cent. on commerce, 2 per cent. on the professions, and 3 per cent. on unskilled labour.

The Australian Baptist Mission works at Farīdpur, the Baptist Mission at Mādārīpur, and the Evangelistic Mission at Gopālganj; and their converts, who are mainly Chandāls, have increased during the last decade from 3,500 to 4,600. The activity of these missions, however, is not to be gauged simply by the number of their converts, for they have also done a great deal in the cause of education.

Agriculture.

The soil is generally a rich loam, with a deposit of vegetable mould in the marshy area. The comparatively high lands in the north-west and centre are well-wooded; here, except in a few depressions where winter rice is grown, two crops are usually obtained, rice or jute being harvested in July or August, and

oilseeds, pulses, wheat, or barley in February. In recently reclaimed alluvial lands the alternation of crops is similar; but low lands which are flooded early yield only spring rice, which is reaped in May or June. In the southern marshes early and late rice are sown together in April. The plants grow with the rise of the flood, and the early crop ripens in August and is reaped from boats. The late rice ripens in October or November, and so much of the stalks as is then above the water is cut; the rest rots, and is burnt and ploughed in when the water has subsided.

The chief agricultural statistics for 1903–4 are shown below, areas being in square miles: -

Subdivision.	Total.	Cultivated.	Cultivable waste.
Farīdpur	860	660	37
Goalundo	428	329	18
Mādārīpur	993	763	42
Total	2,281	1,752	97

Rice occupies five-sixths of the cultivated area, the winter crop accounting for three-fifths of the whole. After rice, jute is the crop most extensively grown; its cultivation has increased very rapidly of late years, and it now occupies 148 square miles. Pulses are an important cold-season crop, especially *māskalai* (*Phaseolus radiatus*); some of this is consumed or exported, but the greater part is grazed by cattle. Rape and mustard and sugar-cane are also largely grown.

Little cultivable land remains untilled; the marshes are ploughed as soon as they silt up sufficiently, and newly formed alluvial lands are cultivated the moment they become fit to bear crops. In Government estates attempts have been made to introduce new cereals and vegetables, and seeds have been freely distributed, but without much result. There is generally little need for Government loans, as the land is very fertile, yielding rich harvests with very little toil, and wealth is evenly distributed; but Rs. 23,000 was advanced in 1893–4 and Rs. 14,000 in 1897–8 under the Agriculturists' Loans Act.

The indigenous breed of cattle is very poor, and very little has been done to improve it, though the richer farmers occasionally introduce better animals from Bhāgalpur. The only fair of any importance is that held at Farīdpur in January and February in connexion with an Agricultural Exhibition, at which prizes are given for agricultural produce, implements, and cattle, and also to weavers and other handicraftsmen.

Hand-weaving supports 53,000 persons, a larger number than in

Trade and communications.

any other District of Bengal. The industry is carried on chiefly by the Muhammadan Jolāhās, who, in addition to coarse cotton cloths for local use, manufacture a large quantity of a cotton check, known as *chārkhāna*, which finds a ready sale in Calcutta. A fine variety of *sītalpāti* (*Phrynium dichotomum*) mats is made in the Bhūshanā *thāna*, and the Namasūdras weave coarse mats of bamboos, canes, and reeds; gunny-bags are also manufactured, chiefly by the Kapāli caste. A good deal of gold and silver jewellery, brass, copper and ironwork, and pottery is made for local use; and boat-building is an important industry. There are no factories, but a few jute hand-presses have recently been introduced.

The bulk of the trade is with Calcutta. Jute forms the principal export, rice, pulses, oilseeds, and fish being the articles of next importance. The chief imports are European cotton piece-goods, salt, kerosene oil, corrugated iron, molasses and sugar, coal and coke from Burdwān, Mānbhūm, and Assam, common rice from Bogra and Dināj-pur, and fine rice and timber from Barisāl. The Calcutta trade is carried by the Eastern Bengal State Railway, by country boats via Khulnā, or by the steamer services. GOALUNDO, the terminus of the railway and of several important steamer routes, is a focus through which an enormous volume of trade passes, and MĀDĀRĪPUR is growing in importance. Other important trade centres are FARĪDPUR, Pāngsa, Belgāchi, RĀJBĀRI, and Pāchuriā on the railway; Sadarpur on the banks of the Bhubaneswar; Jamālpur, Madhukhāli, and Kāmārkhāli on the Chandnā; Saiyidpur and Boālmāri on the Jessore road; Kānai-pur, Jaynagar, and Bhānga on the Kumār; Gopālganj, Bhātiāpāra, and Pātghāti on the Madhumatī; Pālang on the Pālang river; and Mulfat-ganj inland. The middlemen who purchase agricultural produce from the cultivators are usually Muhammadans or Namasūdras. Agents of European firms in Calcutta are employed to buy jute, and Sāhās and Mārwāris also do wholesale business. In the drier parts of the District bullock-carts and pack-ponies are occasionally used, but boats are the almost universal means of carriage; during the rains every village is accessible by water and boat traffic is very brisk, stocks being purchased at that season for the whole year's consumption.

The Eastern Bengal State Railway (broad gauge) enters the District near Māchpāra and crosses the north-west corner to its terminus at Goalundo on the Padmā; from Pāchuriā a branch line runs to the head-quarters station. The principal roads are those from Farīdpur to Jessore, Rājbāri, and Bhānga, and from Kānaipur to Pāngsa. Exclusive of village and municipal roads, the District contains only 182 miles of road, of which 10 miles are metalled. As already stated, most of the traffic is carried by water.

The steamer services from Goalundo down the Padmā touch at various places within the District, and a branch line plies to Mādārīpur. An important route, known as the Kumār-Madhumatī-Bīl route, carries most of the jute from the south of the District to Khulnā. A connecting canal, estimated to cost 20 lakhs, is under construction, but as yet it can only be used by steamers during the rainy season (*see* CALCUTTA AND EASTERN CANALS).

Administration.

For administrative purposes the District is divided into three subdivisions, with head-quarters at FARĪDPUR, RĀJBĀRI (Goalundo), and MĀDĀRĪPUR. Under the District Magistrate-Collector the staff for criminal and revenue work consists of six Deputy-Magistrate-Collectors, of whom four are stationed at head-quarters, and two are in charge of the Goalundo and Mādārīpur subdivisions respectively; a Sub-Deputy-Collector is stationed at Farīdpur and another at Mādārīpur.

For civil work the courts subordinate to the District and Sessions Judge are those of a Sub-Judge and two Munsifs at Farīdpur, two Munsifs each at Goalundo, Mādārīpur, and Chikāndi, and four Munsifs at Bhānga. The criminal courts include those of the District and Sessions Judge, the District Magistrate, and the above-mentioned Deputy-Magistrates. Land disputes give rise to a large number of civil and criminal cases, and not infrequently lead to riots attended with bloodshed and loss of life: such disputes are especially numerous and bitter on the alluvial formations in the great rivers.

At the time of the Permanent Settlement, Farīdpur was included in the province of Dacca; owing to the large amount of waste land at that time, the assessment was very small, and the incidence is consequently very low, being only R. 0-8-8 per cultivated acre or a quarter of the average rental. Of 5,998 estates, only five pay a revenue of over Rs. 10,000, and estates are being rapidly disintegrated under the working of the partition law. In 1903–4 the total current demand was 6·09 lakhs, of which 4·30 lakhs was due from 5,598 permanently settled estates, Rs. 38,000 from 147 estates temporarily settled with proprietors and middlemen, and the remainder from 234 estates directly managed by the Collector. The land revenue is liable to constant fluctuations, owing to alluvion and diluvion. The average rent paid for rice lands is Rs. 3 per acre, but for inferior sandy soil it is sometimes as low as 6 annas. For raised homestead and sugar-cane lands the rates range ordinarily between Rs. 4–8 and Rs. 7–8, but rise in some places to Rs. 9 or even more.

The table on the next page shows the collections of land revenue and of total revenue (principal heads only), in thousands of rupees.

Outside the municipalities of FARĪDPUR and MĀDĀRĪPUR, local affairs are managed by the District board, with subordinate local

boards in the three subdivisions. In 1903–4, its income was Rs. 1,29,000, of which Rs. 63,000 was obtained from rates; and the expenditure was Rs. 1,45,000, including Rs. 61,000 spent on public works and Rs. 47,000 on education.

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue .	5,63	5,93	6,14	6,20
Total revenue .	10,16	11,82	14,51	14,71

The District contains 13 police stations or *thānas*, and 6 outposts. In 1903 the force under the District Superintendent of police consisted of 4 inspectors, 44 sub-inspectors, 29 head constables, and 355 constables, maintained at a total cost of Rs. 1,15,000; there was one policeman to 8·2 square miles, and to 7,045 of the population. There was, in addition, a rural police of 446 *daffadārs* and 4,392 *chaukīdārs*. The District jail at Farīdpur has accommodation for 321 prisoners, and subsidiary jails at Mādārīpur and Rājbāri for 58.

Education made great strides between 1881 and 1901. In the latter year 5·1 per cent. of the population (9·7 males and 0·6 females) could read and write. The total number of pupils under instruction increased from about 14,500 in 1882 to 37,774 in 1892–3 and to 38,502 in 1900–1, while 51,518 boys and 5,995 girls were at school in 1903–4, being respectively 35·4 and 4·1 per cent. of the children of school-going age. The number of educational institutions, public and private, in that year was 1,968, including 105 secondary, 1,656 primary, and 207 special schools. The total expenditure on education was 2·57 lakhs, of which Rs. 25,000 was met from Provincial funds, Rs. 46,000 from District funds, Rs. 700 from municipal funds, and Rs. 1,42,000 from fees. The Muhammadans are far more backward than the Hindus, who in proportion to their numbers have six times as many males able to read and write; less than a third of the pupils in the schools are Musalmāns, though nearly two-thirds of the population profess this religion.

The District contained 19 dispensaries in 1903, of which 4 had accommodation for 89 in-patients. These include the Kumār floating dispensary, which moves about on the Kumār river dispensing medical relief to the inhabitants of the extremely unhealthy areas on its banks. The cases of 164,000 out-patients and 972 in-patients were treated during the year, and 5,223 operations were performed. The total expenditure was Rs. 32,000, of which Rs. 8,000 was met from Government contributions, Rs. 11,000 from Local and Rs. 1,600 from municipal funds, and Rs. 9,000 from subscriptions.

Vaccination is carried on under difficulties, the majority of the population being Muhammadans of the Farāzi sect, who are extremely

averse to vaccination. It is, however, making great progress; and, though it is compulsory only in the two municipalities, 119,000 persons, or 62·3 per 1,000 of the population, were successfully vaccinated in 1903–4.

[Sir W. W. Hunter, *Statistical Account of Bengal*, vol. v (1875).]

Faridpur Subdivision. - Head-quarters subdivision of Faridpur District, Eastern Bengal and Assam, lying between 23° 8′ and 23° 42′ N. and 89° 30′ and 90° 12′ E., with an area of 860 square miles. The whole of the subdivision is an alluvial formation, comparatively high to the east, but very marshy in the interior. The population in 1901 was 712,226, compared with 666,594 in 1891. The subdivision contains one town, FARĪDPUR (population, 11,649), the head-quarters; and 2,299 villages. The density of population is high (828 persons per square mile), rising to 1,223 in Bhānga *thāna* in the north, and not falling below 600 even in the swampy tracts in the south.

Faridpur Town (1). -Head-quarters of Faridpur District, Eastern Bengal and Assam, situated in 23° 37′ N. and 89° 51′ E., on the west bank of the Marā ('dead') Padmā. Population (1901), 11,649. Faridpur takes its name from a Muhammadan saint Farid Shāh, whose shrine it contains. The town is connected with the main line of the Eastern Bengal State Railway by a branch from Pāchuriā. Faridpur was constituted a municipality in 1869. The income during the decade ending 1901–2 averaged Rs. 14,500, and the expenditure Rs. 13,500. In 1903–4 the income was Rs. 19,000, of which Rs. 6,000 was derived from a property tax, and Rs. 5,000 from a conservancy rate; and the expenditure was Rs. 19,800. A water-filter has been constructed at a cost of Rs. 10,000, and a second is under construction. The town contains the usual public offices; the District jail has accommodation for 321 prisoners, who are employed on cloth and carpet-weaving, brick-making and pounding, oil-pressing, and the manufacture of cane furniture and coco-nut fibre mats.

Faridpur Tahsil.—South-eastern *tahsil* of Bareilly District, United Provinces, conterminous with the *pargana* of the same name, lying between 28° 1′ and 28° 22′ N. and 79° 23′ and 79° 45′ E., with an area of 249 square miles. Population increased from 119,805 in 1891 to 128,861 in 1901. There are 314 villages and two towns, including FARĪDPUR (population, 6,635), the *tahsil* head-quarters. The demand for land revenue in 1903–4 was Rs. 1,84,000, and for cesses Rs. 30,000. The density of population, 518 persons per square mile, is the lowest in the District. On the south-west the Rāmgangā river divides the *tahsil* from Budaun, while the East Bahgul crosses it from north to south. Farīdpur is the most unproductive part of the District, consisting for the most part of plateaux of light siliceous soil, undulating into gleaming sandy ridges, which sometimes present the appearance of low hills. In

seasons of favourable rainfall such soil often produces a good autumn crop, but a series of years of heavy rain throws it temporarily out of cultivation. The basins of the rivers are more fertile, both naturally and because irrigation is easier. In 1903–4 the area under cultivation was 196 square miles, of which 34 were irrigated. Wells supply more than half the irrigated area, tanks or *jhīls* about a quarter, and rivers the remainder.

Farīdpur Town (2).—Head-quarters of the *tahsīl* of the same name in Bareilly District, United Provinces, situated in 28° 13′ N. and 79° 33′ E., on the main line of the Oudh and Rohilkhand Railway, and on the road from Lucknow to Delhi. Population (1901), 6,635. The place was formerly called Pura, and was founded by insurgent Katehriyā Rājputs ejected from Bareilly between 1657 and 1679. It derives its present name from one Shaikh Farīd, a mendicant or, according to others, a governor, who built a fort here during Rohilla rule (1748–74). The town contains a *tahsīlī*, a dispensary, and a branch of the American Methodist Mission. It is administered under Act XX of 1856, with an income of about Rs. 1,000. The *tahsīlī* school has 125 pupils, and a girls' school about 20.

Farrah.—Capital of the Farrah province of Afghānistān, situated in 32° 26′ N. and 62° 8′ E.; 2,460 feet above the sea. Formerly a place of some importance, Farrah is now almost deserted, the governor and his escort being the principal inhabitants. The whole place is in ruins, the only habitations being the quarters of the garrison and a few shops. Some large granaries have recently been added. The governor himself lives in a village near the fort. From outside, Farrah presents an imposing appearance, being encircled by a solid rampart of earth to a height of 30 or 40 feet; within, beyond the few buildings mentioned, there is nothing but a succession of mounds and heaps of mud ruins, varied by pits and holes. The place is very unhealthy, being built in a swamp. Farrah is a place of great antiquity; it is believed to be the Phra of Isidore of Charax (first century). According to Ferrier it was sacked by Chingiz Khān, and the survivors were moved farther north. They returned, however, and the town prospered again till its bloody siege by Nādir Shāh. In 1837 the remaining population, amounting to 6,000, was carried off to Kandahār.

Farrukhābād District.—Easternmost District of the Agra Division, United Provinces, lying between 26° 46′ and 27° 43′ N. and 79° 8′ and 80° 1′ E., with an area of 1,685 square miles. On the north the Ganges divides it from Budaun and Shāhjahānpur; on the east is the Oudh District of Hardoī, partly separated by the Ganges; Cawnpore and Etāwah lie to the south, and Mainpurī and Etah to the west. The greater part of the District lies in the DOAB along the right bank of the Ganges, but the Aligarh *tahsīl* lies wholly on the opposite bank.

Physical aspects.

The former division consists of an upland area called *bāngar*, and a low lying tract called *tarai*, *katri*, or *kachohā*. The lowlands stretch from the present bed of the Ganges to the old high bank, with a breadth of 6 miles in the north of the District. At Farrukhābād the river is at present close to its high bank, but farther south it diverges again to a distance of 4 miles. The tract across the Ganges is entirely composed of low-lying land subject to floods, which cover almost the whole area. The uplands are divided into a series of small *doābs* by the rivers Bagār, Kālī Nadī (East), Isan, Arind, and Pāndū, which flow roughly parallel to each other and join the Ganges. These divisions are generally similar. On each bank of the rivers is a small area of alluvial soil, from which rise sandy slopes. The soil gradually improves, becoming less sandy; and the central portion is good loam, with here and there patches of barren land called *usar*, often covered with saline efflorescences. The most northern division, from the old high bank to the Bagār, is the poorest. Besides the small rivers already mentioned, the Rāmgangā flows through part of the Alīgarh *tahsīl*; and an old channel of the Ganges, called the Būrhgangā, lies between the high bank and the present bed of the river in the north of the District. Shallow lakes or *jhīls* are common in the Kaimganj, Alīgarh, Chhibrāmau, and Tirwā *tahsīls*.

The District consists entirely of Gangetic alluvium. *Kankar* is the chief mineral product, but saline efflorescences (*reh*) are also found.

The flora presents no peculiarity. The principal groves, which cover 55 square miles, are of mango-trees, and the District is uniformly though not thickly wooded. The toddy-palm (*Borassus flabellifer*) is commoner than in the neighbouring Districts. In the alluvial tract *babūl* is the commonest tree. In the uplands there are considerable stretches of *dhāk* jungle (*Butea frondosa*). Some damage has been done in the sandy tracts by the spread of a grass called *kāns* (*Saccharum spontaneum*).

Antelope are still very common, and *nīlgai* are occasionally seen. Jackals, hyenas, wolves, and foxes are also found, and wild hog are numerous. Snipe and duck abound in the cold season. Fish are common in the rivers and small tanks, and are largely used as food. Crocodiles are found in the Ganges and Kālī Nadī.

Farrukhābād is one of the healthiest Districts in the Doāb. Its general elevation is considerable, the climate is dry, and the country is remarkably free from epidemics. The trans-Gangetic *parganas* are, however, damper and more feverish, though they are cool in summer. The mean temperature varies from about 58° in January to about 95° in June.

The annual rainfall averages about 33 inches. Variations from year

to year are considerable, but the fall is very uniform throughout the District.

History.

The northern part of the District was included in the ancient kingdom of PANCHĀLA mentioned in the Mahābhārata, and places are still connected by tradition with episodes in the life of Draupadī, wife of the Pāndava brothers. Numerous remains of the Buddhist period point to the importance of several towns early in the Christian era. In the fourth and fifth centuries Kanauj was included in the domains of the Gupta emperors; and when the power of that dynasty declined, in the sixth century, a petty independent line of Maukharī kings ruled here. The Maukharīs fell before the kings of Mālwā, who in turn were defeated by the ruler of Thānesar in the Punjab. Harshavardhana of Thānesar, early in the seventh century, founded a great empire in Northern India, and Hiuen Tsiang, the Chinese pilgrim, describes the magnificence of his court[1]. The empire collapsed on Harshavardhana's death, but inscriptions and copperplates tell of other dynasties ruling at Kanauj in later years. At the end of 1018, when Mahmūd of Ghazni crossed the Jumna, the Rājputs were in power at Kanauj, and had to submit to the sudden shock of Muslim invasion. Although Kanauj was plundered, the expedition was a mere raid, and Rāthors ruled it for nearly 200 years longer. In 1194, however, Muhammad Ghorī defeated the last great Rājā, Jai Chand, and Hindu rule in the central parts of the Provinces was practically at an end. During the early years of Muhammadan rule Kanauj was the seat of a governor, and the District was constantly the scene of revolt. At the end of the fourteenth century part of it was incorporated in the new kingdom of Jaunpur, while Kanauj became the residence of Mahmūd Tughlak when he lost the throne of Delhi. During the first eighty years of the fifteenth century the District suffered much from the struggle between Delhi and Jaunpur, but in 1479 was finally restored to the empire. While the Mughal power was gradually being consolidated in the sixteenth century, and during the struggle with the Pathāns which led to the establishment of the short-lived Sūri dynasty, fighting was frequent, and in 1540 Humāyūn suffered a disastrous defeat near Kanauj. Under the great Mughal emperors the District enjoyed comparative peace, but early in the eighteenth century it became the nucleus of one of the independent States which arose as the Mughal empire crumbled away. The founder was Muhammad Khān, a Bangash Afghān belonging to a village near Kaimganj. He brought 12,000 men to Farrukh Siyar in his fight for the throne, and was rewarded by a grant in Bundelkhand. In 1714 he obtained a grant near his own home and founded the city of Farrukhābād. Muhammad

[1] Beal, *Buddhist Records of the Western World*, vol. i, p. 206; see also Bana's *Harsa Charita*.

Khān was governor of the province of Allahābād for a time, and later of Mālwā, but his chief services were rendered as a soldier. At his death in 1743 he held most of the present Districts of Farrukhābād, Mainpurī, and Etah, with parts of Cawnpore, Alīgarh, Etāwah, Budaun, and Shāhjahānpur. His son, Kaim Khān, was craftily embroiled with the Rohillas by Safdar Jang, Nawāb of Oudh, and lost his life near Budaun in 1749. The Farrukhābād domains were formally annexed to Oudh, but were recovered in 1750 by Ahmad Khān, another son of the first Nawāb, who defeated and slew Rājā Nawal Rai, the Oudh governor. Safdar Jang called in the Marāthās, who besieged Ahmad Khān in the fort at Fatehgarh near Farrukhābād, and drove off the Rohillas who had come to his aid. Ahmad Khān had to fly to the foot of the Himālayas, and in 1752 was allowed to return after ceding half his possessions to the Marāthās. In 1761 he did good service to Ahmad Shāh Durrāni at Pānīpat, and regained much of his lost territory. The recovery embroiled him with Shujā-ud-daula, the Nawāb of Oudh, who coveted the tract for himself; but Ahmad Khān was too strong to be attacked. In 1771 the Marāthās again recovered the *parganas* which had been granted to them, and shortly afterwards Ahmad Khān died. His territory then became tributary to Oudh. In 1777 British troops were stationed at Fatehgarh as part of the brigade which guarded Oudh, and from 1780 to 1785 a British Resident was posted here. The latter act was one of the charges against Warren Hastings, who had engaged to withdraw the Resident. In 1801 the Oudh government ceded to the British its lands in this District, together with the tribute paid by the Nawāb of Farrukhābād, and the latter gave up his sovereign rights in 1802. Two years later Holkar raided the Doāb, but was caught by Lord Lake after a brilliant night march and his force was cut to pieces close to Farrukhābād.

The District remained free from historical events up to the date of the Mutiny. News of the outbreak at Meerut reached Fatehgarh on May 14, 1857; and another week brought tidings of its spread to Alīgarh. The 10th Native Infantry showed symptoms of a mutinous spirit on May 29; but it was not till June 3 that a body of Oudh insurgents crossed the Ganges, and arranged for a rising on the following day. The European officials and residents abandoned Fatehgarh the same evening; but several of them returned a few days later and remained till June 18, when another outbreak occurred, and the rebels placed the Nawāb of Farrukhābād on the throne. The 41st Native Infantry, from Sītāpur, marched into Fatehgarh, and the Europeans began to strengthen the fort. On June 25 the rebels attacked their position, which became untenable by July 4. The fort was then mined, and its defenders escaped in boats. The first boat reached Bithūr, and its occupants were subsequently murdered at Cawnpore by the Nāna;

the second boat was stopped ten miles down the Ganges, and all in it were captured or killed except three. The Nawāb governed the District unopposed till October 23, when he was defeated by the British at Kanauj. The troops, however, passed on, and the Nawāb, with Bakht Khān of Bareilly, continued in the enjoyment of power until Christmas. On January 2, 1858, British forces crossed the Kālī Nadī and took Fatehgarh next day. The Nawāb and Fīroz Shāh fled to Bareilly. Brigadier Hope defeated the Budaun rebels at Shamsābād on January 18, and Brigadier Seaton routed another body on April 7. In May a force of 3,000 Bundelkhand insurgents crossed the District, and besieged Kaimganj; but they were soon driven off into the last rebel refuge in Oudh, and order was not again disturbed.

The ancient sites in the District are numerous. SANKĪSĀ has been identified with a great city mentioned by Hiuen Tsiang, and from KAMPIL westwards are mounds which contain a buried city. The buildings of the Hindu and Buddhist periods have, however, crumbled away, or, as at KANAUJ, been used as the material for mosques. The buildings of the Nawābs of Farrukhābād are not important.

Population.

There are 8 towns and 1,689 villages in the District. Population decreased between 1872 and 1881 owing to famine, and in the next decade owing to deterioration due to floods; it has risen with the return of more favourable seasons. The number of inhabitants at the last four enumerations was as follows: (1872) 917,178, (1881) 907,608, (1891) 858,687, and (1901) 925,812. There are six *tahsīls*—KANAUJ, TIRWĀ, CHHIBRĀMAU, FARRUKHĀBĀD, KAIMGANJ, and ALĪGARH—the head-quarters of each being at a town of the same name, except in the case of Kanauj, of which the head-quarters are at Sarai Mīrān. The principal towns are the municipality of FARRUKHĀBĀD-*cum*-FATEHGARH and KANAUJ. The following table gives the chief statistics of population in 1901:—

Tāluk.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Kanauj	181	1	206	114,215	631	— 2·6	4,157
Tirwā	380	2	256	180,086	474	+ 6·8	3,529
Chhibrāmau	240	2	240	126,705	528	+ 14·0	3,204
Farrukhābād	339	1	387	250,352	739	+ 2·2	12,266
Kaimganj	363	2	397	168,606	464	+ 17·4	3,061
Alīgarh	182	...	203	85,848	472	+ 17·2	2,059
District total	1,685	8	1,689	925,812	549	+ 7·8	28,216

Hindus form 88 per cent. of the total, and Musalmāns 12 per cent. There are only 1,100 Christians. The density is rather above the

Provincial average, and between 1891 and 1901 the rate of increase was comparatively large. More than 99 per cent. of the population speak Western Hindī of the Kanaujiā dialect.

The following are the most numerous Hindu castes: Kisāns (cultivators, akin to the Lodhas of other Districts), 94,000; Chamārs (leather-workers and labourers), 93,000; Ahīrs (graziers and cultivators), 89,000; Brāhmans, 76,000; Rājputs, 73,000; and Kāchhīs (cultivators), 70,000. Kurmīs (28,000) are also important for their skill and industry in agriculture. The only caste peculiar to the District is that of the Sādhs, most of whom are cotton-printers by trade; they are distinguished by belonging to a special sect, which does not recognize the worship of idols or the supremacy of the Brāhman. The District is notable for the large number of Muhammadans of foreign origin; Pathāns number 34,700; Shaikhs, 29,800; Saiyids, 5,800; the most numerous artisan caste is that of the Dhunas or cotton-carders, 7,100. As many as 61 per cent. of the population are supported by agriculture, which is a high proportion. Rājputs hold two-fifths of the land, and Brāhmans and Musalmāns nearly one-fifth each. Ahīrs, Kisāns, Rājputs, Brāhmans, Kāchhīs, and Kurmīs occupy the largest areas as cultivators.

The American Presbyterian Mission was founded in 1838, and 489 out of the 699 native Christians in 1901 were Presbyterians. Many of them reside in the village of Rakha near Fatehgarh, which was held by the mission on lease for sixty years.

Agriculture.

The soil varies from sand to fertile loam and stiff clay, which ordinarily produces rice. Each of the four watersheds between the small rivers which divide the uplands is generally composed of good loam, with occasional patches of sandy soil, and some large *ūsar* plains, the soil near which is clay. The slopes to the rivers are usually sandy; and these and the lowlands near the Ganges and the Alīgarh *tahsīl* are precarious tracts, especially liable to suffer from excessive rain, which causes a rank growth of coarse grasses. On the whole the Rāmgangā deposits a more fertile silt than the Ganges.

The District is held on the usual tenures of the United Provinces. Out of 3,563 *mahāls*, 2,432 are *zamīndāri*, 1,046 *pattīdāri*, and 85 *bhaiyāchārā*. A few estates are held on *talukdāri* tenure. The main agricultural statistics for 1903–4 are given in the table on the next page, in square miles.

The principal food-crops, with the areas sown in 1903–4, are: wheat (326 square miles), barley (191), *jowār* (140), and gram (93). Less important are maize (87), *bājra* (102), and *arhar* (72). Rice is grown chiefly in the outlying village lands, and is of poor quality except in the Tirwā *tahsīl*. Cotton occupied 19 square miles and sugar-cane 21; but the most valuable miscellaneous crops are poppy (47 square miles),

tobacco (3), and potatoes (7). The tobacco of the Kaimganj *tahsīl* has a more than local reputation, as it is irrigated with brackish water, which improves the flavour. Indian hemp or *bhang* (*Cannabis sativa*) is cultivated in a few villages.

Tahsīl.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Kanauj . .	181	124	43	21
Tirwā . . .	380	197	101	76
Chhibrāmau .	240	160	64	29
Farrukhābād .	339	223	81	51
Kaimganj . .	363	226	72	70
Alīgarh . .	182	111	17	33
Total	1,685	1,041	378	280

Cultivation has slightly decreased in area during the last thirty years, but has intensified in quality. The District is noted for its high standard of cultivation, chiefly in the hands of the Kurmīs and Kāchhīs. The best fields bear three crops in a year: maize in the rains, potatoes in the cold season, and tobacco in the spring. The two latter crops require rich manuring and plentiful irrigation, and are thus largely grown near towns. The cultivation near Farrukhābād and Kaimganj can hardly be excelled in the United Provinces. Loans under the Agriculturists' Loans Act are taken freely during adverse seasons; they amounted to a total of 1·3 lakhs between 1891 and 1900, but have now dropped to about Rs. 2,000 a year. The amounts advanced under the Land Improvement Loans Act are still smaller. Drainage works have been carried out in many parts of the District with good results.

There is no indigenous breed of cattle, and all the best animals are imported. Attempts to improve the breed have had no result so far. The ponies likewise are inferior. Sheep and goats are bred locally, and are also imported from beyond the Jumna.

The north and south of the District are fairly well supplied by canal-irrigation from branches of the Lower Ganges Canal, and a third branch irrigates a small area in the centre. Wells, however, are the principal source of irrigation, and in 1903–4 supplied 223 miles, while canals served only 105. The *jhīls* and rivers are used to an appreciable extent, serving 38 and 12 square miles respectively. Water is generally raised from wells in a leathern bucket worked by bullocks, but in low-lying tracts the lever (*dhenkli*) is used. In the case of *jhīls* and rivers, a closely-woven basket swung on ropes held by two or four men is the common form of lift.

Kankar is the only form of stone found, and it occurs in many parts of the District in both block and nodular forms. Saltpetre is manufactured to a considerable extent and exported.

Farrukhābād and Kanauj are celebrated for cloth printing applied to

curtains, quilts, table-covers, and the like; but the industry is languishing at Kanauj. A European demand for the articles produced at Farrukhābād has recently sprung up. Farrukhābād is also a considerable centre for the manufacture of gold lace and of brass and copper vessels. Tents are made in the Central jail and by several private firms, and Kanauj is noted for the production of scent. There are a few indigo factories in the District, but the manufacture is declining. A flour-mill has recently been opened. The Government gun-carriage factory employed 795 hands in 1903, but has undertaken no new work since the completion of the Jubbulpore factory.

Trade and communications.

The chief exports are: tobacco, opium, potatoes, fruit, *bhang*, saltpetre, cotton-prints, scent, and brass and copper vessels; while the imports include grain, piece-goods, salt, timber, and metals. Tobacco, scent, and mangoes are largely exported to Central India and Rājputānā. The rest of the trade is chiefly local, and is carried on at small markets. Up to 1881 the want of railway communication affected the commerce of the District, which has revived considerably since.

Farrukhābād is fairly well supplied with means of communication, except in the Aligarh *tahsīl*, which is often flooded. The Cawnpore-Achhnerā Railway passes through the length of the District near the Ganges, and a branch of the East Indian Railway from Shikohābād was opened in 1906. There are 142 miles of metalled roads, all maintained by the Public Works department; the cost of half of these is, however, local, and 868 miles of unmetalled roads are also maintained by the District board. Avenues of trees have been planted along 118 miles. The grand trunk road passes through the southern half of the District with a branch to Farrukhābād city, which is continued to Shāhjahānpur and Bareilly. Another road gives communication with the north of the District.

The famine of 1783 doubtless affected this District, though it is not specially referred to in the accounts. In subsequent famines Farrukhābād suffered most in 1803–4, 1815–6, 1825–6, and 1837–8. In the latest of these years, relief works on the modern system were started, especially along the grand trunk road. Distress was intense, and Brāhmans were seen disputing the possession of food with dogs, while mothers sold their children. Expenditure from Government funds amounted to 1·8 lakhs, and 6 lakhs of revenue was remitted. There was not much distress in 1860–1 or 1868–70, but in 1877–8 scarcity was severely felt. The southern part of the District was then the most precarious, and this is now the portion best protected by canals. In 1896–7 there was some distress; but it was not severe, and population increased during the decade, except in the Kanauj *tahsīl*.

Famine.

Besides the Collector, the District staff usually includes one member of the Indian Civil Service and four Deputy-Collectors recruited in India. There is a *tahsīldār* at the head-quarters of each *tahsīl*. Other officials include an Executive Engineer of the Canal department, two Opium officers, a Salt officer, and the Superintendent of the District and Central jails.

Administration.

Civil work is disposed of by three District Munsifs, a Sub-Judge, and a District Judge, who also hears Sessions cases. Crime is of the ordinary character, but the District is subject to outbreaks of dacoity. Female infanticide was formerly very common, but few households are now under surveillance. Opium is largely grown in the District, and small portions of the drug are often retained by the cultivators for personal use or illicit sale.

The District was acquired in 1801 and 1802, and was at first administered by an Agent to the Governor-General, but a Collector was appointed in 1806. Early settlements were for short periods, and the collection of revenue gave much trouble, owing to the turbulence of the people, especially east of the Ganges. The first regular settlement was made about 1837, the demand being fixed at 12·9 lakhs; but this was reduced in 1845 by 1·4 lakhs, owing to the effects of the famine of 1838. The next revision was made between 1866 and 1875, and is noteworthy for the improvements in procedure introduced by Mr. (now Sir Charles) Elliott, whose methods were copied in other Districts. The assessment was made on a valuation of the rental 'assets,' calculated by ascertaining standard rates for different classes of soil from rates actually paid. Each village was divided for this purpose into tracts of similar soil, instead of each field being separately classified. The estimated 'assets' were also checked by comparison with the actual rent-rolls. The revenue assessed was 12·5 lakhs. In the precarious tracts liable to flooding the demand broke down, and in 1890–2 reductions amounting to Rs. 62,000 were made. The latest revision was carried out between 1899 and 1903. Revenue was assessed on actual rent-rolls, checked and corrected, where necessary, by standard rates, and during settlement rents were enhanced by Rs. 63,000. About two-thirds of the tenants' holdings are protected by occupancy rights. The new demand amounts to 12·2 lakhs, representing 49 per cent. of the net 'assets.' The settlement was thus practically a redistribution, and the deteriorated tracts have been assessed lightly. The incidence of revenue is Rs. 1–4–0 per acre, varying from Rs. 1–5–0 in the high land to 8 annas in the alluvial tract.

The total collections on account of land revenue and total revenue are given in the table on the next page, in thousands of rupees.

Besides the municipality of FARRUKHĀBĀD-*cum*-FATEHGARH, seven towns are administered under Act XX of 1856. Outside these, local

affairs are managed by the District board, which had an income of 1·3 lakhs in 1903–4, chiefly derived from rates. The expenditure was 1·5 lakhs, of which Rs. 81,000 was spent on roads and buildings.

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	12,29	11,19	11,59	12,18
Total revenue . .	15,54	17,06	18,74	19,72

There are 18 police stations and one outpost in the District. The Superintendent of police had in 1904 a force of 4 inspectors, 82 subordinate officers, and 410 constables, besides 230 municipal and town police, and 2,100 village and road police. At Fatehgarh there is a Central jail, besides the ordinary District jail.

The District takes a medium position in the Provinces as regards literacy, and only 3 per cent. (5·4 males and 0·4 females) of the population could read and write in 1901. The number of public schools fell from 184 in 1880–1 to 156 in 1900–1; but the number of pupils rose from 5,294 to 7,271. In 1903–4 there were 233 public schools with 9,383 pupils, of whom 672 were girls, besides 41 private schools with 457 pupils. Four schools are managed by Government and 128 by the District or municipal boards. The total expenditure on education in the same year was Rs. 55,000, of which Rs. 37,000 was met from Local funds and Rs. 11,000 from fees.

There are nine hospitals and dispensaries, with accommodation for 112 in-patients. In 1903 the number of cases treated was 52,000, of whom 1,900 were in-patients, and 4,500 operations were performed. The total expenditure was Rs. 14,500, chiefly met from Local funds.

About 22,300 persons were successfully vaccinated in 1903–4, representing 24 per 1,000 of the population—a low proportion. Vaccination is compulsory only in the municipality and the cantonment.

[W. Irvine, 'The Bangash Nawābs of Farrukhābād,' *Journal of the Bengal Asiatic Society* (1878, p. 260); *District Gazetteer* (1884, under revision); H. J. Hoare, *Settlement Report* (1903).]

Farrukhābād Tahsīl.—Head-quarters *tahsīl* of Farrukhābād District, United Provinces, comprising the *parganas* of Bhojpur, Muhammadābād, Pahāra, and Shamsābād East, and lying between 27° 9′ and 27° 28′ N. and 79° 15′ and 79° 44′ E., with an area of 339 square miles. It is bounded on the east by the Ganges and on the south by the Kālī Nadī (East). Population increased from 244,896 in 1891 to 250,352 in 1901. There are 387 villages and one town, FARRUKHĀBĀD-*cum*-FATEHGARH (population, 67,338), the District and *tahsīl* head-quarters. The demand for land revenue in 1903–4 was Rs. 2,55,000, and for cesses Rs. 48,000. The density of population, 739 persons per square mile, is the highest in the District. Excepting a small tract of alluvial land

near the Ganges, the whole *tahsīl* lies on the uplands, sloping down on the south to the basin of the Kālī Nadī. Through the north-east corner flows the small river Bagār, whose bed has been deepened and straightened to improve the drainage. Immediately above the Ganges, and especially round Fatehgarh, some of the finest cultivation in the District is to be found. Here a treble crop of maize, potatoes, and tobacco is often raised, while fine groves of mango-trees produce a plentiful supply of fruit, which is largely exported. In 1903–4 the area under cultivation was 223 square miles, of which 81 were irrigated. The Fatehgarh branch of the Lower Ganges Canal serves a small area, but wells are the chief source of irrigation.

Farrukhābād City.—Town which gives its name to Farrukhābād District, United Provinces, situated in 27° 24′ N. and 79° 34′ E., 769 miles by rail from Calcutta and 924 miles from Bombay. It lies near the Gānges, at the terminus of a branch of the East Indian Railway from Shikohābād, and also on the Cawnpore-Achhnerā Railway, and on a branch of the grand trunk road. The head-quarters of the District and the cantonment are at FATEHGARH, 3 miles east, and the two towns form a single municipal area. Population is decreasing. At the last four enumerations the number of inhabitants was as follows: (1872) 79,204, (1881) 79,761, (1891) 78,032, and (1901) 67,338. The population of Farrukhābād alone was 51,060 in 1901. Of the total, Hindus numbered 47,041 and Musalmāns 19,208.

Farrukhābād was founded about 1714 by Nawāb Muhammad Khān, and named after the emperor Farrukh Siyar. Its history has been related in that of the District. The town is surrounded by the remains of a wall which encloses a triangular area. The houses and shops are well built, and often adorned with beautifully carved wooden balconies. Near the northern boundary is situated a high mound on which stood the Nawāb's palace, but its place has been taken by the town hall and *tahsīlī*. The streets are fairly broad and often shaded by trees. There are, however, few buildings of much pretension, the District school being perhaps the finest. North of the city lie the tombs of the Nawābs, chiefly in a ruinous state. The town contains a dispensary and a female hospital.

The municipality was constituted in 1864. During the ten years ending 1901 the income averaged Rs. 57,000, and the expenditure Rs. 56,000. In 1903–4 the income was Rs. 70,000, chiefly derived from octroi (Rs. 57,000); and the expenditure was Rs. 93,000, including a drainage scheme (Rs. 38,000), conservancy (Rs. 13,000), public safety (Rs. 15,000), and administration and collection (Rs. 8,000). The drainage scheme, which has been financed from savings, is to cost about a lakh.

For many years after annexation the trade of Farrukhābād was con-

siderable, owing to its position near the Ganges and the grand trunk road, but the opening of the East Indian Railway diverted commerce. At present there is some manufacture of gold lace and of brass and copper vessels, and the calico-printing industry is gaining a more than local celebrity. The latter is chiefly in the hands of Sādhs, a kind of Hindu Quakers. A flour-mill has recently been started. There is also a considerable export of potatoes, tobacco, and mangoes. The high school contained 164 pupils in 1904; the American Presbyterian Mission school, 217; and the town or middle school, 113. There are also several primary schools.

Farrukhnagar.—Town in the District and *tahsīl* of Gurgaon, Punjab, situated in 28° 27′ N. and 76° 50′ E., on a branch of the Rājputāna-Mālwā Railway, 14 miles from Gurgaon town. Population (1901), 6,136. It is the dépôt for the salt extracted from saline springs in the neighbourhood, but the industry has greatly declined of late years and threatens soon to be extinct altogether. Farrukhnagar was founded by a Baloch chief, Faujdār Khān, afterwards Dalel Khān, who was made governor by the emperor Farrukh Siyar. He assumed the title of Nawāb in 1732, and the Nawābs of Farrukhnagar played an important part in the history of the tract for the next seventy years. Farrukhnagar was captured by the Jāts of Bharatpur in 1757, but recovered in 1764. On annexation the Nawābs were confirmed in their principality, but it was confiscated in 1858 for the complicity of the reigning chief in the Mutiny. The chief buildings are the Delhi Gate, the Nawāb's palace, and a fine mosque, all dating from the time of Faujdār Khān; also a large octagonal well belonging to the period of Jāt occupation. The municipality was created in 1867. The income during the ten years ending 1902–3 averaged Rs. 6,400, and the expenditure Rs. 5,900. In 1903–4 the income was Rs. 6,800, chiefly derived from octroi; and the expenditure was Rs. 10,600. It maintains a dispensary.

Fatahābād Tahsīl (*Fatehābād*).—*Tahsīl* of Hissār District, Punjab, lying between 29° 13′ and 29° 48′ N. and 75° 13′ and 76° 0′ E., with an area of 1,179 square miles. The population in 1901 was 190,921, compared with 181,638 in 1891. It contains one town, FATAHĀBĀD (population, 2,786), the head-quarters; and 261 villages, among which TOHĀNA and AGROHA are places of historical or archaeological interest. The land revenue and cesses amounted in 1903–4 to 2·3 lakhs. The Ghaggar has cut for itself a deep channel in the north of the *tahsīl*. To the south of this channel lies a broad belt of stiff clay, covered with sparse jungle interspersed with stretches of precarious cultivation, which depend on occasional floods brought by natural and artificial channels from the Ghaggar. The east of the *tahsīl* lies in Hariāna, but the centre and south are bare and sandy. A portion is irrigated by the Western Jumna Canal.

Fatahābād Town (*Fatehābād*).—Head-quarters of the *tahsīl* of the same name in Hissār District, Punjab, situated in 29° 31′ N. and 75° 27′ E., 30 miles north-west of Hissār. Population (1901), 2,786. The town was founded about 1352 by the emperor Fīroz Shāh, who named it after his son Fateh Khān, and had a canal dug to it from the Ghaggar. The fort contains a pillar inscribed with the genealogy of Fīroz Shāh, and a mosque and inscription of Humāyūn. The town is of no commercial importance. It is administered as a 'notified area,' the income of which in 1903–4 was Rs. 1,700.

Fatahjang (*Fatehjang*).—Easternmost *tahsīl* of Attock District, Punjab, lying between 33° 10′ and 33° 45′ N. and 72° 23′ and 73° 1′ E., with an area of 866 square miles. The population in 1901 was 114,849, compared with 113,041 in 1891. It contains 203 villages, of which Fatahjang (population, 4,825) is the head-quarters. The land revenue and cesses amounted in 1903–4 to 1·9 lakhs. The *tahsīl* is divided into three distinct parts. North of the Kālā-Chitta is a small plain much cut up by ravines. South of the Khairi-Mūrat is the fertile Sohān valley, while between the two ranges of hills lies a rough plain, narrow in the east and broadening towards the west.

Fatehābād (1).—South central *tahsīl* of Agra District, United Provinces, conterminous with the *pargana* of the same name, lying between 26° 56′ and 27° 8′ N. and 77° 55′ and 78° 26′ E., with an area of 241 square miles. The *tahsīl* is bounded on the north-east by the Jumna, on the south by the Utangan, and on the west by the Khārī Nadī. Population increased from 108,446 in 1891 to 114,733 in 1901. There are 161 villages and one town, Fatehābād (population, 4,673), the *tahsīl* head-quarters. The demand for land revenue in 1903–4 was Rs. 2,51,000, and for cesses Rs. 30,000. A considerable area is occupied by the ravines of the Jumna and Utangan; but most of the *tahsīl* is an upland tract of average fertility in which well-irrigation is easy, while the Agra Canal passes through it. There are two main depressions, one of which was probably an old bed of the Jumna. In 1903–4 the area under cultivation was 169 square miles, of which 60 were irrigated. The Agra Canal serves about one-quarter of the irrigated area, but wells are the most important source of supply.

Fatehābād (2).—*Tahsīl* of Hissar District, Punjab. *See* FATAHĀBĀD.

Fatehgarh Tahsīl (or Sirhind).—Head-quarters *tahsīl* of the Amargarh *nizāmat*, Patiāla State, Punjab, lying between 30° 33′ and 30° 59′ N. and 76° 17′ and 76° 42′ E., with an area of 243 square miles. The population in 1901 was 126,589, compared with 130,741 in 1891. The *tahsīl* contains the towns of BASI (population, 13,738) and SIRHIND or Fatehgarh (5,415), the head-quarters; and 247 villages. The land revenue and cesses amounted in 1903–4 to 2·7 lakhs.

Fatehgarh Town.—Head-quarters of Farrukhābād District, United

Provinces, situated in 27° 24′ N. and 79° 35′ E., on a branch of the grand trunk road, and on the Cawnpore-Achhnerā Railway. Population (1901), 16,278. The fort was built by Nawāb Muhammad Khān about 1714, but first became of importance in 1751, when Nawāb Ahmad Khān was besieged in it by the Marāthās. In 1777 this was chosen as one of the stations for the brigade of troops lent to the Nawāb of Oudh, but it did not pass into the possession of the British till 1802, when it became the head-quarters of an Agent to the Governor-General. In 1804 Holkar reached Fatehgarh in his raid through the Doāb, but was surprised and put to precipitate flight by Lord Lake. When the Mutiny broke out in 1857, a few of the European residents fled early in June to Cawnpore, where they were seized by the Nāna and massacred. Those who remained behind, after sustaining a siege of upwards of a week, were forced to abandon the fort, which had been undermined by the rebels, and to betake themselves to boats. On their way down the Ganges, they were attacked by the rebels and villagers on both sides of the river. One boat reached Bithūr, where it was captured; the occupants were taken prisoners to Cawnpore and subsequently massacred. Another boat grounded in the river the day after leaving Fatehgarh, and all the passengers but three were shot down or drowned in their attempt to reach land. A number of the refugees were brought back to Fatehgarh, and, after being kept in confinement for nearly three weeks, were shot or sabred on the parade-ground; their remains were cast into a well over which has been built a monument, with a memorial church near it. The fort lies near the Ganges at the north of the station. From 1818 it was used as a gun-carriage factory, but since 1906 it has been converted into an army clothing dépôt. Near it stand the barracks of the British and Native infantry garrison, partly occupied at present by a mounted infantry class. The rest of the cantonment and the civil station lie along the high bank of the river separating the native town from the Ganges.

The municipal accounts are kept jointly with those of FARRUKHĀBĀD CITY, which lies three miles away. The cantonment had a population of 4,060 in 1901, and the annual income and expenditure of cantonment funds are each about Rs. 8,000. Trade is almost entirely local, but tents are made in three private factories and in the Central jail. The gun-carriage factory employed 795 hands in 1903. A middle school has 143 pupils, and there are several primary schools, including one in the gun-carriage factory, a girls' school, and a school for European and Eurasian children.

Fatehjang.—*Tahsīl* of Attock District, Punjab. *See* FATAHJANG.

Fatehpur District.—District in the Allahābād Division, United Provinces, lying between 25° 26′ and 26° 16′ N. and 80° 14′ and 81° 20′ E., with an area of 1,618 square miles. It is bounded on the

north by the Ganges, dividing it from Rāe Barelī District in Oudh; on the west by Cawnpore; on the south by the Jumna, separating it from Hamīrpur and Bāndā Districts; and on the east by Allahābād.

Physical aspects.

The District of Fatehpur forms a portion of the DOĀB, or great alluvial tract between the Ganges and the Jumna, and its main features do not differ from those common to the whole area enclosed by those two great rivers. It consists for the most part of a highly cultivated and fairly well wooded plain. A ridge of slightly higher land, forming the watershed of the District, runs through it from east to west, at an average distance of three to five miles from the Ganges. In the extreme west are three small rivers—the Pāndū, which flows northward into the Ganges, and the Rind and the Non, which swell the waters of the Jumna. The tract enclosed between the Jumna and the two last-named streams is a tangled mass of ravines, with wild and desolate scenery. Shallow lakes (*jhīls*) are common in the midland portion of the District, which is badly drained, but they ordinarily dry up by January or February. As a whole, the western region is much cut up by ravines and covered with *babūl* jungle; the central tract is more generally cultivated, though interspersed with frequent patches of barren *ūsar*; and the eastern part, near the Allahābād border, is one unbroken stretch of smiling and prosperous tillage.

The soil consists entirely of Gangetic alluvium, in which *kankar* is the chief mineral product.

The District is well supplied with cultivated trees, in particular the mango in the west and the *mahuā* in the east. Groves are especially numerous in the south-east. *Shīsham*, *nīm*, *sirīs*, *pipal*, and *imlī* are common along roadsides and near the village sites, while *babūl*, *ber*, and *dhāk* flourish in the ravines and on waste land.

Leopards are occasionally found in the ravines along the Jumna and Rind, and wolves abound in the same tracts. Wild hog and jackals are common everywhere, and the *nīlgai* and antelope are to be seen in places. The 'ravine deer' (gazelle) is found wherever there is broken ground, and often where the country is undulating. Wild-fowl of all kinds are very abundant, and geese, duck, and teal swarm in the numerous *jhīls* during the cold season. Crocodiles, porpoises, and fish of many kinds are common in the large rivers.

The climate of Fatehpur is that of the Doāb generally; but from its easterly position the west winds do not reach it with such force in the hot season as in Agra and the western Districts. The surface is somewhat marshy, and the numerous *jhīls* render the atmosphere damp. It is, however, not unhealthy.

The annual rainfall over the whole District averages 34 inches, and variations in different parts are small. The amount received from year

to year, however, fluctuates considerably. Thus in 1894 the fall was 71 inches, and in 1896 less than 17 inches.

History.

According to tradition, the Rājās of Argal held a large part of the District as tributaries of the Kanauj kingdom before the Musalmān conquest, and Jai Chand, the last king of Kanauj, is said to have deposited his treasure here before his final defeat in 1194. Nothing definite is known of the history of the District during the early Muhammadan period when it formed part of the province of Korā, or in the fifteenth century, when it was included in the short-lived kingdom of Jaunpur. The Argal Rājās supported Sher Shāh against Humāyūn, and were finally crushed on the restoration of Mughal power. Under Akbar the western half of the District formed part of the *sarkār* of Korā, while the eastern half was included in Karā. It has twice been the scene of battles in which the fate of the Mughal empire was at stake. In 1659 Aurangzeb met Shujā between Korā and Khajuhā, and the battle which resulted was one of the bloodiest ever fought in India, Shujā being defeated and his army dispersed. In 1712 Farrukh Siyar was unsuccessfully opposed near the same place by his cousin, Azz-ud-dīn, son of Jahāndār, who had seized the throne. During the slow decline of the Delhi dynasty Fatehpur was entrusted to the governor of Oudh; but in 1736 it was overrun by the Marāthās, on the invitation of a disaffected landholder of Korā. The Marāthās retained possession of the country until 1750, when it was wrested from them by the Pathāns of Fatehgarh. Three years later Safdar Jang, the practically independent Nawāb of Oudh, reconquered it for his own benefit. By the treaty of 1765 Fatehpur was handed over to the titular emperor, Shāh Alam; but when in 1774 he threw himself into the hands of the Marāthās, his eastern territories were considered to have escheated, and the British sold them for 50 lakhs of rupees to the Nawāb Wazīr. As the Oudh government was in a chronic state of arrears with regard to the payment of its stipulated tribute, a new arrangement was effected in 1801, by which the Nawāb ceded Allahābād and Korā to the English, in lieu of all outstanding claims.

No event of interest occurred after the introduction of British rule, until the Mutiny of 1857. On the 6th of June news of the Cawnpore outbreak arrived at the station. On the 8th a treasure guard returning from Allahābād proved mutinous; and next day the mob rose, burnt the houses and plundered all the property of the European residents. The civil officers escaped to Bāndā, except the Judge, who was murdered. On the 28th of June fourteen fugitives from Cawnpore landed at Shivarājpur in this District, and were all killed but four, who escaped by swimming to the Oudh shore. The District remained in the hands of rebels throughout the month; but on the 30th Colonel Neill sent off Major Renaud's column from Allahābād to Cawnpore. On the 11th of

July General Havelock's force joined Renaud's at Khāgā, and next day they defeated the rebels at Bilanda. They then attacked and shelled Fatehpur, drove out the rebels, and took possession of the place. On the 15th Havelock advanced to Aung and drove the enemy back on the Pāndū Nadī. There a second battle was fought the same day, and the insurgents were driven in full flight to Cawnpore. British authority, however, was confined to the tract along the grand trunk road; and order was not re-established till after the fall of Lucknow and the return of Lord Clyde's army to Cawnpore, when the Gwalior mutineers were finally driven off.

Attempts have been made to identify several places in the District with sites visited by the Chinese pilgrims; but no excavations have been carried out, and the identifications are uncertain. The Hindu remains are generally fragmentary, and even the later Muhammadan buildings at KORĀ and KHAJUHĀ are few, and not of striking merit.

Population.

Fatehpur contains 5 towns and 1,403 villages. Population is increasing, but received a check owing to the vicissitudes of the seasons between 1891 and 1901, when the District suffered both from floods and from drought. The numbers at the last four enumerations were as follows: (1872) 663,877, (1881) 683,745, (1891) 699,157, and (1901) 686,391. There are four *tahsīls*—FATEHPUR, KHAJUHĀ, GHĀZĪPUR, and KHĀGĀ—each named after its head-quarters. FATEHPUR, the only municipality and the head-quarters of the District, is the largest town. The following table gives the chief statistics of population in 1901:—

Tahsīl.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Fatehpur .	356	1	374	171,598	482	– 2·2	6,563
Khajuhā .	504	3	385	199,223	395	– 3·6	8,302
Ghāzīpur .	277	...	151	91,222	329	– 1·3	3,840
Khāgā . .	481	1	493	224,348	466	– 0·1	6,731
District total	1,618	5	1,403	686,391	424	– 1·8	25,436

About 88 per cent. of the population are Hindus, and less than 12 per cent. Musalmāns. Fatehpur is less thickly populated than the Districts of the Doāb farther west. Eastern Hindī is spoken by 83 per cent. of the population, and Western Hindī by about 17 per cent.

The most numerous of the Hindu castes are: Chamārs (leather-workers and cultivators), 63,000; Brāhmans, 58,000; Ahīrs (graziers and cultivators), 57,000; Rājputs, 42,000; Kurmīs (agriculturists), 42,000; Pāsīs (toddy-drawers and labourers), 32,000; and Lodhas

(cultivators), 30,000. Among Musalmāns the largest divisions are: Shaikhs, 26,000; Pathāns, 16,000; and Behnās (cotton-carders), 6,000. The agricultural population forms 70 per cent. of the total, while nearly 7 per cent. are supported by general labour. Rājputs, Brāhmans, and Kāyasths hold the greater part of the land, while Rājputs, Brāhmans, Lodhas, Kurmīs, and Kāchhīs are the chief cultivating castes.

In 1901 there were 113 native Christians, of whom 84 were Presbyterians. The American Presbyterian Mission has been established here since 1853.

Agriculture.

Three natural divisions exist in the District. Bordering on the Ganges is a long narrow tract of alluvial soil, separated from the watershed by a belt of sandy land. South of the watershed, which is marked by a distinct ridge, lies the fertile central area which extends over more than half of the District. The prevailing soil is a good loam, with clay in the depressions, and many *jhīls* near which rice is sown. After a series of wet years portions of this tract become waterlogged, owing to defective drainage. The most southern portion of the District, bordering on the Jumna and forming from one-fourth to one-fifth of the total area, resembles the part of BUNDELKHAND immediately across the Jumna. A dark heavy soil named *kābar*, which is unworkable when very dry or very wet, and a lighter and less fertile soil called *parwā* predominate. Ravines are extensive and tend to increase, while the spring-level is extremely low. On the edge of the Jumna is a little rich alluvial soil.

The ordinary tenures of the United Provinces are found. *Zamīndāri mahāls* number 3,197, their predominance being due to the large number of sales during the early period of British rule, when the cultivating communities lost their rights; 1,163 *mahāls* are held *pattīdāri*, and 45 *bhaiyāchārā*. The main agricultural statistics for 1903–4 are shown below, in square miles:—

Tahsīl.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Fatehpur . . .	356	178	91	42
Khajuhā . . .	504	276	83	64
Ghāzīpur . . .	277	158	39	45
Khāgā . . .	481	269	112	54
Total	1,618	881	325	205

The commonest food-crop is a mixture of gram and barley. The areas under the chief crops in 1903–4 were—gram, 222 square miles; barley, 161; *jowār*, 147; wheat, 123; rice, 94; cotton, 34; and poppy, 13 square miles.

The area under cultivation has decreased slightly within the last thirty years; but owing to an increase in the area bearing two crops in

a year, the gross area cultivated in each of the main harvests has risen, especially in the case of the autumn crop. The increase is found in the cheaper food-crops, while the area under the more valuable products, especially cotton and sugar-cane, has decreased. On the other hand, poppy is more largely grown than formerly. In adverse seasons loans are freely taken under the Land Improvement and Agriculturists' Loans Acts. The advances amounted to a total of 2·9 lakhs between 1891 and 1900, of which 1·5 lakhs was lent in the famine year, 1896–7. With the return of more favourable seasons advances have been smaller.

In the greater part of the District the cattle are of the inferior type common to the Doāb. Near the Rind and Jumna a smaller and more hardy breed is found, resembling the cattle of Bundelkhand. Nothing has been done to improve the breeds, and there is practically no horse-breeding. The Fatehpur sheep are, however, well-known, and are exported in considerable numbers.

In 1903–4 the area irrigated was 325 square miles, including 130 square miles from wells, 93 from tanks or *jhīls*, and 99 from Government canals. Wells are the only source of irrigation in the north of the District, and both masonry and unbricked wells are common. The Fatehpur branch of the Lower Ganges Canal, which was opened in 1898, supplies part of the central and southern tracts. It is chiefly used in the spring harvest, and very little canal water is taken for the autumn crops. Irrigation from tanks, which comprise chiefly the numerous swamps or *jhīls*, is confined to the central tract. Near the Jumna the spring-level is at a depth of 60 to 90 feet, and irrigation from wells is almost unknown.

Kankar is found in all parts of the District, and is the only mineral product, except saltpetre which is manufactured from efflorescences on the soil.

Trade and communications.

The District is largely agricultural, and its manufactures are unimportant. It is, however, celebrated for the ornamental whips made at Fatehpur town, and for the artistic bed-covers, curtains, and awnings made at Jāfarganj. The latter are covered with designs, partly stamped, and partly drawn and coloured by hand, inscriptions in Persian being generally introduced in the border. Coarser cotton prints are made at Kishanpur and playing-cards at Khajuhā.

The trade of the District is mainly in agricultural products, and BINDKĪ is the most important commercial town. Grain, cotton, hides, and *ghī* are largely exported; and piece-goods, metals, and salt are the chief imports. Markets are held in many villages, Kishanpur or Ekdālā on the Jumna being the chief; and an important religious fair takes place at Shivarājpur on the Ganges. The railway takes a large propor-

tion of the traffic, but trade with Bundelkhand on the south and with Oudh on the north is carried on by road. The great rivers are used much less than formerly.

The main line of the East Indian Railway crosses the District from end to end. The road system is fairly good; and 197 miles of metalled roads are in charge of the Public Works department, though the cost of all but 78 miles is met from Local funds. There are 341 miles of unmetalled roads. Avenues of trees are maintained on 122 miles. The main routes are: the grand trunk road, which is followed by the line of the railway; and the metalled road at right angles to this, which passes from Rāe Barelī in Oudh to Bundelkhand. The old imperial road from Agra to Allahābād meets the grand trunk road near Fatehpur town.

Famine.

The District must have suffered in the famines immediately before and after the commencement of British rule, but no separate records have been preserved. In 1837–8 distress was not so severe as farther west. Fatehpur escaped lightly in 1860–1, and again in 1868–9, though relief works were opened on the latter occasion. In 1877–8 also there was no famine, but the labouring classes were distressed. The drought of 1896 followed a succession of bad seasons in which the crops had been injured by excessive rain, and famine pressed hardly on the southern part of the District. Relief works and poorhouses were opened, and the daily number of persons in receipt of aid rose to 45,000, the total cost of the operations being 1½ lakhs.

Administration.

The Collector is usually assisted by four Deputy-Collectors recruited in India. A *tahsīldār* is posted at the head-quarters of each *tahsīl*, and there is an Assistant Opium Agent at Fatehpur.

There is only one District Munsif, and the District is included in the Civil and Sessions Judgeship of Cawnpore. Sessions cases, however, are tried by the Judge of Bāndā as Joint Sessions Judge. Crime is light and presents no special features. Female infanticide was formerly suspected, but no persons are now under surveillance.

At the cession in 1801 the present District was included partly in Cawnpore and partly in Allahābād. In 1814 a Joint-Magistracy was formed with head-quarters first at Bhitaura and then at Fatehpur, and the subdivision became a separate District in 1826. The *parganas* constituting Fatehpur had nominally paid 14·4 lakhs under Oudh rule, and this demand was retained after the cession, but soon had to be reduced. The whole tract was farmed up to 1809 to Nawāb Bākar Alī Khān, who received 10 per cent. of the collections. By extortions and chicanery he and his family acquired 182 estates, paying a revenue of 2·3 lakhs. The early settlements were made for short periods and

pressed heavily, though they were lighter than the nominal demand under native rule. The fraudulent sales effected during the early part of the nineteenth century were examined by the special commission appointed under Regulation I of 1821, and 176 public sales and 29 private transactions were cancelled. The first regular settlement under Regulation IX of 1833 was completed during a single cold season, 1839–40, and although a survey was made and villages were inspected, the methods were very summary. The demand fixed was 14·5 lakhs, which was reduced a few years later by Rs. 21,000. The next settlement was made between 1871 and 1876. Villages were grouped together in blocks according to the classes of soil they contained, and rates were selected from the rents actually found to be paid. The total revenue assessed amounted to 13 lakhs, or less than half the assumed 'assets.' In 1900 the question of revision was considered, and it was decided to extend the existing settlement for ten years. The present demand is 13·1 lakhs, with an incidence of Rs. 1·4 per acre, varying from Rs. 1·3 to Rs. 2 in different parts of the District.

Collections on account of land revenue and total revenue have been, in thousands of rupees :—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	13,08	13,13	14,50	13,04
Total revenue . .	14,48	17,14	18,93	17,45

Fatehpur town is the only municipality, but four towns are administered under Act XX of 1856. The local affairs of the District beyond the limits of these places are managed by the District board, which had an income and expenditure of about a lakh in 1903–4. The expenditure includes Rs. 55,000 on roads and buildings.

There are 20 police stations; and the District Superintendent of police has a force of 3 inspectors, 77 subordinate officers, and 323 constables, besides 51 municipal and town police, and 1,880 rural and road police. The District jail contained a daily average of 223 prisoners in 1903.

The District is not distinguished for the literacy of its inhabitants, of whom only 3·8 per cent. (7 males and 0·1 females) could read and write in 1901. The number of public schools fell from 132 in 1880–1 to 101 in 1900–1, but the number of pupils rose from 4,046 to 4,371. In 1903–4 there were 177 such institutions, with 6,795 pupils, of whom 200 were girls, besides 180 private schools with 1,737 pupils. Three of the public schools were managed by Government and 115 by the District and municipal boards. In 1903–4 the total expenditure on education was Rs. 36,000, of which Rs. 28,000 was provided by Local funds, and Rs. 6,300 by fees.

There are six hospitals and dispensaries, with accommodation for 80 in-patients. In 1903 the number of cases treated was 28,000, including 946 in-patients, and 1,300 operations were performed. The expenditure was Rs. 7,800, chiefly from Local funds.

About 22,000 persons were successfully vaccinated in 1903–4, representing a proportion of 31 per 1,000 of population. Vaccination is compulsory only in the municipality of Fatehpur.

[A. B. Patterson, *Settlement Report* (1878); H. R. Nevill, *District Gazetteer* (1906).]

Fatehpur Tahsīl (1).—North-central *tahsīl* of Fatehpur District, United Provinces, comprising the *parganas* of Fatehpur and Haswā, and lying between 25° 43′ and 26° 4′ N. and 80° 38′ and 81° 4′ E., with an area of 356 square miles. Population fell from 175,452 in 1891 to 171,598 in 1901. There are 374 villages and one town, FATEHPUR (population, 19,281), the District and *tahsīl* head-quarters. The demand for land revenue in 1903–4 was Rs. 2,87,000, and for cesses Rs. 46,000. The density of population, 482 persons per square mile, is the highest in the District. The Ganges forms part of the northern boundary, but the drainage largely flows south-east through a series of *jhīls* into a channel called the Sasur Khaderī. In 1903–4 the area under cultivation was 178 square miles, of which 91 were irrigated, wells and tanks or *jhīls* being the chief sources of supply.

Fatehpur Town (1).—Head-quarters of Fatehpur District and *tahsīl*, United Provinces, situated in 25° 56′ N. and 80° 50′ E., on the grand trunk road, and on the East Indian Railway. Population (1901), 19,281. Nothing is known of the early history of the town, but it was extended by Nawāb Abdus Samad Khān in the reign of Aurangzeb. In 1825 it became the head-quarters of a subdivision, and in the following year of the newly-formed District. The houses are chiefly built of mud, the only buildings of historical interest being the tomb of Nawāb Abdus Samad Khān, and the tomb and mosque of Nawāb Bākar Alī Khān, who enjoyed a farm of the District early in the nineteenth century. The chief public buildings, besides the ordinary District courts, are the municipal hall, male and female dispensaries, and school. Fatehpur has been a municipality since 1872. During the ten years ending 1901 the income and expenditure averaged Rs. 13,000. In 1903–4 the income was Rs. 20,000, chiefly from octroi (Rs. 13,000); and the expenditure was Rs. 18,000. Trade is principally local, but grain and *ghī* are exported, and there is a noted manufacture of whips. The municipality manages one school and aids another, the two containing 292 pupils, while the District high school has 144.

Fatehpur Tahsīl (2).—Northern *tahsīl* of Bāra Bankī District, United Provinces, comprising the *parganas* of Rāmnagar, Muhammadpur, Bādō Sarai, Fatehpur, Bhitaulī, and Kursī, and lying between 26° 58′

and 27° 21′ N. and 80° 56′ and 81° 35′ E., with an area of 521 square miles. Population increased from 315,652 in 1891 to 335,407 in 1901. There are 673 villages and two towns, including FATEHPUR (population, 8,180), the *tahsīl* head-quarters. The demand for land revenue in 1903–4 was Rs. 5,05,000, and for cesses Rs. 82,000. Bhitaulī *pargana* is permanently settled. The density of population, 644 persons per square mile, is the lowest in the District. The north-eastern portion of the *tahsīl* is a low tract lying between the Chaukā and Gogra, which is liable to be swept by floods. Elsewhere the land lies high, forming a level fertile plain studded with many small tanks or swamps. In 1903–4 the area under cultivation was 353 square miles, of which 113 were irrigated. Tanks or swamps supply a larger area than wells.

Fatehpur Town (2).—Head-quarters of the *tahsīl* of the same name in Bāra Bankī District, United Provinces, situated in 27° 10′ N. and 81° 14′ E., on a metalled road. Population (1901), 8,180. Varying traditions assign the foundation of this place to the fourteenth and fifteenth centuries. It is full of old masonry buildings, most of which are in a state of decay. The finest is an *imāmbāra* built by an officer of Nasīr-ud-dīn Haidar. An old mosque is said to have been constructed in the reign of Akbar. Fatehpur contains, besides the usual public offices, a dispensary and a school with 130 pupils. It is administered under Act XX of 1856, with an income of about Rs. 1,400. Markets are held twice a week, and there is a considerable trade in grain. Many weavers reside here, who turn out cotton cloth, rugs, and carpets.

Fatehpur Town (3).—Town belonging to the Sīkar chiefship in the Shekhāwati *nizāmat* of Jaipur State, Rājputāna, situated in 28° N. and 74° 58′ E., about 95 miles north-west of Jaipur city. The town is the third largest in the State, its population in 1901 having been 16,393. It contains 14 schools attended by about 420 pupils, and a combined post and telegraph office, besides several fine houses belonging to wealthy and enterprising bankers and merchants, who have business connexions all over India and who, prior to the construction of the telegraph in 1896, kept up heliographic communication with Jaipur city to record the rise or fall in the price of opium from day to day.

Fatehpur Sīkri.—Town in the Kiraolī *tahsīl* of Agra District, United Provinces, situated in 27° 5′ N. and 77° 40′ E., on a metalled road 23 miles west of Agra city. Population (1901), 7,147. It was close to the village of Sīkri that Bābar defeated the Rājput confederacy in 1527; and here on the ridge of sandstone rocks dwelt the saint Salīm Chishti, who foretold to Akbar the birth of a son, afterwards the emperor Jahāngīr. In 1569 Akbar commenced to build a great city called Fatehpur, and within fifteen years a magnificent series of

buildings had been erected. The city was abandoned as a royal residence soon after its completion, but was occupied for a short time in the eighteenth century by Muhammad Shāh; and Husain Alī Khān, the celebrated Saiyid general, was murdered near here in 1720. The site of Fatehpur Sīkri is still surrounded on three sides by the great wall, about 5 miles long, built by Akbar; but most of the large space enclosed is no longer occupied by buildings. The modern town lies near the western end, partly on the level ground and partly on the slope of the ridge. It is a small, well-paved place, containing a dispensary and a police station.

From close by the highest houses in the town a flight of steps leads up to the magnificent gateway, called the Buland Darwāza or 'lofty gate,' which forms the entrance to the great quadrangle of the mosque, 350 feet by 440. In this stands the marble building containing the tomb of the saint Salīm Chishti, the walls of which are elaborately carved. The sarcophagus itself is surrounded by a screen of lattice-work and a canopy inlaid with mother-of-pearl, which has recently been restored. Close by the north wall of the mosque are the houses of the brothers, Abul Fazl and Faizī, but the main block of the palace buildings lies some distance to the north-east. On the west of this block is the large palace called after Jodh Bai, the Rājput wife of Akbar. It consists of a spacious courtyard, surrounded by a continuous gallery, from which rise rows of buildings on the north and south, roofed with slabs of blue enamel. A lofty and richly carved gate gives access to a terrace, on which stand the so-called houses of Bīrbal and Miriam, or the 'Christian lady.' The former is noticeable for its massive materials and the lavish minuteness of its detail. The 'Christian lady' was probably a Hindu wife. Beyond these buildings is another great courtyard, divided into two parts. The southern half contains the private apartments of Akbar with the Khwābgāh, or 'sleeping-place,' and the lovely palace of the Turkish Sultāna. The latter is of sandstone, richly carved with geometrical patterns and hunting scenes. The Pānch Mahal or 'five-storeyed building,' and the Dīwān-i-khās or 'private audience chamber,' are the principal structures in the northern portion. The Pānch Mahal consists of five galleries, one above another, and appears to have been copied from a Buddhist model. The Dīwān-i-khās contains an enormous octagonal pillar, crowned by a circular capital, from which four galleries run to the corners of the room. According to tradition, Akbar used to hold his famous theological discussions in this place. Many of the buildings, and especially Miriam's house and the Khwābgāh, were adorned with paintings. These have largely perished or been destroyed; but the scheme of some has been recovered, and a few restorations have been made. The eastern front of the palace was formed by the Dīwān-i-ām

or 'public hall,' close to which lay the baths on the south, and a great square called the Mint on the north-east. The palace buildings stand on the crest of the ridge, and below them lies a depression which once formed a great lake. Beyond the lake stretched the royal park. The long descent from the Dīwān-i-ām, through the Naubat-khāna or entrance gate to the Agra road, is flanked by confused masses of ruins, the remains of the bazars of the old city.

Fatehpur Sīkri was a municipality from 1865 to 1904. During the ten years ending 1901 the income and expenditure averaged about Rs. 5,000, octroi supplying most of the income. In 1903–4 the income was Rs. 9,000, and the expenditure Rs. 10,000. The town has now been made a 'notified area.' In the time of Akbar it was celebrated for its fabrics of hair and silk-spinning, besides the skill of its masons and stone-carvers. At present cotton carpets and millstones are the chief products. There are two schools with about 100 pupils.

[E. W. Smith, *The Mughal Architecture of Fatehpur Sīkri*, 4 vols. (Allahābād, 1894–8).]

Fathkhelda.—Village in the Mehkar *tāluk* of Buldāna District, Berār, situated in 20° 13′ N. and 76° 27′ E., on the small river Bhogāwatī, an affluent of the Pengangā. Population (1901), 4,198. The original name of the village was Shakarkhelda, but it was changed to Fathkhelda ('village of victory') by Asaf Jāh, to commemorate the victory gained here by him in 1724 over Mubāriz Khān, governor of Mālwā, who was slain on the field, a victory which established the virtual independence of the Nizām of Hyderābād. The village was sacked by Sindhia's troops in 1803 before Assaye, and suffered severely in a famine of that year. There is at Fathkhelda a handsome mosque, built by Khudāwand Khān Mahdavī in 1581, which much resembles that at Rohankhed.

Fatwā.—Village in the Bārh subdivision of Patna District, Bengal, situated in 25° 30′ N. and 85° 19′ E., on the East Indian Railway, 7 miles from Patnā city, at the junction of the Pūnpūn with the Ganges. Population (1901), 857. *Tasar* cloth is manufactured, and tablecloths, towels, and handkerchiefs are woven by Jolāhās.

Fāzilka Tahsīl.—*Tahsīl* and subdivision of Ferozepore District, Punjab, lying between 29° 55′ and 30° 34′ N. and 73° 52′ and 74° 43′ E., with an area of 1,355 square miles. It is bounded north-west by the Sutlej, which divides it from the Dīpālpur *tahsīl* of Montgomery District, and east by the Patiāla State. It is divided into three well-marked natural divisions: a narrow low-lying belt along the Sutlej, a somewhat broader strip of older alluvium, and a plain broken by sandhills, which extends to the borders of Bīkaner and is irrigated by the Sirhind Canal. The population in 1901 was 197,457, compared with 135,634 in 1891. It contains the town of FĀZILKA (population,

8,505), the head-quarters, and 319 villages. The land revenue and cesses amounted in 1903–4 to 2·2 lakhs.

Fāzilka Town.—Head-quarters of the subdivision and *tahsīl* of the same name, Ferozepore District, Punjab, situated in 30° 33′ N. and 74° 3′ E. It is the terminus of the Fāzilka extension of the Rājputāna-Mālwā Railway, and has been connected with Ludhiāna, Ferozepore, and the Southern Punjab Railway by a line recently constructed. Population (1901), 8,505. It was founded about 1846 on the ruins of a deserted village, named after a Wattu chief, Fāzil. It is a considerable grain mart and contains a wool-press. The municipality was created in 1867. The income during the ten years ending 1902–3 averaged Rs. 21,300, and the expenditure Rs. 22,400. In 1903–4 the income was Rs. 16,000, chiefly derived from octroi; and the expenditure was Rs. 18,500. The town has an Anglo-vernacular middle school maintained by the municipality, and a Government dispensary.

Fenchuganj.—Village in the North Sylhet subdivision of Sylhet District, Eastern Bengal and Assam, situated in 24° 42′ N. and 91° 58′ E., on the left bank of the Kusiyārā river. Population (1901), 285. It is the head-quarters of the India General Steam Navigation Company in the Surmā Valley and an important steamer station. The public buildings include a dispensary.

Fenny River (vernacular *Pheni*).—River of Eastern Bengal and Assam. Rising in 23° 20′ N. and 91° 47′ E., in Hill Tippera, it flows south-west, marking the boundary between Hill Tippera and the Chittagong Hill Tracts, which it leaves at Rāmghar. Thence it flows west and south, dividing Chittagong from Noākhāli on the north, and ultimately falls into the Sandwīp channel, an arm of the Bay of Bengal, in 22° 50′ N. and 91° 27′ E., after a course of 72 miles. During its course through the hills it is of little use for navigation, as the banks are abrupt and covered with heavy grass jungle and bamboo coppices. The Fenny is of considerable depth during the rains, but is rendered dangerous by rapid currents, whirling eddies, and sharp turns; it is navigable by large boats throughout the year for a distance of 30 miles. It is joined on the right bank by the Muharī river; and the Little Fenny, which flows almost directly south from its source in Hill Tippera, falls into the Bay close to its mouth.

Fenny Subdivision.—Eastern subdivision of Noākhāli District, Eastern Bengal and Assam, lying between 22° 43′ and 23° 18′ N. and 91° 15′ and 91° 35′ E., with an area of 343 square miles. It consists of low-lying alluvium, with the exception of a narrow strip of land on the east adjoining Hill Tippera, where the country is more undulating. The population in 1901 was 318,837, compared with 290,530 in 1891, the density being 930 persons per square mile. There are 678 villages, of which the most important is FENNY, the head-quarters.

Fenny Village.—Head-quarters of the subdivision of the same name in Noākhāli District, Eastern Bengal and Assam, situated in 23° 1′ N. and 91° 25′ E., on the Assam-Bengal Railway. Population (1901), 5,663. Fenny contains the usual public offices; the sub-jail has accommodation for 23 prisoners.

Ferokh.—Village in the Ernād *tāluk* of Malabar District, Madras, situated in 11° 12′ N. and 75° 49′ E., 7 miles from Calicut, with a station on the Madras Railway. Population (1901), 3,500. It has an important weekly market and a tile factory. The chief trade is in timber, dried fish, and coco-nuts. In 1788 Tipū Sultān of Mysore made a determined but ineffectual attempt to raise the town to the position of a rival to Calicut.

Ferozepore District (*Firozpur*).—District in the Jullundur Division of the Punjab, lying between 29° 55′ and 31° 9′ N. and 73° 52′ and 75° 26′ E., with an area of 4,302 square miles. On the north-east and north-west, the Sutlej forms the boundary separating the District from Jullundur and the Kapūrthala State, and, after its confluence with the Beās, from the Districts of Lahore and Montgomery. On the south-west and south, it is bounded by the States of Bahāwalpur and Bīkaner, and by Hissār District; on the south-east, by the Farīdkot State, and by detached pieces of territory belonging to Patiāla and Nābha; and on the east by the District of Ludhiāna. Farīdkot State lies across the centre of the District, extending from the south-eastern border to within a few miles of the Sutlej on the north-west. A detached area forming a part of the Moga *tahsīl* lies east of the Farīdkot State. The District consists of a flat, alluvial plain, divided into three broad plateaux by two broken and shelving banks which mark ancient courses of the Sutlej. The upper bank, which crosses the District about 35 miles east of the present stream, is from 15 to 20 feet high; and the river seems to have run beneath it until 350 or 400 years ago, when its junction with the Beās lay near Multān. In the second half of the eighteenth century the river ran under part of the lower bank, and in its changes from this to its present bed has cut out two or three channels, now entirely dry, the most important of which, the Sukhar Nai, runs in a tortuous course east and west. The volume of water in the Sutlej has sensibly diminished since the opening of the Sirhind Canal, and during the cold season it is easily fordable everywhere above its confluence with the Beās; below the confluence the stream is about 1,000 yards wide in the cold season, swelling to 2 or 3 miles in time of flood. The country is well wooded in its northern half, but very bare in the south; it is absolutely without hill or eminence of any description, even rock and stone being unknown.

Physical aspects.

There is nothing of geological interest in the District, which is situated entirely on the alluvium. In the north the spontaneous vegetation

is that of the Central Punjab, in the south that of the desert, while in the Fāzilka subdivision several species of the Western Punjab, more particularly saltworts yielding *sajji* (barilla), are abundant. Trees are rare, except where planted; but the *tāli* or *shīsham* (*Dalbergia Sissoo*) is common on islands in the Sutlej. Along the banks of that river there are large brakes (locally called *belas*) of tall grasses (*Saccharum*, *Andropogon*, &c.) mixed with tamarisk, which are used for thatching, brush-making, and basket-weaving; also *munj* (used for cordage) and *khas-khas* (scented roots employed for screens, &c.).

Wolves are the only beasts of prey now found, and they are by no means common; but until the middle of the nineteenth century tigers were found on the banks of the Sutlej. Hog abound, and 'ravine deer' (Indian gazelle) and antelope are fairly plentiful.

The climate does not differ from that of the Punjab plains generally, except that Ferozepore is proverbial for its dust-storms. Owing to the dryness of its climate, the city and cantonment of Ferozepore and the upland plains are exceptionally healthy; but the riverain tract is malarious in the extreme.

The annual rainfall varies from 11 inches at Muktsar to 20 at Zīra; of the rain at the latter place 17 inches fall in the summer months and 2 in the winter. The rainfall is very uncertain; the greatest amount received in any year between 1881 and 1903 was 25 inches at Ferozepore in 1882, and in four of the last twenty years one place or another has received absolutely no rain. An unusually heavy flood came down the Sutlej in August, 1900, and the level then rose three feet above the highest on record, a part of the city of Ferozepore being washed away.

History.

The earliest known rulers appear to have been the Ponwār Rājputs, one of whose capitals may have been Janer, a place apparently mentioned by Al Baihaki as Hajnīr on the route from Meerut to Lahore. About the time of the first Muhammadan invasions a colony of Bhatti Rājputs from Jaisalmer settled in the neighbourhood of Muktsar, and the Manj, a branch of them, ousted the Ponwārs and became converts to Islām about 1288. The great Jat tribes—Dhāliwāls, Gils, and others—which now people the District, began to appear 200 years after the Bhattis. About 1370 the fort of Ferozepore was built by Fīroz Shāh III, and included in his new government of Sirhind. Up to a comparatively recent date it seems probable, as tradition avers, that the District was richly cultivated, and deserted sites and ruined wells in the tract bordering on the older course of the Sutlej bear witness to the former presence of a numerous population. Though no date can be absolutely determined for this epoch of prosperity, there are some grounds for the belief that the Sutlej flowed east of Ferozepore fort in the time of Akbar; for the *Ain-i-Akbarī* describes it as the capital of a large tract attached to the

province of Multān, and not to Sirhind, as would probably have been the case had the river then run in its modern course. The shifting of the river from which the tract derived its fertility, and the ravages of war, were doubtless the chief causes of its decline. This probably commenced before the end of the sixteenth century, and in another hundred years the country presented the appearance of a desert. About the end of the sixteenth century the Sidhu Jats, from whom the Phūlkiān Rājās are descended, made their appearance; and in the middle of the seventeenth century most of the Jat tribes were converted to Sikhism by Har Rai, the seventh Gurū. In 1705 the tenth Gurū, Govind Singh, in his flight from Chamkaur, was defeated with great loss at Muktsar; in 1715 Nawāb Isa Khān, a Manj chief, who fifteen years before had built the fort of Kot Isa Khān, rebelled against the imperial authorities and was defeated and killed; and about the same time the Dogars, a wild, predatory clan which claims descent from the Chauhān Rājputs, settled near Pākpattan, and gradually spread up the Sutlej valley, finding none to oppose them, as the scattered Bhatti population which occupied it retired before the new colonists. At length, in 1740, according to tradition, they reached Ferozepore, which was then included in a district called the Lakha Jungle in charge of an imperial officer stationed at Kasūr. Three of these officials in succession were murdered by the Dogars, who seem to have had matters much their own way until the Sikh power arose.

In 1763 the Bhangī confederacy, one of the great Sikh sections, attacked and conquered Ferozepore under their famous leader, Gūjar Singh, who made over the newly acquired territory to his nephew, Gurbakhsh Singh. The young Sikh chieftain rebuilt the fort and consolidated his power on the Sutlej, but spent most of his time in other portions of the province. In 1792, when he seems to have divided his estates with his family, Ferozepore fell to Dhanna Singh, his second son. Attacked by the Dogars, by the Pathāns of Kasūr, and by the neighbouring principality of Raikot, the new ruler lost his territories piece by piece, but was still in possession of Ferozepore itself when Ranjīt Singh crossed the Sutlej in 1808, and threatened to absorb all the minor principalities which lay between his domain and the British frontier. But the British Government, established at Delhi since 1803, intervened with an offer of protection to all the Cis-Sutlej States; and Dhanna Singh gladly availed himself of the promised aid, being one of the first chieftains to accept British protection and control. Ranjīt Singh, seeing the British ready to support their rights, at once ceased to interfere with the minor States, and Dhanna Singh retained unmolested the remnant of his dominions until his death in 1818. He left no son, but his widow succeeded to the principality during her lifetime; and on her death in 1835, the territory escheated to the British

Government, under the conditions of the arrangement effected in 1809. The political importance of Ferozepore had been already recognized, and an officer was at once deputed to take possession of the new post. After the boundary had been carefully determined, the District was made over for a while to a native official; but it soon became desirable to make Ferozepore the permanent seat of a European Political officer. In 1839 Sir Henry (then Captain) Lawrence took charge of the station, which formed at that time the advanced outpost of British India in the direction of the Sikh power. Early accounts represent the country as a dreary and desert plain, where rain seldom fell and dust-storms never ceased. The energy of Captain Lawrence, however, combined with the unwonted security under British rule, soon attracted new settlers to this hitherto desolate region. Cultivation rapidly increased, trees began to fringe the water-side, trade collected round the local centres; and Ferozepore, which in 1835 was a deserted village, had in 1841 a population of nearly 5,000 persons. Four years later, the first Sikh War broke out. The enemy crossed the Sutlej opposite Ferozepore on December 16, 1845; and the battles of Mudki, Ferozeshāh, Aliwāl, and Sobraon, the first two within the limits of the present District, followed one another in rapid succession. Broken by their defeats, the Sikhs once more retired across the boundary river, pursued by the British army, which dictated the terms of peace beneath the walls of Lahore. The whole cis-Sutlej possessions of the Punjab kingdom passed into the hands of the East India Company, and the little principality of Ferozepore became at once the nucleus of an important British District. The existing area was increased by subsequent additions, the last of which took place in 1884. Since the successful close of the first Sikh campaign, the peace of the District has never been broken, except during the Mutiny of 1857. In May of that year, one of the two Native infantry regiments stationed at Ferozepore broke out into revolt, and, in spite of a British regiment and some European artillery, plundered and destroyed the buildings of the cantonment. The arsenal and magazine, however, which gave the station its principal importance, were saved without loss of life to the European garrison. The mutineers were subsequently dispersed. The detachment of Native infantry at Fāzilka was at the same time disarmed; and the levies raised by General Van Cortlandt, and in Fāzilka by Mr. Oliver, succeeded in preserving the peace of the District, which on any show of weakness would have been in revolt from one end to the other. In 1884, when Sirsa District was broken up, the *tahsīl* of Fāzilka was added to Ferozepore.

The population of the District at the last three enumerations was: (1881) 747,329, (1891) 886,676, and (1901) 958,072, dwelling in 8 towns and 1,503 villages. It increased by 8 per cent. during the

last decade, the increase being greatest in the Fāzilka *tahsīl* and least in Zīra. It is divided into the five *tahsīls* of FEROZEPORE, ZĪRA, MOGA, MUKTSAR, and FĀZILKA, the head-quarters of each being at the place from which it is named. The chief towns are the municipalities of FEROZEPORE, the head-quarters of the District, FĀZILKA, MUKTSAR, DHARMKOT, ZĪRA, and MAKHU.

Population.

The following table shows the chief statistics of population in 1901:—

Tahsil.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Ferozepore .	480	2	320	165,851	345·5	— 7·7	10,159
Zīra . .	498	3	342	176,462	354·3	+ 1·3	4,218
Moga . .	807	1	202	245,857	304·6	+ 4·3	11,378
Muktsar .	937	1	320	172,445	184·0	+ 6·8	5,538
Fāzilka . .	1,355	1	319	197,457	145·7	+ 45·6	5,279
District total	4,302	8	1,503	958,072	222·7	+ 8·0	36,572

NOTE.—The figures for the areas of *tahsīls* are taken from revenue returns. The total District area is that given in the *Census Report*.

Muhammadans number 447,615, or 47 per cent. of the total; Hindus, 279,099, or more than 29 per cent.; and Sikhs, 228,355, or nearly 24 per cent. The language generally spoken is Punjābi of the Mālwai type, but on the borders of Bīkaner Bāgrī is spoken.

By far the largest tribe are the Jats or Jāts (248,000). They are of the Mālwā type, described under LUDHIĀNA DISTRICT. The Arains (65,000) appear to be recent immigrants from Jullundur and Lahore. Small to begin with, their holdings in this District have become so subdivided, and their recent extravagance has plunged them so heavily into debt, that they present a complete contrast to their brethren in Ludhiāna. Rājputs number 82,000. The Dogars (16,000) are still mainly a pastoral tribe; they are noted cattle-thieves, and have been described as feeble-minded, vain, careless, thriftless, very self-indulgent, and incapable of serious effort. Gūjars number 14,000. The chief commercial tribes are the Aroras (24,000), Baniās (18,000), and Khattrīs (11,000). Of the artisan and menial tribes, the most important are the Chhīmbas (washermen, 15,000), Chamārs (leather-workers, 32,000), Chūhrās (scavengers, 95,000), Julāhās (weavers, 23,000), Kumhārs (potters, 35,000), Māchhis (fishermen, 20,000), Mochīs (cobblers, 23,000), Sonārs (goldsmiths, 8,000), Tarkhāns (carpenters, 31,000), Telis (oil-pressers, 16,000), and Lohārs (ironsmiths, 10,000). There are 14,000 barbers and 11,000 village minstrels. Ascetics include the Muhammadan Bodlas (1,200), whose powers of healing by

incantation are as highly esteemed by the people, both Muhammadan and Hindu, as their curse is dreaded. Brāhmans number 18,000. The Bāwaris (11,000), Hārnis, and Sānsis (500) have been proclaimed as criminal tribes. Mahtams number 14,000. About 61 per cent. of the population are supported by agriculture.

The Ludhiāna American Presbyterian Mission has a station, occupied in 1871, at Ferozepore. The mission of the Presbyterian Church of the United States of America started work in 1881. The District in 1901 contained 240 native Christians.

The conditions of the District vary with the distance from the hills, the annual rainfall decreasing by about 4 inches every 20 miles, while in every part the light soils of the uplands can resist drought much better than the clays of the riverain tract. In the north-east the rainfall is sufficient for ordinary tillage. In the centre the hard clay soils of the riverain require water to grow even ordinary crops in dry years, but the light upland soils do very well with the quantity of rain they usually receive. In the south there is no unirrigated cultivation in the riverain, and in the uplands the cultivation is extremely precarious.

Agriculture.

The District is held mostly on the *bhaiyāchārā* and *pattīdāri* tenures, *zamīndāri* lands covering only 474 square miles.

The area for which details are available from the revenue records of 1903–4 is 4,078 square miles, as shown below:—

Tahsīl.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Ferozepore	486	371	144	65
Zīra	495	413	155	48
Moga	807	756	268	16
Muktsar	935	807	449	73
Fāzilka	1,355	1,097	595	193
Total	4,078	3,444	1,611	395

Wheat and gram are the most important crops of the spring harvest, occupying 784 and 841 square miles respectively in 1903–4; barley covered 213 square miles. In the autumn harvest, the great and spiked millets occupied 193 and 128 square miles respectively. Some rice (21 square miles) is grown on the inundation canals, and maize (117 square miles) in the riverain. The pulse *moth* is the autumn crop of the sandy tracts beneath the great bank. Little sugar-cane or cotton is grown.

The cultivated area increased by 6 per cent. during the twelve years ending 1903–4, the increase being chiefly due to the extension of canal-irrigation. Little has been done towards improving the quality of the crops, experiments tending to show that foreign seeds deteriorate

after a year or two. The chief improvement in agricultural practice is the substitution of the spring cultivation for the less valuable autumn crops; forty years ago the autumn harvest occupied twice the area of the spring, and even now spring cultivation in the south of the District is insignificant. Loans under the Agriculturists' Loans Act are popular, and as a rule faithfully applied. During the five years ending 1904 Rs. 86,000 was advanced under this Act, and Rs. 1,600 under the Land Improvement Loans Act.

The cattle of the riverain are greatly inferior to the upland breed, which is an extremely fine one. Before the introduction of British rule, the jungles round Muktsar were inhabited by an essentially pastoral population. Camels are much used in the sandy parts and the local breed is good. Ferozepore is an important horse-breeding District. There are two breeds of horses—a small wiry animal bred chiefly by the Dogars of the riverain, and a larger one bred inland. An important horse and cattle fair is held at Jalālābād in the Mamdot estate in February. Nine horse and eighteen donkey stallions are kept by the Army Remount department, and two pony stallions by the District board. Sheep are fairly numerous, and the wool of the country between Fāzilka and Bīkaner is much esteemed.

Of the total area cultivated in 1903–4, 1,611 square miles, or 47 per cent., were classed as irrigated. Of this area, 170 square miles were irrigated from wells, 79 from wells and canals, 1,361 from canals, and 519 acres from streams and tanks. In addition, 68 square miles, or 2 per cent., were subject to inundation from the Sutlej. The high lands of the south-east are irrigated by the Abohar branch of the Sirhind Canal, while the riverain is watered by the Grey Inundation Canals. In the riverain wells are worked by Persian wheels, in the high lands by the rope and bucket. In both cases bullocks are used. There were 8,604 wells in use in 1904, besides 808 temporary wells, lever wells, and water-lifts.

Forests covering an area of 6 square miles are managed by the Deputy-Commissioner. Small groves of trees are generally found round wells; but there are no large plantations, and the scarcity of wood is felt to a considerable extent. *Kankar* is the only mineral product of value.

The manufactures are confined almost entirely to the supply of local wants. Coarse cloths and blankets are woven from home-grown cotton and wool, and the carts made locally are of exceptional excellence. Mats are woven of Indian hemp and false hemp. Excellent lacquer-work on wood is produced. The arsenal at Ferozepore town employed 1,199 hands in 1904.

Trade and communications.

The District exports wheat and other articles of agricultural produce,

which are to a great extent carried by the producers direct to markets in Ludhiānā, Amritsar, Bahāwalpur, Lahore, Jullundur, and Hoshiārpur. The chief imports are sugar, cotton, sesamum, metals, piece-goods, indigo, tobacco, salt, rice, and spices. Ferozepore town is the chief trade centre.

Ferozepore town lies on the North-Western Railway from Lahore to Bhatinda, and the Fāzilka *tahsīl* is traversed by the Southern Punjab Railway. Fāzilka town is also connected with Bhatinda by a branch of the Rājputāna-Mālwā (narrow gauge) Railway, which runs parallel to the North-Western Railway from Bhatinda to Kot Kapūra. A railway running from Ludhiāna through Ferozepore and Fāzilka to join the Southern Punjab Railway at McLeodganj has recently been opened. Ferozepore town lies on the important metalled road from Lahore to Ludhiāna. The total length of metalled roads in the District is 81 miles and of unmetalled roads 828 miles. Of the former, 57 miles are under the Public Works department, and the rest under the District board. The Abohar branch of the Sirhind Canal and the Sutlej Navigation Canal form a waterway connecting Ferozepore town with Rūpar. Below its junction with the Beās, the Sutlej is navigable all the year round. Little use, however, is made of these means of water communication. There are twenty ferries on the Sutlej.

Famine.

The District was visited by famine in 1759–60, and again in 1783–4, the year of the terrible *chālīsa* famine, when rain failed for three successive seasons and wheat sold at a seer and a quarter per rupee. Famine again occurred in 1803–4, 1817–8, 1833–4, 1842–3, 1848–9, 1856–7, and 1860–1. In 1868–9 there was famine, and Rs. 16,739 was spent in relief. The next famine was in 1896–7, by which time the extension of canal-irrigation and the improvement of communications had to a great extent prevented distress becoming really acute. Food for human beings was not scarce, as the stocks of grain were ample, but a good deal of suffering was caused by high prices. The total amount spent on relief was Rs. 33,952, and the greatest number relieved in any week was 4,149. In 1899–1900 scarcity was again felt. The greatest number on test works was 2,296, and the expenditure was Rs. 75,470, of which Rs. 61,435 was for works of permanent utility on canals.

Administration.

The District is in charge of a Deputy-Commissioner, aided by six Assistant or Extra-Assistant Commissioners, of whom one is in charge of the Fāzilka subdivision and one in charge of the District treasury. It is divided into the five *tahsīls* of FEROZEPORE, ZĪRA, MOGA, MUKTSAR, and FĀZILKA, each under a *tahsīldār* and a *naib-tahsīldār*, the Fāzilka *tahsīl* forming a subdivision.

The Deputy-Commissioner as District Magistrate is responsible for

criminal justice. Civil judicial work is under a District Judge, and both officers are subordinate to the Divisional Judge of the Ferozepore Civil Division, who is also Sessions Judge. There are four Munsifs, one at head-quarters and one at each outlying *tahsīl*, except Fāzilka. Dacoity and murder are especially common in the District. The most frequent forms of crime are cattle-theft and burglary.

Practically nothing is known of the revenue systems which obtained in Ferozepore previous to annexation. The *Ain-i-Akbarī* mentions Ferozepore as the capital of a large *pargana* in the Multān *Sūbah*. The Lahore and Kapūrthala governments seem to have taken their revenue in cash. They fixed the amount for short periods only, and sometimes collected in kind. From annexation onwards the revenue history has to be considered in three parts. The District proper is divided into two portions by the State of Faridkot, while the revenue history of the Fāzilka *tahsīl*, which was added to the District in 1884, is distinct from either of those portions and possesses different natural features. Several summary assessments were made from annexation to 1852, when the regular settlement was commenced. This assessment, which increased the demand of the summary settlement by only 1 per cent., was sanctioned for a term of thirty years. The Muktsar *tahsīl* was annexed in 1855 and settled summarily. This settlement ran on till 1868, when (together with the Mamdot territory annexed in 1864) the *tahsīl* was regularly settled. The northern part of the District, including the Moga, Zīra, and Ferozepore *tahsīls*, was resettled between 1884 and 1888. Besides raising the demand from Rs. 4,80,000 to Rs. 7,30,000, a water rate was imposed of 6 and 12 annas per *ghumao* (five-sixths of an acre) on crops irrigated by the Grey Inundation Canals. This rate brings in about Rs. 30,000 a year. The Muktsar *tahsīl* was reassessed immediately afterwards, and the revenue raised from Rs. 1,76,000 to Rs. 2,65,000, excluding the canal rate, which was calculated to bring in a further Rs. 20,000.

The Fāzilka *tahsīl* was summarily settled after annexation, and the regular settlement was made in 1852–64. The revised settlement made in 1881 increased the revenue from Rs. 55,000 to Rs. 94,000. At the same time 51 villages on the Sutlej were placed under a fluctuating assessment, based on crop rates varying from Rs. 1-8-0 to 8 annas per acre. The *tahsīl* came again under assessment in February, 1900, when the revenue was increased by Rs. 71,000, excluding a large enhancement of occupiers' rates on canal-irrigated lands.

The rates of the present settlement range from R. 0–14–3 to Rs. 1–6–3 on 'wet' land, and from 7 annas to R. 0–13–10 on 'dry' land.

The collections of land revenue alone and of total revenue are shown in the following table :—

	1880-1.	1890-1.	1900-1.	1903-4.
Land revenue .	5,19*	8,71	9,01	11,04
Total revenue .	734	12,97	15,13	17,78

* For the District as then constituted, excluding the Fāzilka *tahsil*.

The District possesses six municipalities: FEROZEPORE, FĀZILKA, MUKTSAR, DHARMKOT, ZĪRA, and MAKHU. Outside these, local affairs are managed by the District board, which had in 1903–4 an income of Rs. 1,73,000. The expenditure was Rs. 1,61,000, public works being the largest item.

The regular police force consists of 679 of all ranks, including 59 cantonment and 91 municipal police, under a Superintendent who usually has four inspectors to assist him. The village and town watchmen number 1,528. There are 18 police stations, 4 outposts, and 13 road-posts. The District jail at head-quarters has accommodation for 424 prisoners.

Ferozepore stands fourteenth among the twenty-eight Districts of the Province in respect of the literacy of its population. In 1901 the proportion of literate persons was 3·8 per cent. (6·7 males and 0·3 females). The number of pupils under instruction was 2,942 in 1880–1, 5,446 in 1890–1, 6,113 in 1900–1, and 6,387 in 1903–4. In the last year there were 10 secondary and 93 primary (public) schools, and 7 advanced and 90 elementary (private) schools, with 473 girls in the public and 289 in the private schools. The District possesses an Anglo-vernacular high school maintained by the Ferozepore municipality, the management of which was taken over by the Educational department in 1904, and two unaided high schools—the Har Bhagwān Dās Memorial high school at Ferozepore and the Dev Dharm high school at Moga. It also has 7 middle and 93 primary schools under the department, and 2 middle and 95 primary schools supported mainly by private enterprise. Indigenous education, however, is on the decline. The girls' schools, though few, show more signs of life than they did ten years ago, and there is healthy competition between the small mission school for girls and that of the Dev Samāj. The total expenditure on education in 1903–4 was Rs. 72,000, of which the District board contributed Rs. 25,300; the Government grant was Rs. 5,000.

Besides the civil hospital and a mission hospital at Ferozepore, the District contains seven outlying dispensaries. These institutions in 1904 treated a tolal of 97,612 out-patients and 3,067 in-patients, and 7,781 operations were performed. The expenditure was nearly Rs. 23,000, of which Rs. 10,000 was derived from municipal and Rs. 12,000 from Local funds.

The number of successful vaccinations in 1903-4 was 24,321, representing 26 per 1,000 of the population.

[E. B. Francis, *District Gazetteer* (1888-9), *Settlement Report of the Northern Part of the District* (1893), *Settlement Report of Muktsar and Ilāka Mamdot* (1892), and *Customary Law of the Tahsīls of Moga, Zīra, and Ferozepore* (1890); J. Wilson, *General Code of Tribal Custom in the Sirsa District* (1883); C. M. King, *Settlement Report of Sirsa and Fāzilka Tahsīls* (1905).]

Ferozepore Tahsīl.—*Tahsīl* of Ferozepore District, Punjab, lying between 30° 44′ and 31° 7′ N. and 74° 25′ and 74° 57′ E., with an area of 486 square miles. It is bounded on the north-west by the Sutlej, which divides it from Lahore District. The lowlands along the river are irrigated by the Grey Canals, but the greater part of the *tahsīl* lies in an upland plateau of sandy loam. The population in 1901 was 165,851, compared with 179,606 in 1891. FEROZEPORE TOWN (population, 49,341) is the head-quarters of the *tahsīl*, which also contains the town of MUDKĪ (2,977) and 320 villages. The land revenue and cesses amounted in 1903-4 to 2·1 lakhs. The battle-fields of FEROZESHĀH and MUDKĪ are in this *tahsīl*.

Ferozepore Town.—Head-quarters of the District and *tahsīl* of Ferozepore, Punjab, situated in 30° 58′ N. and 74° 37′ E., on the old high bank of the Sutlej, on the North-Western Railway; distant by rail from Calcutta 1,198 miles, from Bombay 1,080, and from Karāchi 788. Population (1901), with cantonment, 49,341, including 24,314 Muhammadans, 21,304 Hindus, 1,665 Sikhs, and 1,753 Christians. The town was founded, according to tradition, in the time of Fīroz Shāh III, but was in a declining state at the period of British annexation, the population in 1838 being only 2,732. It was occupied by the British in 1835, on the death of Sardārni Lachhman Kunwar. It is now the seat of a thriving commerce, due principally to the exertions of Sir H. Lawrence, who induced many native traders to settle in the town, and more lately to the enterprise of an English merchant, who has erected a powerful cotton-press in the vicinity. The main streets are wide and well paved, while a circular road which girdles the wall is lined by the gardens of wealthy residents. The memorial church, in honour of those who fell in the Sutlej campaign of 1845-6, was destroyed during the Mutiny, but since restored. A Sikh temple in honour of the men of the 36th Sikhs who fell holding Fort Sāragarhi and in the sortie from Fort Gulistān in 1897, erected by private subscriptions collected by the *Pioneer* newspaper, and opened in 1903 by the Lieutenant-Governor of the Punjab, testifies to the loyalty and valour of our former foes.

Ferozepore has a large and prosperous grain market, but is chiefly important for its cantonment, the population of which in 1901 was 25,866. One of the two arsenals in the Province is situated at Feroze-

pore, which in 1904 employed 1,199 hands. The garrison includes a battery of field artillery and a company of garrison artillery, a British infantry regiment, one regiment of Native cavalry, and two battalions of Native infantry. The income and expenditure of the cantonment funds during the ten years ending 1902–3 averaged Rs. 47,000.

The municipality was created in 1867. The municipal receipts during the ten years ending 1902–3 averaged Rs. 50,900, and the expenditure Rs. 49,000. In 1903–4 the income was Rs. 52,700, chiefly derived from octroi; and the expenditure was Rs. 45,100, including conservancy (Rs. 7,700), education (Rs. 11,700), medical (Rs. 8,400), public safety (Rs. 7,200), and administration (Rs. 5,500). The chief educational institutions are two Anglo-vernacular high schools, one of which, maintained by the municipality, was taken over by the Educational department in 1904, and an aided Anglo-vernacular middle school in cantonments. There is a civil hospital. The Ludhiāna American Presbyterian Mission maintains a hospital for males and a small school for girls.

Ferozeshāh (*Pharūshahr*).—Battle-field in the District and *tahsīl* of Ferozepore, Punjab, situated in 30° 53′ N. and 74° 50′ E., about 12 miles from the left bank of the Sutlej. It is famous for the attack made upon the formidably entrenched Sikh camp, on December 21, 1845, by the British forces under Sir Hugh Gough and Sir Henry Hardinge. After two days' severe fighting, the entrenchments were carried and the enemy completely routed, but not without heavy losses on the part of the conquerors. No traces of the earthworks now remain, but a monument erected upon the spot perpetuates the memory of the officers and men who fell in the engagement. The real name of the place, as called by the people, is Pharūshahr, corrupted into the historical name Ferozeshāh.

Fife, Lake.—Lake in Poona District, Bombay. *See* LAKE FIFE.

Firingīpet.—Town in South Arcot District, Madras. *See* PORTO NOVO.

Fīrozābād Tahsīl.—North-eastern *tahsīl* of Agra District, United Provinces, conterminous with the *pargana* of the same name, lying between 26° 59′ and 27° 22′ N. and 78° 19′ and 78° 32′ E., with an area of 203 square miles. Population increased from 112,153 in 1891 to 119,775 in 1901. There are 186 villages and one town, FĪROZABĀD (population, 16,849), the *tahsīl* head-quarters. The demand for land revenue in 1903–4 was Rs. 2,25,000, and for cesses Rs. 27,000. The density of population, 590 persons per square mile, is slightly above the District average. The *tahsīl* lies north of the Jumna, and is crossed by two small streams, the Sirsā and Sengar. About one-sixth of the total area consists of the Jumna ravines, which produce only thatching-grass and a little stunted timber. The rest is a fertile tract of upland soil, with a few patches of *ūsar*, *dhāk* jungle (*Butea frondosa*), and here and there sandy ridges. In 1903–4 the area under cultivation was

141 square miles, of which 60 were irrigated. Wells supply over 90 per cent. of the irrigated area, and the Upper Ganges Canal serves about 5 square miles.

Fīrozābād Town.—Head-quarters of the *tahsīl* of the same name in Agra District, United Provinces, situated in 27° 9′ N. and 78° 23′ E., on the road from Agra city to Mainpurī, and on the East Indian Railway. Population (1901), 16,849. The town is ancient, but is said to have been destroyed and rebuilt in the sixteenth century by a eunuch, named Malik Fīroz, under the orders of Akbar, because Todar Mal was insulted by the inhabitants. It contains an old mosque and some temples, besides a dispensary, and branches of the American Methodist Mission and the Church Missionary Society. A municipality was constituted in 1869. During the ten years ending 1901 the income and expenditure averaged about Rs. 14,000. In 1903–4 the income was Rs. 16,000, chiefly from octroi (Rs. 12,000); and the expenditure was Rs. 20,000. The trade of the place is mainly local, but there is a cotton-ginning factory employing about 100 hands. The municipality maintains a school and aids four others with 190 pupils, besides the *tahsīlī* school with about 80 pupils.

Fīrozpur.—District, *tahsīl*, and town in the Punjab. *See* FEROZEPORE.

Fīrozpur Tahsīl.—*Tahsīl* of Gurgaon District, Punjab, lying between 27° 39′ and 28° 1′ N. and 76° 53′ and 77° 20′ E., with an area of 317 square miles. It is bounded on the north-east by the Nūh and Palwal *tahsīls*, on the south-east by the Muttra District of the United Provinces and the State of Bharatpur, and on the west by the State of Alwar. The population in 1901 was 132,287, compared with 113,874 in 1891. It contains the town of FĪROZPUR-JHIRKA (population, 7,278), the head-quarters, and 230 villages. The land revenue and cesses in 1903–4 amounted to 2·7 lakhs. The *parganas* of Fīrozpur and Punāhāna, which make up the present *tahsīl*, were assigned for good service to Ahmad Bakhsh Khān, but were forfeited by his son for complicity in the murder of Mr. William Fraser in 1836. Of the two ranges of bare and rocky hills which extend northwards into the *tahsīl*, one forms the western boundary and the other runs north-east for 25 miles and then sinks into the plain. The soil in the low-lying parts of the *tahsīl*, which are liable to be flooded after heavy rains, is a sandy loam.

Fīrozpur-Jhirka.—Head-quarters of the Fīrozpur *tahsīl* in Gurgaon District, Punjab, situated in 27° 47′ N. and 76° 58′ E., 50 miles due south of Gurgaon town. Population (1901), 7,278. Formerly a trade centre for cotton, it has been ruined by the absence of railway communications. It has an out-still for the distillation of spirit. It is said to have been founded by Fīroz Shāh III as a military post

to control the Mewātīs. From 1803 to 1836 it was the seat of the Nawābs of Fīrozpur, to whom the present *tahsīl* had been granted on annexation. The municipality was created in 1867. The income and expenditure during the ten years ending 1902–3 averaged Rs. 7,400 and Rs. 7,100 respectively. The income in 1903–4 was Rs. 6,600, chiefly derived from octroi: and the expenditure was Rs. 7,800. It maintains a vernacular middle school and a dispensary.

Fīrūz Shāh.—Battle-field in Ferozepore District, Punjab. *See* FEROZESHĀH.

Forbesganj. Village in the Arāriā subdivision of Purnea District, Bengal, situated in 26° 19′ N. and 87° 16′ E. Population (1901), 2,029. Forbesganj lies on the Eastern Bengal State Railway and is a market of growing importance, the chief articles of commerce being jute, grain, and piece-goods; there are two steam jute-presses. The place contains a number of Mārwāri merchants, some of whom conduct a trans-frontier trade with Nepāl.

Fort Dufferin.—Part of Mandalay cantonment, Upper Burma. *See* MANDALAY CITY.

Fort Lockhart.—Military outpost on the Sāmāna range, in the Hangu *tahsīl* of Kohāt District, North-West Frontier Province, and summer head-quarters of the general commanding the Kohāt military district, situated in 33° 33′ N. and 70° 55′ E., 6,743 feet above sea-level. The garrison consists of a Native infantry regiment, and in summer a mountain battery.

Fort Mackeson.—Formerly a considerable frontier fort in Peshāwar District, North-West Frontier Province, built to command the north entrance to the Kohāt Pass, from which it is 3½ miles distant. It consisted of a pentagon, an inner keep, and a hornwork, with accommodation for 500 troops; but, with the exception of the keep, it was dismantled in 1887, and is now held by 29 men of the border military police.

Fort Munro.—Hill station in the District and *tahsīl* of Dera Ghāzi Khān, Punjab, situated in 30° N. and 70° 3′ E., on a peak of the Sulaimān Hills, 6,300 feet above sea-level.

Fort St. David.—A ruined fortress in the Cuddalore *tāluk* of South Arcot District, Madras, situated in 11° 45′ N. and 79° 47′ E., on the bank of the Gadilam river near the point where it falls into the Bay of Bengal, about 1½ miles east of Cuddalore New Town. The place is now included within the limits of the municipality of CUDDALORE, and several European bungalows have been erected within its crumbling lines. It has as stirring a history as almost any spot in the Presidency. The Dutch and the French both had settlements here at one time. There was a small fort, which had been built by a Hindu merchant named Chinnia Chetti, and after the capture of

Gingee by Sivaji in 1677 this passed into the possession of the Marāthās. From them it was purchased by the English in 1690, the sale including all the land round to the distance of a 'randome shott of a great gun.' The great gun was carefully loaded and fired to the different points of the compass, and wherever its shot fell a boundary mark was set up. The villages so obtained are called the 'cannon-ball villages' to this day. The place was originally known in those days as Tegnapatam or Devipatam; and it has been conjectured with much probability that it was named Fort St. David by Elihu Yale, then Governor of Fort St. George, who was a Welshman, in honour of his country's patron saint. From 1725 onwards the fortifications were greatly improved and the place became of considerable strength. Upon the capitulation of Madras to the French under La Bourdonnais in 1746, Fort St. David became the British head-quarters on the coast, and the Company's agents there assumed the general administration of affairs in the South of India. They successfully resisted an attack made in the same year by Dupleix. Clive received his first commission here in 1747 and was appointed its Governor in 1756. In 1758 the French under Lally (see the graphic account of the affair in Orme's *History*) captured and dismantled the fort, but abandoned it in 1760 when Eyre Coote marched on Pondicherry. In 1782 they again took it, and restored its defences in 1783 sufficiently to withstand an attack by General Stuart. It was given back to the English in 1785. A curious feature of the fortifications was the subterranean passages under the glacis. These appear to have run completely round the fort, thus forming a safe means of communication for the garrison. At short intervals other galleries, striking off at right angles and terminating in powder chambers, served as mines. At the south-east corner the gallery ran down to the edge of the sea. Some of these passages are still to be seen.

Fort St. George.—The citadel of Madras. *See* MADRAS CITY.

Fort Sandeman Subdivision.—Subdivision and *tahsīl* of the Zhob District, Baluchistān, forming the north-eastern corner of the District, and lying between 30° 39′ and 32° 4′ N. and 68° 58′ and 70° 3′ E., with an area of 3,583 square miles. Population (1901), 34,712. The land revenue, including grazing tax and royalty levied on wood, amounted in 1903–4 to Rs. 40,000. The head-quarters station is FORT SANDEMAN (population, 3,552). The *tahsīl* possesses 190 villages. The country is hilly, and intersected by the valley of the Zhob and many minor valleys. Cultivation is sparse and backward. The Girdao plain is covered with rich pasture in years of good rainfall. The Shīnghar spurs of the Sulaimān range contain fine forests of edible pine.

Fort Sandeman Town.—Head-quarters station of the Zhob

District, Baluchistān, situated in 31° 21′ N. and 69° 27′ E. It was first occupied in December, 1889. To the natives the locality is known as Apozai; it received its present name from its founder, Sir Robert Sandeman. The station stands about 6½ miles east of the Zhob river, in an open plain 4,700 feet above sea-level. A ridge rises 150 feet above the surface of the plain to the north, on which stands the residence of the Political Agent, known as the Castle. The military lines, bazar, dispensaries, and school lie below. The nearest railway station in Baluchistān is Harnai, 168 miles; Bhakkar, the railway station for Dera Ismail Khān, is 122 miles. The population numbered 3,552 in 1901. The garrison includes a Native cavalry and a Native infantry regiment, and Fort Sandeman is also the head-quarters of the Zhob Levy Corps. A supply of water for drinking purposes, carried by a pipe nine miles from the Saliāza valley, was inaugurated in 1894, at a cost of a little over a lakh of rupees. Water for irrigation is also obtained from the same source, and by this means many fruit and other trees have been planted. A Local fund has existed since 1890; the income during 1903–4 was Rs. 18,000 and the expenditure Rs. 17,000. One-third of the net receipts from octroi is paid over to the military authorities. A small sanitarium, about 8,500 ft. above sea-level, exists about 30 miles away at Shīnghar on the Sulaimān range, to which resort is made in the summer months.

Fort Victoria.—Fort in the Dāpoli *tāluka* of Ratnāgiri District, Bombay. *See* BĀNKOT.

Fort William.—The citadel of Calcutta, Bengal. *See* CALCUTTA.

French Possessions.—The head-quarters of the Governor of French India are at Pondicherry; and the French Possessions comprise five Settlements, with certain dependent *loges* or plots. They aggregate 203 square miles, and had a total population in 1891 of 286,347 persons and in 1901 of 273,185. These totals were made up as follows: PONDICHERRY, area 115 square miles, population (1901) 174,456; KĀRIKĀL, 53 square miles, population 56,595; MAHÉ, 26 square miles, population 10,298; YANAM, 5 square miles, population 5,005; and CHANDERNAGORE, 4 square miles, population 26,831. Except the last, these possessions are all located within the Madras Presidency. The greater part of the decline in the population during the decade ending 1901 occurred at Kārikāl.

The first French expedition into Indian waters, with a view to open up commercial relations, dates as far back as 1603. It was undertaken by private merchants at Rouen; but it failed, as also did several similar attempts which followed. In 1642 Cardinal Richelieu founded the first Compagnie d'Orient, but its efforts met with no success. Colbert reconstituted the Company on a larger basis in 1664, granting exemption from taxes and a monopoly of the Indian trade for fifty

years. After having twice attempted, without success, to establish itself in Madagascar, Colbert's Company again took up the idea of direct trade with India, and its President, Caron, founded in 1668 the Comptoir or agency at Surat. But on finding that city unsuited for a head establishment, he seized the harbour of Trincomalee in Ceylon from the Dutch. The Dutch, however, speedily retook Trincomalee; and Caron, passing over to the Coromandel coast, in 1672 seized St. Thomé, a Portuguese town adjoining Madras which had for twelve years been in the possession of Holland. He was, however, compelled to restore it to the Dutch in 1674.

The ruin of the Company seemed impending, when one of its agents, the celebrated François Martin, suddenly restored it. Rallying under him a handful of sixty Frenchmen, saved out of the wreck of the settlements at Trincomalee and St. Thomé, he took up his abode at Pondicherry, then a small village, which he purchased in 1683 from the Rājā of Gingee. He built fortifications, and a trade began to spring up; but he was unable to hold the town against the Dutch, who wrested it from him in 1693, and held it until it was restored to the French by the Peace of Ryswick in 1697.

Pondicherry became in this year, and has ever since remained, the most important of the French Settlements in India. Its foundation was contemporaneous with that of Calcutta; like Calcutta, its site was purchased by a European Company from a native prince; and what Job Charnock was to Calcutta, François Martin proved to Pondicherry. On its restitution to the French by the Peace of Ryswick in 1697, Martin was appointed governor, and under his able management Pondicherry became an entrepôt of trade. Chandernagore, in Lower Bengal, had been acquired by the French Company in 1688, by grant from the Delhi emperor; Mahé, on the Malabar coast, was obtained in 1725–6, under the government of M. Lenoir; Kārikāl, on the Coromandel coast, under that of M. Dumas in 1739. Yanam, on the coast of the Northern Circars, was taken possession of in 1750, and formally ceded to the French two years later.

The war of 1741 between France and England led to the attack alike of Madras and of Pondicherry, the capitals of the English and French Companies in Southern India. La Bourdonnais equipped at his own expense a fleet, and laid siege to Madras, which capitulated on September 21, 1746, and was ransomed for £400,000. The English in due time made reprisals. On April 26, 1748, they appeared before Pondicherry, but eventually retired after a most skilful defence of the town conducted by the famous Dupleix during forty-two days. The Peace of Aix-la-Chapelle put a stop to further hostilities, and left Dupleix free to further his dream of an Indian empire for France. Between 1746 and 1756, by a happy mingling of clever diplomacy and fearless daring,

Dupleix and his lieutenants passed from success to success until the French reached the height of their power in the South. He obtained from the Mughal emperor at Delhi the title of Nawāb; established a protectorate over the *Sūbah* of Arcot and other parts of Southern India; made large additions to the French territory around Pondicherry, Kārikāl, and Masulipatam; and extended the French authority over the four Sarkārs of Mustafānagar, Ellore, Rājahmundry, and Chicacole, and the island of Srīrangam, formed by two arms of the Cauvery. These various annexations opened up to French commerce 200 leagues of seaboard, and yielded a revenue of £800,000 (20 million francs).

This period of power proved of short duration. Dupleix, feebly supported by the Court of Versailles, met with a series of reverses from the English Company, and was recalled to Paris in 1753. A certain extent of the territory still remained to his successor; but during the Seven Years' War the Government of France could afford no reinforcements for its Indian possessions. The English Company overran them, defeated the French at Wandiwāsh, and seized Arcot. Lally-Tollendal, after a chivalrous defence, surrendered Pondicherry on January 6, 1761. The English demolished the town; the walls, the forts, the public buildings, were all destroyed. The captured troops and all Europeans in the French Company's service were deported to France.

Two years later, the peace of 1763 restored Pondicherry and the other Indian factories to the French, but with their former territories greatly curtailed. The abolition of the monopoly of the French Company in 1769 threw open the trade, and Pondicherry began to show signs of new vitality. But in 1778 it again fell into the hands of the English East India Company. In 1782 the Bailli de Suffren made a brilliant effort on behalf of his countrymen, fighting four naval battles with the English in seven months, and retaking the fort of Trincomalee. Next year, the Treaty of Versailles restored Pondicherry and the other factories to the French, January 20, 1783. But the English Company took advantage, as usual, of the breaking out of the next war in Europe to seize the French possessions in India, and again compelled their rivals to evacuate their settlements in 1793. The Peace of Amiens once more restored them to the French in 1802; on the renewal of hostilities, the English Company again seized them, September 11, 1803. Pondicherry thus passed for the fourth time under British rule; and, during the long Napoleonic wars, the French power ceased to exist in India.

Pondicherry and the other factories were restored to the French by the treaties of 1814 and 1815, the territories being finally reduced to their present limits. The French had to begin the whole work of their Indian settlements *de novo*; and an expedition arrived at Pondicherry

on September 16, 1816, to re-enter on possession. On December 4, 1816, Pondicherry and Chandernagore were delivered over to them; Kārikāl on January 14, 1817; Mahé, on February 22, 1817; and Yanam, on April 12, 1817. A convention between the Governments of France and England, dated March 7, 1815, regulated the conditions of their restoration. The French renounced their former right, under the convention of August 30, 1787, to claim annually from the English East India Company 300 chests of opium at cost price, and agreed to pay henceforth the average rates realized at the Calcutta sales. They also bound themselves to make over to the English Company, at a fixed price, all surplus salt manufactured within their restored territories over and above the requirements of the local population. In compensation for these concessions, the English agreed to pay 4 lakhs of sicca rupees (one million francs, or, say, £40,000) annually to the French Government. As it was found that the right to make salt at all in the French Settlements led to the smuggling of that article into the surrounding British Districts, the French Government was induced, on May 13, 1818, to surrender it altogether for an annual payment of 4,000 pagodas (33,600 francs, or, say, £1,344). This second treaty, although at first made for only fifteen years, has been indefinitely prolonged; the British Government supplying the French authorities with salt at cost price, and allowing the latter to sell it to their own subjects at their own rates. Difficulties still continue regarding the supply of arrack, or country liquor, that made in Pondicherry being cheaper than the British product after it has paid the heavy excise duty, and special arrangements are required along the Pondicherry border. The cost of manufacture of toddy (palm-juice liquor) is about equal in the two territories, and no complications ensue. The tariff on imports into British India also necessitates the maintenance of a special land customs establishment all along the intricate frontier of the Pondicherry Settlement.

The military command and administration-in-chief of the French possessions in India are vested in a Governor, whose residence is at Pondicherry. He is assisted by a minister of the interior, secretaries in the different administrative departments, and a principal judicial officer. In 1879 local councils and a council-general were established, the members being chosen by a sort of universal suffrage within the French territories. Ten municipalities or communal boards were erected under a decree issued in 1880: namely, at Pondicherry, Oulgaret, Villenour, Bahūr, Kārikāl, La Grande Aldée, Nedungādu, Chandernagore, Mahé, and Yanam. On municipal boards natives are entitled to a proportion of the seats. Civil and criminal courts, courts of first instance, and a court of appeal compose the judicial machinery. The army and establishments connected with the Governor and his staff at Pondi-

cherry, and those of the local governors or *chefs de service* at Chandernagore, Yanam, Mahé, and Kārikāl, together with other head quarters charges, necessarily engross a large proportion of the revenue. All the state and dignity of an independent Government, with four dependent ones, have to be maintained. This is effected by rigid economy, and the prestige of the French Government is worthily maintained in the East. Pondicherry is also the scene of considerable religious pomp and missionary activity. It forms the seat of a Préfecture Apostolique, founded in 1828, consisting of a Préfet Apostolique and a body of priests for all French India; and of the Missions Étrangères, the successors of the Mission du Carnatic founded by the Jesuits in 1776. But the chief field of this mission lies outside the French Settlements; a large proportion of its Christians are British subjects and many of the churches are in British territory. The British rupee is the only legal tender within French territories. The system of education is progressive to a satisfactory extent. A line of railway running via Villenour, from Pondicherry to Villupuram on the South Indian Railway, maintains communication with Madras and the rest of British India, and Kārikāl is linked to the same railway by the branch from Peralam. The telegraph is working throughout the Settlements. A Chamber of Commerce consisting of fourteen members, nine of them Europeans or persons of European descent, was reorganized in 1879. The capital, Pondicherry, is a very handsome town, and presents, especially from the sea, a striking appearance of French civilization. It forms the head-quarters of the French national line of steam communication with the East, the Messageries Maritimes. The total sea-borne exports from French India in 1904 were returned at £1,209,000, of which £409,000 was with France, £113,000 with French colonies, and the remainder with other countries, chiefly British. The imports by sea in the same year were valued at £232,000, of which £202,000 came from foreign countries and the remainder from France and her colonies. The number of ships entering ports in the French Settlements in the same year was 413, with an aggregate burden of 683,727 tons.

French Rock.—A small rock in Trichinopoly District and *tāluk*, Madras, situated in 10° 49′ N. and 78° 43′ E., about a mile to the east of TRICHINOPOLY CITY, and to the north of the Tanjore road at the point where it is crossed by the Uyyakondān channel. It has two prominences with a saddle between. In the siege of Trichinopoly by Chanda Sāhib and the French in 1751, the latter occupied the rock and mounted on it two 18-pounders; hence its name. The guns were, however, at too great a distance to make any impression on the walls of the fort. Some time after (April, 1752) the French abandoned for a time all their posts to the south of the Cauvery, except Tiruvarambūr (Erumbīswaram). In 1753 Stringer Lawrence pitched his camp a little

to the south-east of the French Rock, in order to facilitate a junction with the reinforcements expected from Madras. The remains of the redoubt which protected the left of his camp are still to be seen, about 300 yards north of the railway and $1\frac{1}{2}$ miles north-east of the Golden (or Sugar-loaf) Rock. After the arrival of these reinforcements the battle of the Sugar-loaf Rock was fought (September 21, 1753), in which the French and Mysore forces were utterly defeated. In the Central jail at Trichinopoly are two old battered guns, one still spiked, which are supposed to have been taken in this fight.

Fuleli Canal.—A canal in Sind, Bombay, and one of the largest in India. It used to be fed by a winding channel taking off from the Indus about 9 miles north of Hyderābād. In 1856 a new mouth at Jamshora, 4 miles from Hyderābād, was excavated by Government at a cost of Rs. 1,05,000, and has proved to be the most profitable work in Sind. For about 20 miles south of Hyderābād the Fuleli was really a river channel, which flowed back into the Indus; but it was cut off from the river, and extended southwards by Miān Nūr Muhammad Kalhora and the Mīrs, to irrigate their lands, and has now become a very large canal. In March, 1900, it was made perennial by the excavation of an escape, which connects it with an old river channel, called the Purān, and so carries the excess water to the sea. The result is that the flooding of immense areas at the tail has been stopped, and about 1,000 boats and 5 steam launches ply on it almost continuously throughout the year. The length of the main canal is 98 miles and of its branches 914 miles. The maximum discharge, which has been limited on account of breaches in its banks and consequent flooding of large tracts, is 10,000 cubic feet per second: but when another escape is made, it will be possible to admit as much as 12,000 cubic feet.

In 1903–4 the gross revenue was $7\frac{1}{3}$ lakhs, representing a return of 21·8 per cent. on the capital outlay. If the *jāgīr* land on the canal, which pays only about one-fifth of the ordinary assessment, had paid the full amount, the return on the capital outlay would have been 31·7 per cent. The greatest area cultivated in one year on this canal was 650 square miles in 1900–1; but when more scientific means of distribution are provided, this area will be increased.

Fulta.—Village in the Twenty-four Parganas District, Bengal. *See* FALTĀ.

Fyzābād Division (*Faizābād*).—Eastern Division of Oudh, United Provinces, lying between 25° 34′ and 28° 24′ N. and 80° 56′ and 83° 8′ E., with an area of 12,113 square miles. The Division extends from the low hills on the Nepāl frontier to the Ganges, and is bounded on the east by the Gorakhpur and Benares Divisions and on the west by the Lucknow Division. The head-quarters of the Commissioner are

at FYZABAD CITY. Population is increasing steadily. The numbers at the last four enumerations were as follows: (1869) 5,905,367, (1881) 6,062,140, (1891) 6,794,272, and (1901) 6,855,991. The density of population, 566 persons per square mile, is considerably above the Provincial average, and the Districts lying between the Gogra and the Ganges are congested. Although third in size in the United Provinces, this Division has the largest population. In 1901 Hindus formed 86 per cent. of the total and Musalmāns nearly 14 per cent. There were also 2,437 Christians (including 951 natives). The Division contains six Districts, as shown below:—

District.	Area in square miles.	Population, 1901.	Land revenue and cesses, 1903-4, in thousands of rupees.
Fyzābād . .	1,740	1,225,374	16,28
Gondā . . .	2,813	1,403,195	20,47
Bahraich . .	2,647	1,051,347	14,34
Sultānpur . .	1,713	1,083,904	17,02
Partābgarh . .	1,442	912,848	15,05
Bāra Bankī . .	1,758	1,179,313	22,82
Total	12,113	6,855,991	1,05,98

Bahraich and Gondā lie north and east of the Kauriāla or Gogra and border on Nepāl. Fyzābād and Bāra Bankī are situated along the south bank of the Gogra, and Partābgarh along the north bank of the Ganges. Sultānpur lies between Fyzābād and Partābgarh. The habitations of the people are scattered in small hamlets; and while the Division contains 13,979 villages, it has only 35 towns. FYZĀBĀD with AJODHYĀ (population, 75,085 with cantonment) and BAHRAICH (27,304) are the only towns with more than 20,000 inhabiants. The chief places of commercial importance are Fyzābād, Bahraich, BELĀ, GONDĀ, NAWĀBGANJ (Bāra Bankī), NAWĀBGANJ (Gondā), TĀNDĀ, AKBARPUR, JALĀLPUR, SULTĀNPUR, and BĀRA BANKĪ. Ajodhyā is to the Hindu one of the most sacred places in India, as it was the capital of Kosala, at which Rāma was born, while the Jains visit it as the birthplace of several of their Tirthankaras or hierarchs. The ruins of SET MAHET are interesting, and the site is identified by some Orientalists with Srāvastī.

Fyzābād District (*Faizābād*).—District in the Fyzābād Division of the United Provinces, lying between 26° 9′ and 26° 50′ N. and 81° 41′ and 83° 8′ E., south of the Gogra river, with an area of 1,740 square miles. In shape the District is an irregular parallelogram, running from west to east with a slight tendency southwards. It is bounded on the north-east by the Gogra, which divides it from Gonda, Basti, and Gorakhpur; on the south-east and south by Azamgarh and

Sultānpur; and on the west by Bāra Bankī. The chief river is the Gogra, which flows along the whole northern frontier for a distance of 95 miles, being navigable throughout by large cargo-boats and river steamers. The high banks of the river are about 25 feet above cold-season water-level. While this is the largest river, it receives very little of the drainage of the District. For a short distance at the south-west angle the Gumtī forms the boundary. Two small streams, the Mārhā and Biswī, unite about the centre of the District to form the Tons (Eastern). The Majhoī, Tirwā, Pikiā, Tonrī, and Chhotī Sarjū are of minor importance. In addition to many isolated *jhīls* or swamps, there are collections of these at two or three places; but Fyzābād contains no lakes of any size.

Physical aspects.

The District exposes nothing but alluvium, in which *kankar* or calcareous limestone occurs both in block form and in nodules.

The flora presents no peculiarity. The whole area is well wooded, but there is no forest, though patches of *dhāk* jungle (*Butea frondosa*) occur in many places. Fine mango groves and clumps of bamboos adorn the landscape.

There are few wild animals. *Nīlgai* are found along the Gogra and in small patches of *dhāk* jungle. Antelope are very scarce. A large herd of domestic cattle has run wild in the lowlands, but the numbers are being reduced by capture. Game-birds, including water-fowl and snipe, are common, and the rivers and tanks contain an abundance of fish.

The climate is good, though cholera is endemic, and the Ajodhyā fairs are frequently sources of epidemics. Extreme heat is unusual, and the mean monthly temperature ranges from about 65° to 88°.

The annual rainfall averages 41 inches, and it is evenly distributed, though the north receives the heaviest fall. Considerable fluctuations take place from year to year.

The early history of the District is purely legendary. It is regarded by the Hindus with special veneration as containing Ajodhyā, the capital of Kosala, which was the birthplace of Rāma. Ajodhyā is also a place of pilgrimage for the Jains, owing to the birth of several of their saints there. From numismatic evidence it is certain that shortly before the Christian era a line of kings ruled here for some considerable time; but details of the history during the rise and decline of Buddhism, the short but brilliant rule of the Gupta kings, and the rise of the later kingdom of Kanauj, are alike wanting. The first approach to more accurate records is reached in the eleventh century, when the half-mythical raid of Saiyid Sālār took place. A portion of the high road is still pointed out along which the country people will not pass after dark, for they say that at night the road is thronged with headless horsemen of Saiyid Sālār's army. After

History.

the fall of Kanauj, nearly 200 years later, the Musalmāns overran Oudh, and Ajodhyā became the capital of a province. In the fifteenth century the kings of Jaunpur held the District, and after their fall it lapsed again to Delhi. The Muhammadan historians relate little of interest, though the governorship of Oudh was of some importance. Bābar entered the District, and early in Akbar's reign the governor rebelled. In the eighteenth century the importance of Ajodhyā increased, as it became the capital of the new line of Nawābs who made Oudh an independent State. Saādat Khān and Safdar Jang spent little time at their head-quarters; but after his defeat at Buxar Shujā-ud-daula made the new town of Fyzābād his permanent residence. Shortly after his death in 1775 the capital was moved to Lucknow, and Fyzābād declined.

The only important event in the history of the District since the annexation of Oudh in 1859 was the Mutiny of 1857. In the early part of that year the troops in cantonments consisted of the 22nd Bengal Native Infantry, the 6th Irregular Oudh Cavalry, a company of the 7th Bengal Artillery, and a horse battery of light field-guns. The troops revolted on the night of June 8, but the outbreak was not accompanied by the scenes of massacre which occurred at other military stations. The European officers with their wives and families were allowed to leave unmolested; and although some of them were attacked in their flight by mutineers of other regiments, nearly all succeeded after more or less hardship in reaching places of safety. A Muhammadan landholder, Mīr Muhammad Husain Khān, sheltered one party in his small fort for several days until the road was open and they could reach Gorakhpur in safety.

Ancient mounds exist at many places, but have not been explored. Local tradition ascribes them to the Bhars, but some at least are probably Buddhist. A copperplate grant of Jai Chand and a fragmentary inscription of the same king have been found. Besides the coins of the local rulers referred to above, coins of the Guptas are not uncommon, and an important hoard of silver coins of the sixth or seventh century A.D. was unearthed in 1904. The temples of Ajodhyā are chiefly modern. The only Muhammadan buildings of more than local interest are at Ajodhyā, AKBARPUR, and Fyzābād.

Population.

The District contains 9 towns and 2,661 villages. Its population is increasing. The numbers at the last four enumerations were as follows: (1869) 1,024,652, (1881) 1,081,419, (1891) 1,216,959, and (1901) 1,225,374. There are four *tahsīls*—FYZĀBĀD, AKBARPUR, BĪKĀPUR, and TĀNDĀ—each named from its head-quarters. The principal towns are the municipalities of FYZABAD with AJODHYA, and TĀNDĀ. The table on the next page gives the chief statistics of population in 1901.

Tahsil.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Fyzābād .	371	3	449	334,327	901	+ 5·6	19,898
Akbarpur .	393	1	609	243,929	622	+ 0·9	5,097
Bīkāpur .	467	...	623	296,776	635	+ 2·7	7,731
Tāndā . .	509	5	980	350,342	688	− 5·3	7,213
District total	1,740	9	2,661	1,225,374	704	+ 0·7	39,939

The figures include 20,407 persons belonging to other Districts, who were enumerated at a fair in Ajodhyā in 1901. In 1904 *pargana* Surhurpur, containing two towns and an area of 144 square miles with a population of 100,930, was transferred from Tāndā to Akbarpur. Nearly 89 per cent. of the total population are Hindus and 11 per cent. Musalmāns. During the last decade the normal increase of population was arrested by the effects of both excessive rain and drought. This District supplies a considerable number of emigrants to the West Indian colonies and also to Assam. About 70 per cent. of the people speak the Awadhī dialect of Eastern Hindī, and 26 per cent. speak Bihārī.

Chamārs (tanners and cultivators), 172,000, are the most numerous Hindu caste, forming 16 per cent. of the total. The other castes of importance are Brāhmans, 165,000; Ahīrs (graziers and cultivators), 139,000; Kurmīs (agriculturists), 74,000; Rājputs or Chhattrīs, 68,000; Kewats (cultivators), 41,000; Pāsīs (toddy-drawers and cultivators), 39,000; Muraos (market-gardeners), 36,000; Baniās, 35,000; Korīs (weavers), 33,000; and Bhars (labourers), 25,000. The Kurmīs, Kewats, Pāsīs, Muraos, and Bhars are chiefly found in the centre and east of the Provinces. Musalmāns include Julāhās (weavers), 29,000; Shaikhs, 20,000; Pathāns, 14,000; and Behnās (cotton-carders), 12,000. Agriculture supports 64 per cent. of the total population, and general labour 4 per cent. Rājputs or Chhattrīs hold more than half of the land.

There were 341 native Christians in 1901, of whom 141 belonged to the Anglican communion and 113 were Methodists. The Church Missionary Society has laboured in the District since 1862, and the Wesleyan Mission was opened in 1875.

Agriculture.

The District is chiefly situated on the upland above the Gogra: but along the bed of that river lie stretches of alluvial soil, in places producing magnificent spring crops, and in others being merely sand in which tamarisk and grasses are the only vegetation. The natural soils on the upland are sand, loam, and

clay. Sand is found on the high banks of the Gogra and the other streams, and passes into fertile loam, which stiffens into clay in the swamps and depressions. The heavy clay soil, which covers a large area, produces excellent rice. Owing to the density of population, agriculture has become intensive.

The ordinary tenures of Oudh are found in Fyzābād. *Talukdārs* own 72 per cent. of the total area. Subordinate tenures are found to a larger extent, both in *talukdāri* estates and in other *mahāls*, than in any other District of Oudh. Thus sub-settlement holders or *pukhtadārs* have rights in about a quarter of the District, and owners of specific plots have rights in an additional 11 per cent. A few of the sub-settled *mahāls* are further sub-settled with a second grade of *pukhtadārs*, and some of these with still a third grade. There are also complex *mahāls*, or revenue units, which extend to a number of villages. The main agricultural statistics for 1903–4 are given below, in square miles:—

Tahsil.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Fyzābād	371	225	99	49
Akbarpur	393	242	137	60
Bīkāpur	467	287	143	84
Tāndā	509	330	189	61
Total	1,740	1,084	568	254

Rice is the principal food-crop, covering 421 square miles or 39 per cent. of the total. Gram (261), wheat (206), peas and *masūr* (170), barley (93), *arhar* (64), pulses (52), and *kodon* (47) are also important. The chief non-food crops are sugar-cane (67 square miles), poppy (22), oilseeds (13), and indigo (9).

The cultivated area is now about 12 per cent. greater than it was forty years ago, this increase being due mainly to the clearance of the jungle and the breaking up of inferior land which formerly could not be cultivated with profit. The increase has been attended by few changes in methods; but there is a tendency to extend the area under the more valuable crops, such as wheat, sugar-cane, and poppy, and the area double cropped has increased. The cultivation of indigo is not of much importance, but it has maintained its position better than in other Districts. There is a small but constant demand for advances under the Land Improvement and Agriculturists' Loans Acts. During the ten years ending 1900 the total loans amounted to 1·2 lakhs, of which Rs. 70,000 was lent in the famine year, 1897. In the next four years about Rs. 3,000 was advanced annually.

The cattle bred locally are of an inferior type, and better animals are largely imported. Attempts to improve the breed have failed owing

to the unsuitability of the bulls. The ponies are also of poor quality. Sheep and goats are kept, but in smaller numbers than in the adjoining Districts.

Fyzābād is one of the few Districts in the United Provinces in which the area irrigated from tanks and *jhīls* in normal years exceeds that supplied from wells. In 1903–4, out of 568 square miles irrigated, tanks and *jhīls* supplied 289 square miles and wells 264. The proportions vary according to the season, but tank-irrigation is always important. Unfortunately the tanks and *jhīls* are shallow, and fail in dry seasons when they are most needed, the result being a failure of the rice crop. The number of wells is, however, increasing, and temporary wells can be made in most parts when required. Water is raised by a wheel and pulley from wells, and from *jhīls* in a swing-basket. It is usually sprinkled over the land with a wooden shovel.

The chief mineral product is *kankar* or calcareous limestone, which is used for making lime and for metalling roads. Saline efflorescences are collected in several places, and used for the manufacture of coarse glass for bangles.

Trade and communications.

The chief manufacturing industry is cotton-weaving. Coarse cloth is produced in many places; but TĀNDĀ, AKBARPUR, and JALĀLPUR are noted for muslins and other fine materials, and during the eighteenth and the early part of the nineteenth century several Europeans had factories at Tāndā. Cotton-dyeing and printing are carried on in a few places, and sugar-refining is also of some importance. Many houses are adorned with finely carved doors, but wood-carving is now a declining industry.

The chief exports are grain (especially rice), sugar, cloth, oilseeds, opium, hides, and tobacco; while the imports include piece-goods, metals, and salt. The recent extension of railways north of the Gogra has affected the trade of Fyzābād, which was formerly a commercial centre for Eastern Oudh. There is still a considerable traffic in sailing boats and in steamers along the Gogra; but the bulk of the trade is carried by rail, and places situated on or near the railway are rising in importance, especially Gosainganj and AKBARPUR.

The loop-line of the Oudh and Rohilkhand Railway from Benares to Lucknow passes through the District. It enters at the south-east and passes north-west to Fyzābād city, from which place it turns west. A branch of the same railway runs south, from Fyzābād to Allahābād. A short length connects Fyzābād with the bank of the Gogra at Ajodhyā, opposite which, in Gondā District, is the terminus of a branch of the Bengal and North-Western Railway. There are 760 miles of road, but only 93 miles are metalled. The latter are in charge of the Public Works department, but the cost of all but 48 miles is charged

to Local funds. The chief roads are those from Fyzābād city to Lucknow, Rāe Barelī, Jaunpur, Azamgarh, and Allahābād. Avenues of trees are maintained on 193 miles, the fine tamarind avenue on the Lucknow road, which was originally planted in the time of the Nawābs of Oudh, being specially noticeable.

Famine.

Fyzābād suffered severely from famine in 1783–4, and in 1786 further damage was caused by excessive rain. In 1837 there was distress owing to high prices caused by scarcity elsewhere, and in 1860, 1866, and 1874 the lower classes suffered from a similar cause. The scarcity of 1877–8 was more serious, and relief works were opened in 1878. In 1896 the monsoon ceased prematurely, and towards the close of the year relief works and poorhouses were opened. Distress was, however, less felt than elsewhere and ceased with the rains of 1897. Severe floods have done much damage from time to time, especially in 1871, 1894, and 1903.

Administration.

The Deputy-Commissioner is usually assisted by one or two members of the Indian Civil Service, and by four Deputy-Collectors recruited in India. A *tahsīldār* is stationed at the head-quarters of each *tahsīl*. Two officers of the Opium department reside in the District.

The ordinary civil courts are those of two District Munsifs and a Subordinate Judge. A system of village Munsifs has recently been introduced. The District and Sessions Judge of Fyzābād is also District Judge of Bāra Bankī and Sessions Judge of Sultānpur. The District is fairly free from serious crime, even in the cities of Fyzābād and Ajodhyā. The kidnapping of girls for marriage to Rājputs and Brāhmans is, however, not uncommon.

The District of Fyzābād, as formed at annexation in 1856, included also the northern parts of the present District of Sultānpur as far south as the Gumtī. This area was removed in 1869. A summary settlement was made in 1856, followed after the restoration of order by a second summary settlement, which fixed the demand at 8·7 lakhs. The first regular settlement, preceded by a survey, was commenced in 1862. Assessment was mainly based on conjectural data, such as the estimated yield of crops and rates suggested by committees of *talukdars* and *zamīndārs*. Rent-rolls were hardly examined at all, and a very large area of waste land was assessed. The revenue proposed amounted to 12·4 lakhs, and the enhancement was not relieved by being made progressive where it was large. The working of the assessment was affected by bad seasons in 1870 and 1871, and by other causes. Revisions were, therefore, undertaken which were not completed until 1879, by which time many of the defects of the settlement had been remedied. The revised demand was 11·6 lakhs, and was only reached by degrees where exceptionally large enhancements were made. Owing

to the enormous number of claims to rights in land, the settlement courts had an unusual amount of work. The latest revision, made between 1893 and 1899, was carried out without a complete resurvey and revision of records. The assessment was made on the basis of recorded rents, corrected where necessary. The revenue fixed was 14·6 lakhs, representing 44 per cent. of the estimated net 'assets.' The incidence is Rs. 1·2 per acre, varying from Rs. 1·1 to Rs. 1·3 in different *parganas*. Enhancements were largely made progressive, and the full demand will not be in force till 1910.

Collections on account of land revenue and total revenue have been, in thousands of rupees:—

	1880–1.	1890–1.	1900–1.	1903–4
Land revenue . .	11,13	11,27	13,53	14,03
Total revenue . .	13,77	17,87	21,42	23,79

There are two municipalities, FYZĀBĀD with AJODHYĀ and TĀNDĀ, and eight towns are administered under Act XX of 1856. Beyond the limits of these, local affairs are managed by the District board, which in 1903–4 had an income and expenditure of 1·3 lakhs. About half of the income is derived from local rates, and the expenditure includes Rs. 58,000 on roads and buildings.

The District Superintendent of police has under him a force of 4 inspectors, 112 subordinate officers, and 427 constables, distributed in 16 police stations, besides 208 municipal and town police, and 2,229 rural and road police. The District jail contained a daily average of 396 prisoners in 1903.

A high proportion of the population of Fyzābād is literate, and 4·1 per cent. (6·3 males and 0·2 females) could read and write in 1901. The number of public institutions increased from 97 with 3,941 pupils in 1880–1 to 150 with 9,351 pupils in 1900–1. In 1903–4 there were 198 public schools with 11,314 pupils, of whom 282 were girls, besides 75 private schools with 1,273 pupils. Only 1,648 of the pupils had advanced beyond the primary stage. Government manages 3 of the schools and the District and municipal boards manage 99. The total expenditure on education was Rs. 55,000, of which Rs. 38,000 was provided from Local funds and Rs. 11,000 by fees.

There are 11 hospitals and dispensaries, with accommodation for 160 in-patients. In 1903 the number of cases treated was 75,000, including 1,982 in-patients, and 6,673 operations were performed. The expenditure amounted to Rs. 16,000, chiefly met from Local funds.

About 33,000 persons were vaccinated in 1903–4, representing the low proportion of 27 per 1,000 of population. Vaccination is compulsory only in the municipalities and in the cantonment of Fyzābād.

[H. F. House, *Settlement Report* (1900); H. R. Nevill, *District Gazetteer* (1905).]

Fyzābād Tahsīl.—North-western *tahsīl* of Fyzābād District, United Provinces, comprising the *parganas* of Mangalsī, Havelī Awadh, and Amsin, and lying between 26° 32′ and 26° 50′ N. and 81° 48′ and 82° 29′ E., along the right bank of the Gogra, with an area of 371 square miles. Population increased from 316,586 in 1891 to 334,327 in 1901; but the apparent increase was due to a large concourse of pilgrims at a fair. Excluding these, the population in 1901 was 313,920. There are 449 villages and four towns, including FYZĀBĀD CITY (population, 75,085), the District and *tahsīl* head-quarters. The demand for land revenue in 1903–4 was Rs. 2,93,000, and for cesses Rs. 49,000. The high density of population, 846 persons per square mile, is due to the inclusion of the city. The *tahsīl* is a long and narrow strip of land lying above the Gogra, with rich alluvial deposits in the bed of the river. The uplands are generally fertile near the high bank, but towards the south heavy clay soil is found, with patches of *dhāk* jungle (*Butea frondosa*) and many swamps. In 1903–4 the area under cultivation was 225 square miles, of which 99 were irrigated, tanks or *jhīls* supplying rather more than wells in ordinary years.

Fyzābād City (*Faizābād*).—Administrative head-quarters, with cantonment, of Fyzābād District, United Provinces, situated in 26° 47′ N. and 82° 10′ E., near the Gogra, on roads from Lucknow and Allahābād, and at the junction of three branches of the Oudh and Rohilkhand Railway; distance by rail from Calcutta 599 miles, and from Bombay 965. Population, including cantonment and Ajodhyā: (1881) 71,405, (1891), 78,921, and (1901) 75,085. The population in 1901 included 55,406 Hindus and 17,674 Musalmāns. Fyzābād alone contained 53,501 inhabitants, of whom 6,097 resided in the cantonment.

When Saādat Khān was appointed governor of Oudh he built a hunting lodge 4 miles west of Ajodhyā, then the head-quarters of the province. Gardens were laid out and shops sprang up in the neighbourhood, and during the time of his successor Safdar Jang the name Faizābād was first applied. Shujā-ud-daula, the third Nawāb, lived chiefly at Lucknow during the early part of his reign; but after his defeat at Buxar in 1764 he made Fyzābād his residence, and during the remainder of his life added largely to its defences and also laid out a large town. Shujā-ud-daula died early in 1775, and before the close of the year Asaf-ud-daula moved permanently to Lucknow. The importance of Fyzābād declined, but it still remained the home of Asaf-ud-daula's grandmother and mother, the Nawāb Begam and Bahū Begam, whose treatment was the subject of charges against Warren Hastings. After the death of the Bahū Begam in 1816 Fyzābād decayed still farther, but its position has improved since annexation.

The cantonment lies north-west of the city, extending to the bank of the Gogra, along which stretches a beautiful park containing some temples at a place known as the Guptār Ghāt. South of the cantonment is the civil station, which contains the usual offices of the headquarters of a Division, and a fine building used as a museum and public library. There are also male and female dispensaries, and the chief stations of the Church Missionary Society, the Wesleyan Mission, and the Zanāna Bible and Medical Mission. The city is a well-kept place, with fairly wide roads. Most of the large buildings date from the time of Shujā-ud-daula, and are of brick covered with plaster. Two fine gateways give access to a beautiful garden known as the Gulāb-bārī. In the centre of this is a lofty and handsome building which was constructed by Shujā-ud-daula and in which he lies buried. The tomb of the Bahū Begam is a fine domed building lying south of the town. Three lakhs of rupees from the Begam's property were set aside for the construction of the tomb, and provision was made for its maintenance. The tomb was not completed till after the Mutiny, and its maintenance and the disbursement of the proceeds of the endowment are now supervised by the Deputy-Commissioner. The earthwork of the fort, called Chhota ('the lesser') Calcutta, constructed by Shujā-ud-daula, still remains, and portions of the various palaces built by the Nawābs and their nobles have survived.

Fyzābād is administered jointly with Ajodhyā as a municipality, the introduction of local self-government dating from 1865. During the ten years ending 1901 the income and expenditure averaged Rs. 75,000 and Rs. 74,000 respectively. In 1903–4 the income was Rs. 88,000, octroi (Rs. 65,000) being the chief item; and the expenditure was Rs. 83,000, including conservancy (Rs. 21,000), public safety (Rs. 11,000), public works (Rs. 16,000), and administration and collection (Rs. 8,000). A large scheme for drainage works has recently been sanctioned. The cantonment is usually garrisoned by British infantry and artillery and Native cavalry and infantry. During the ten years ending 1901 the income and expenditure of the cantonment fund averaged about Rs. 19,000. In 1903–4 the income was Rs. 22,000, and the expenditure Rs. 30,000.

The city is an important centre of the sugar-refining industry, and has a considerable trade in agricultural produce and imported goods, partly carried by river, but chiefly by rail. There are 16 schools for boys, attended by 1,200 pupils, and 4 schools for girls with 162.

Fyzābād.—Town in Badakhshān, Afghānistān. *See* FAIZABAD.

Gābat.—Petty State in MAHĪ KĀNTHA, Bombay.

Gadag Tāluka.—Eastern *tāluka* of Dhārwār District, Bombay, lying between 15° 2′ and 15° 38′ N. and 75° 26′ and 75° 57′ E., with an area of 699 square miles. It includes the petty subdivision (*petha*)

of Mundargi. There are two towns, GADAG (population, 30,652), the head-quarters, and MULGUND (7,523): and 98 villages, including KURTKOTI (5,247). The population in 1901 was 137,573, compared with 124,713 in 1891. The density, 197 persons per square mile, is much below the District average. The demand for land revenue in 1903–4 was 2·73 lakhs, and for cesses Rs. 20,000. In the south the village sites are small and lie close together, but they become more scattered in other parts. The chief hills are the Kappat range. They are of strongly iron-charged clay slate, which in the west shows traces of gold. The climate is temperate and healthy. The Dambal tanks, made at a cost of Rs. 64,000, irrigate 40 square miles in the District. The annual rainfall averages about 25 inches.

Gadag Town.—Head-quarters of the *tāluka* of the same name in Dhārwār District, Bombay, situated in 15° 25′ N. and 75° 38′ E., on the Southern Mahratta Railway. Population (1901), 30,652. Hindus number 23,297, Muhammadans 6,213, and Christians 933. Gadag with Bettigeri was constituted a municipality in 1859. During the decade ending 1901 the income averaged Rs. 33,000. In 1903–4 the income was Rs. 47,000. Gadag is a flourishing town with a considerable trade in raw cotton and cotton and silk fabrics, and contains a cotton spinning-mill with 14,000 spindles and 9 cotton-ginning factories. The mill, owned by a private company, annually produces about 1,000,000 pounds of yarn valued at 5 lakhs, and employs daily an average of 444 hands. Gadag has the remains of some of the most richly carved temples in the District. The chief of these are dedicated to Trikuteshwar, Saraswatī, Nārāyan, Someshwar, and Rāmeshwar. Inscriptions in some of these describe Gadag under the name of Kratuka; and it appears from them that the town was at different times under the Western Chālukya (973–1170), Kalāchuri (1161–83), Hoysala Ballāl (1047–1310), Deogiri Yādava (1170–1310), and Vijayanagar kings (1336–1565). About 1673 Gadag was included with Nusratābād or Dhārwār as one of the chief districts of the Bankāpur *sarkār*. In 1818 General Munro invested Gadag. The town contains a Subordinate Judge's court, two dispensaries (of which one belongs to the railway company), a school for European and Eurasian girls, a municipal middle school, and 8 other schools.

Gādarwāra Tahsīl.—Western *tahsīl* of Narsinghpur District, Central Provinces, lying between 22° 38′ and 23° 15′ N. and 78° 27′ and 79° 4′ E., with an area of 870 square miles. The population in 1901 was 165,213, compared with 194,225 in 1891. The density is 190 persons per square mile. The *tahsīl* contains one town, GĀDARWĀRA (population, 8,198), the head quarters; and 430 inhabited villages. Excluding 63 square miles of Government forest, 69 per cent. of the available area is occupied for cultivation. The cultivated area in 1903–4 was 515

square miles. The demand for land revenue in the same year was Rs. 3,03,000, and for cesses Rs. 27,000. The *tahsīl* occupies a tract in the Narbadā valley, consisting of a fertile plain of black soil, cut up into ravines near the river and flanked by a narrow belt of the Sātpurā hill country.

Gādarwāra Town.—Head-quarters of the *tahsīl* of the same name in Narsinghpur District, Central Provinces, situated in 22° 55′ N. and 78° 48′ E., on the left bank of the Shakkar and on the Great Indian Peninsula Railway to Jubbulpore, 536 miles from Bombay. The town was the capital of the District in the time of the Marāthās. Population (1901), 8,198. Gādarwāra was created a municipality in 1867. The municipal receipts during the decade ending 1901 averaged Rs. 19,000. In 1903–4 the income was Rs. 33,000, derived principally from octroi. Gādarwāra is the largest exporting station in the District for the local products of *ghī* and grain. Various handicrafts, such as weaving, dyeing, shoe-making, and pottery, are also carried on in the town, but are in a depressed condition. A cotton-ginning factory has recently been erected with a capital of Rs. 32,000, which disposed of cotton to the value of a lakh of rupees in 1902–3. Gādarwāra contains an English middle school and a dispensary.

Gad Boriad.—Petty State in REWĀ KĀNTHA, Bombay.

Gadhada.—Town in the State of Bhaunagar, Kāthiāwār, Bombay, 42 miles from Bhaunagar town. Population (1901), 5,375. This is one of the principal centres of the sect of Swāmi Nārāyan, founded in 1804 by a Hindu reformer, Sahajānand, from the United Provinces (*see* CHHAPIA), who died here in 1830 after converting many of the Kāthīs, Kolīs, and Bhīls. Necklaces of sandal-wood beads worn by followers of the sect are made in considerable quantities. The sect possesses a fine temple at Gadhada. The town is the head-quarters of the revenue officer, and the criminal court of the Gadhada district is held here.

Gadhāli.—Petty State in KĀTHIĀWĀR, Bombay.

Gadhia.—Petty State in KĀTHIĀWĀR, Bombay.

Gad-Hinglaj.—Head-quarters of the *tāluka* of the same name in Kolhāpur State, Bombay, situated in 16° 12′ N. and 74° 25′ E., on the left bank of the Hiranyakeshi river, close to the Sankeshwar-Parpoli pass road, 45 miles south-east of Kolhāpur city. Population (1901), 6,373. About three hundred years ago, want of water is said to have forced the people to move the town to the river bank from an older site about 4,600 feet to the north-west. Every Sunday a market is held, when large quantities of rice and other grain are brought for sale. The chief temple in honour of Kāleshwar in the centre of the town is built of rubble and mortar. About three miles north of Gad-Hinglaj is a temple of Bahiri, where every March a fair is held, attended by about 2,000 people.

Gadhka.—Petty State in KĀTHIĀWĀR, Bombay.

Gadhoola.—Petty State in KĀTHIĀWĀR, Bombay.

Gadwāl Samasthān (or Keshavnagar).—A *samasthān* or tributary estate in the east of Raichūr District, Hyderābād State. It contains one town, GADWĀL (population, 10,195), and 214 villages, and has an area of 864 square miles, with a population (1901) of 968,491. The total revenue is 3 lakhs, and the tribute paid to the Nizām is Rs. 86,840. Gadwāl existed long before the foundation of the Hyderābād State. It formerly issued its own coin, which is still current in Raichūr District. Nothing is known regarding the early history of the *samasthān*. The fort at Gadwāl town, the residence of the present Rājā, was commenced about 1703, and completed in 1710 by Rājā Somtādari. The present Rājā is a minor, and the estate has been under the control of the Court of Wards since 1902. The Kistna and Tungabhadra water the northern and southern portions of the *samasthān*, and the land bordering on these rivers, being alluvial, is very fertile. The remaining portion consists of *masab* land and uncultivable waste. Most of the cultivation is of the 'dry-crop' description. There being very few tanks, little 'wet' cultivation is possible, and well-irrigation is carried on only to a limited extent. Silk *sārīs*, scarfs, turbans, and *dhotīs* with gold borders of a superior kind are manufactured at Gadwāl town. Ten factories are at work, and about 2 lakhs' worth of these articles is exported annually to Hyderābād, Secunderābād, Raichūr, and other places in the neighbourhood.

Gadwāl Town. Head-quarters of the *samasthān* of the same name in Raichūr District, Hyderābād State, situated in 16° 14′ N. and 77° 13′ E., 35 miles east of Raichūr town. Population (1901), 10,195.

Gagar.—A range of mountains in Naini Tāl and Almorā Districts, United Provinces, forming a portion of the Outer Himālayan range, lying between 29° 14′ and 29° 30′ N. and 79° 7′ and 79° 37′ E. This range is also known as Gārgachal, from the legend that the *rishi* Gārg once dwelt on it. The chain runs along the southern border of the two Districts, parallel to the plains, from the Kosī river to the Kālī, and presents a line of higher elevation than any ranges between it and the main ridge of the Central Himālayas. The loftiest peak is Badhāntola, 8,612 feet, while the steep cliff of Chīnā, which towers above the lake and town of Nainī Tāl, reaches a height of 8,568 feet. The average elevation is from 6,000 to 8,000 feet. Forests of cypress, *tūn* (*Cedrela Toona*), fir, and other timber trees clothe the steep hillsides, except where they have been cleared for potato cultivation.

Gāgraun.—Fort and village in the Kanwās district of the State of Kotah, Rājputāna, situated in 24° 38′ N. and 76° 12′ E., at the junction of the Ahu and Kālī Sind rivers, about 2½ miles north-east of the *chhaoni* of Jhālrapātan and 45 miles south-east of Kotah city.

The fort, which is one of the strongest in Rājputāna, is said to have been built by the Dor or Doda Rājputs, who held it till about the end of the twelfth century, when they were dispossessed by the Khīchī Chauhāns. The latter, under their Rāja, Jet Singh, successfully resisted a siege by Alā-ud-dīn in 1300; but in the time of Rājā Achaldās (about 1428) the place was either taken by, or surrendered to, Hoshang Shāh of Mālwā. In 1519 one Bhīm Karan is mentioned by the Musalmān historians as being in possession, but he was attacked by Mahmūd Khiljī, and was taken prisoner and put to death. Shortly after this Mahmūd was defeated by Rānā Sangrām Singh of Mewar, and the Rājputs continued to hold Gāgraun till 1532, when Bahādur Shāh of Gujarāt took the place. About thirty years later, Akbar, on his way to Mālwā, reached the fort, and gave orders for its reduction, but the commandant hastened to surrender and presented his tribute, which greatly pleased the emperor. In the *Ain-i-Akbarī* Gāgraun is mentioned as one of the *sarkārs* or districts of the *Sūbah* or province of Mālwā; and it remained in the possession of the Mughals till the beginning of the eighteenth century, when Mahārao Bhīm Singh of Kotah obtained it by grant from the emperor. Subsequently the fort was repaired, strengthened, and added to by the regent Zālim Singh.

The fort is separated from the village by a strong high wall, and by a deep ditch cut in the solid rock and crossed by a stone bridge. The principal entrance is from the village; and, after crossing the ditch, the passage lies between two large bastions, without any gateway, ascending with high walls on either side till the great gate is reached. Inside the fort, the path skirts a large excavation in the rock, intended to hold water but often quite dry, and then zigzags into the inner work through a large gateway. The exit is to the south-east by a simple doorway in the wall, from which a descent leads to the end wall immediately over the river. Hence there is a path which, going back towards the village but outside the citadel, crosses a small precipice protected by ramparts 60 or 70 feet above the ground, and leads to the two bastions already mentioned. On the north-east face there is but one wall, the precipitous nature of the hill here rendering a second and lower wall unnecessary. The hills and valleys to the north across the Kālī Sind are thickly wooded, and the gorge by which that river finds its way out into the open plains is very fine, high precipices alternating with wooded slopes on either side. One precipice, absolutely vertical, has been plumbed and found to be 307 feet in height. It is known as the *Gidh-karai* or 'vulture's cliff,' and, it is said, was formerly used as a place of execution by the Kotah chiefs, the victims being hurled on to the rocks below. The tops of these ridges are the culminating points of the range, the slope to the open country beyond being gradual. Wild animals abound, and the parrots are celebrated for their beauty and

the comparative ease with which they can be taught to imitate the human voice. The village is believed to be very ancient, and to have been called Gargāsāshtar, after Gargāchāri, the *purohit* of Srī Krishna, who lived here; others identify it with the Gargarātpur of ancient writings from which the Hindu astronomer Garga calculated longitude. The Kotah Darbār formerly had a mint here, but it was abolished many years ago. The population has greatly decreased since the time when the place was an important military outpost, and in 1901 numbered only 601.

About 11 miles to the south-east is the village of Mau, once a large town which Tod called the first capital of the Khīchīs, and which, in General Cunningham's opinion, probably 'succeeded Chandrāvati as the capital of all the country on the lower course of the Kālī Sind shortly after the beginning of the thirteenth century.' The remains of the old town extend for a quarter of a mile from east to west, and about the same distance from north to south. To the west is a large ruined palace attributed locally to the great Prithwī Rāj Chauhān, but this assignment is most completely refuted by its cusped Muhammadan arches and by a Nāgarī inscription over the entrance which gives the date as A.D. 1711.

[*Archaeological Survey of Northern India*, vol. ii.]

Gaibānda Subdivision.—South-eastern subdivision of Rangpur District, Eastern Bengal and Assam, lying between 25° 3′ and 25° 39′ N. and 89° 12′ and 89° 42′ E., along the right bank of the Brahmaputra, with an area of 762 square miles. The subdivision is a flat unbroken plain, containing numerous *jhils* and marshes. The population in 1901 was 520,184, compared with 463,601 in 1891, and the density was 683 persons per square mile. This is the most progressive part of the District, the population having increased by 12·2 per cent. during the last decade, owing to the opening of the Brahmaputra-Sultānpur Branch Railway and to the extension of jute cultivation, which has attracted settlers from the unhealthy north-western *thānas*, and also from Pābna and Mymensingh. GAIBĀNDA (1,635), the head-quarters, is the only town, and there are 1,427 villages.

Gaibānda Town.—Head-quarters of the subdivision of the same name in Rangpur District, Eastern Bengal and Assam, situated in 25° 21′ N. and 89° 34′ E., on the Ghāghāt river. Population (1901), 1,635. The town contains the usual public offices; the sub-jail has accommodation for 18 prisoners.

Gaighāta Bakshi Khāl.—An improved natural waterway, 7½ miles in length, forming a connecting link between the DĀMODAR and RŪPNARĀYAN rivers in the Howrah District of Bengal. The channel was taken over by the Irrigation department from the District board of Howrah in 1894, and no capital account is kept. The right of col-

lecting tolls was leased out for the five years ending March, 1901, at an annual rental of Rs. 4,500, and the lease has since been renewed for another five years on the same terms. The expenditure in 1903–4 amounted to Rs. 538 and the receipts to Rs. 2,300.

Gajapatinagaram.—*Tahsīl* in Vizagapatam District, Madras, lying near the Ghāts, between 18° 11′ and 18° 30′ N. and 83° 3′ and 83° 32′ E., with an area of 333 square miles. The population in 1901 was 134,553, compared with 124,057 in 1891. The *tahsīl* contains 228 villages, the head-quarters being at the village of the same name. The demand for land revenue and cesses in 1903–4 was Rs. 14,600.

Gajendragarh.—Town in the Ron *tāluka* of Dhārwār District, Bombay, situated in 15° 44′ N. and 75° 58′ E., 51 miles south-east of Kalādgi. Population (1901), 8,853. The town contains five schools, including one for girls.

Gālna.—Fort in the Mālegaon *tāluka* of Nāsik District, Bombay, situated in 20° 46′ N. and 74° 32′ E. It is built on a circular detached hill, with fairly flat top affording an area of 20 or 30 acres. The top is 2,316 feet above mean sea-level, or about 800 feet above the plain, and is accessible only by a broad flight of steps cut into the northern face. These steps cross the hill from east to west, and then, reversing the line, climb again to the eastward, and pass under four gateways. The upper walls are perfect and contain magazines of various sizes in each of the bastions, which are semicircles and must have commanded the approach in every direction on the south and west, while the face of the hill being almost perpendicular for nearly 1,000 feet below the wall, the lines are as straight as the outlines of the rock allow, and have been defended by large wall pieces, which were moved on iron pivots; many of these may still be seen on the round bastions at every 80 or 100 yards on the west and north faces. The south side of the hill is a bare scarp for many feet from the wall; and, at about two-thirds of the length from the east, there is a bastion in which are arches of Saracenic form, between the central two of which was a slab containing a Persian inscription dated 1569. There was a second slab in a niche between the battlements, fronting the north and surmounting a row of cellars furnished with moderate-sized windows and probably intended for residences. This slab contained a Devanāgari inscription dated A.D. 1580. Other antiquities include the idols of Gālneshwar Mahādeo, five cisterns, a series of rock-cut caves, and a handsome mosque. Close to the mosque are the ruins of a palace called the Rang Mahal or 'pleasure palace.' The view from Gālna is magnificent.

Gālna was an important place from the end of the fifteenth century, being held alternately by Musalmāns and Marāthās. In 1634 Muhammad Khān, the Musalmān commandant of Gālna, intended to deliver the fort to Shāhjī, who had possessed himself of Nāsik, Trimbak, Sangam-

ner, and Junnar as far as the country of the Konkan. But after promises of imperial favour and of a great reward, Muhammad Khān delivered the fort to the representative of the emperor. In 1679 Sivaji plundered Gālna, and in the wars between the Marāthās and the Mughals, at the close of the seventeenth century, the fort more than once changed hands. It was attacked by Aurangzeb in 1704 and taken after a long siege in 1705. In December, 1804, after a slight resistance, Gālna was taken by Colonel Wallace. In March, 1818, it was evacuated by the commandant and garrison, and occupied by a company of Native infantry. In 1862 it was found to be ruinous. Gālna fort seems at one time to have been used as a sanitarium for Dhūlia. There are the ruins of one or two houses on the top, and the tomb of a young European officer who is said to have committed suicide from grief at having killed an old woman while he was shooting bears. There are also seven Musalmān tombs. Immediately below and to the north-east of the fort lies the village of Gālna. It appears to have been of great size and importance, and was protected by a double line of defences, traces of which remain. The present population of the village is about 500, including some well-to-do money-lenders. For a few years after 1818 a *māmlatdār* held his office in Gālna village.

Gamanpura.—Petty State in Mahī Kāntha, Bombay.

Gandak, Great.—A river of Northern India. Rising in the central mountain basin of Nepāl, in 27° 27′ N. and 83° 56′ E., where its sources are known as the Sapt Gandakī, or 'country of the seven Gandaks,' it drains the tract between the Dhaulāgiri and Gosainthān mountains. The most important of these contributory streams is the Trisūlgangā, and they all unite before breaking through the mountains at Tribenī. The river is also known in Nepāl as the Sālgrāmi, and in the United Provinces as the Nārāyani; it is the *Kondochates* of the Greek geographers, and according to Lassen the *Sadānīra* ('ever-flowing') of the epics. Crossing the British frontier at Tribenī, it forms the boundary between Champāran District of Bengal and Gorakhpur District of the United Provinces for about 20 miles, after which it flows for 40 miles within Champāran, and then once more separates the Provinces for 12 miles of its course. Thenceforward it forms the boundary between Sāran District of Bengal on the south-west and Champāran and Muzaffarpur Districts on the north-east, and it finally joins the Ganges opposite Patna, in 25° 41′ N. and 85° 12′ E., after a course of 192 miles. At first a snow-fed torrent, the Gandak, soon after its entry into British territory, acquires the character of a deltaic river, its banks being above the level of the surrounding country, which is protected by embankments from inundation. The river is navigable throughout the year by country boats below Bagahā in Champāran District. Rafts of timber pass

down it from Nepāl and from the Gorakhpur forests, and grain and sugar are exported by the same route. Navigation is, however, difficult, as the channel during the dry season is narrow and winding, while in the rains it becomes a torrent. In the hot season the river is rarely more than a quarter of a mile across, but in the rains it widens to 2 or 3 miles. It is nowhere fordable, and is continually changing its course. The TRIBENĪ CANAL, now under construction, will carry its waters eastward to within 10 miles of Adāpur in Champāran District, and will irrigate the portion of that District most liable to famine. The SĀRAN CANALS are fed from a side-channel on the right bank of the river. The Būrhi ('old') Gandak, or Sikrāna, an old channel of the river, is described in the article on CHAMPĀRAN DISTRICT. A fine railway bridge on the Bengal and North-Western Railway spans the Gandak near its mouth. The most important place on its bank is HĀJĪPUR on the left bank, and a great bathing festival takes place annually at SONPUR at its confluence with the Ganges.

Gandak, Little.—A river which rises in the lower Nepāl hills, and enters Gorakhpur District of the United Provinces a few miles west of the GREAT GANDAK. It flows from north to south through the whole length of Gorakhpur, and joins the GOGRA just within Sāran District of Bengal. Except in the rains it has a small stream, not exceeding 60 feet in breadth, and is generally fordable. In 1859 it was proposed to turn it into a navigable canal, but the scheme was never carried out. Boats ply during the rains as high as Ragarganj in the Padraunā *tahsīl*.

Gandevi.—Head-quarters of the *tāluka* of the same name in Navsāri *prānt*, Baroda State, situated in 20° 49′ N. and 73° 2′ E., 3 miles from Amalsar on the Bombay, Baroda, and Central India Railway, and 28 miles south-east of Surat. Population (1901), 5,927. The town possesses a magistrate's court, a dispensary, a high school aided by the State, vernacular schools, and public offices. A municipality, constituted in 1905, receives an allotment of Rs. 3,500 from customs, excise, and tolls. There is a considerable trade in grain, molasses, *ghī*, and castor-oil. A large sugar factory, which was worked for some time by the State, has now been purchased by a private firm. The chief industry is hand-loom weaving.

Gandhāra (the *Gandaria* of the Greeks).—The ancient name for the tract on the north-west frontier of India which comprised the whole lower valley of the Kābul river, the ancient Kophene or Kubhā, from the Kau or Alingār river near 70° E. to the Indus, and from the Safed Koh and Kohāt range on the south to the borders of the Swāt valley on the north. It thus included the modern District of Peshāwar, with part of Kohāt, the Mohmand country, Swāt, Bājaur, and Buner, and

at one period even embraced within its limits the great city of Takshasilā, east of the Indus. Its length was 170 miles from west to east at its greatest, and 100 miles from north to south. Its people were known to Herodotus, Hekataeus, Ptolemy, and Strabo as Gandarioi or Gandarae, and furnished a contingent to Darius in his invasion of Greece. Gandhāra was included in the Arachosian satrapy of the Achaemenid kings of Persia. At different times Pushkalāvati (the Peukelaotis of the Greeks), Purushapura (Peshāwar), and Udabhāndapura (UND) formed its capital. The province between the Swāt and Indus rivers, corresponding to the modern Yūsufzai country, was known as Udyāna or Ujjāna, and to the Greeks as Suastene. At times it formed a separate principality. Gandhāra was a great seat of the Buddhist religion and Graeco-Bactrian culture in the centuries after Alexander's invasion until about A. D. 515, when Mihirakula, the Hun, overran Udyāna and Kashmīr and oppressed the Buddhists. Of the Chinese pilgrims who visited Gandhāra, Fa Hian found (*c.* 404) 500 monasteries and the people devoted to the Buddhist faith; in the seventh century Hiuen Tsiang laments its decline: while fully 100 years later (757–64) U-K'ong still found 300 monasteries and princes who were zealous patrons of the monks. Gandhāra has given its name to the Graeco-Buddhist sculpture found so abundantly in this region.

Gandhol.—Petty State in KATHIAWAR, Bombay.

Gandikota ('Gorge-fort').—Ancient fortress in the Jammalamadugu *tāluk* of Cuddapah District, Madras, perched on a hill overlooking the gorge of the Penner river, 1,670 feet above the sea, in 14° 47′ N. and 78° 16′ E.

This narrow and deep gorge is the finest river pass in the District, and indeed in Southern India, with the exception of the wild bed of the Kistna where that river cuts its way through the Nallamalais between Kurnool District and the Nizām's Dominions. For a mile or more the Penner rushes through a gap barely 200 yards wide, on either side of which rise, sheer from its foaming waters, dark cliffs 200 or 300 feet in height. Those on the right bank are crowned by the Gandikota fort.

According to an ancient grant in the fort, a king called Kapa, of Bommanapalle, a village close by, founded the village of Gandikota, and built its fortress. Harihara, the first of the Vijayanagar kings, is said to have constructed a temple in it. According to Firishta, however, the fort was not built until 1589. It was captured by the Golconda Sultān and held by Mīr Jumla; later, it was the capital of one of the five *sarkārs* of the Carnatic Bālāghāt, until it was absorbed by the Pathān Nawāb of Cuddapah. It was here that Fateh Naik, the father of the great Haidar Alī, first distinguished himself. Haidar improved

and garrisoned the fort, but it was captured by Captain Little in the war with Tipū in 1791. Properly defended, it should, in the conditions of warfare then existing, have been impregnable. It was always one of the most important strongholds in the Cuddapah country, being the key to the valley of the Penner, and its name occurs frequently in the accounts of the ancient struggles.

Gangādhar.—River in Goālpāra District, Eastern Bengal and Assam. *See* SANKOSH.

Gangaikondapuram.—Village in the Udaiyārpālaiyam *tāluk* of Trichinopoly District, Madras, situated in 11° 12′ N. and 79° 28′ E., about 6 miles east of Jeyamkondacholapuram, the head-quarters of the *tāluk*, and 1 mile west of the trunk road from Madras to Kumbakonam. It is now an unimportant agricultural village with a population (1901) of only 2,702, but historically and archaeologically it is one of the most interesting places in the District. The name as now spelt means literally the 'city visited by the Ganges,' and is popularly derived from a well in the temple which according to tradition is connected by underground ways with the Ganges. The story is that Bānāsura having been disabled from going to the Ganges for his bath, Siva made the river appear in this well and thus enabled the demon to obtain salvation. The name, however, is quite certainly a contraction of Gangaikondacholapuram, the city founded by Gangaikonda-Chola ('the Chola who conquered the country round the Ganges'), this surname having been borne by Rājendra Chola I. The city, of which the remains still lie scattered in the neighbourhood, was the residence of the Chola kings from Rājendra Chola I to Kulottunga I, A.D. 1011–2 to 1118.

The most prominent object in the ruins is the great temple, which resembles in many respects the famous shrine of Tanjore. Bishop Caldwell thought this latter was probably copied from it; but the present belief is that it was founded by Rājārājā, the father of Rājendra Chola I, who was also the founder of the Tanjore temple, and that therefore the two buildings were both erected about the same time. The temple consists of one large enclosure, measuring 584 feet by 372. This was evidently once well fortified by a strong surrounding wall, with a two-storeyed colonnade all round and bastions at each corner. In 1836, however, the bastions were almost entirely destroyed and most of the wall removed, to provide materials for the Lower Anicut across the Coleroon, which was then under construction. The wall is being gradually rebuilt, and there are traces of three bastions, one at each end of the eastern wall and another in the centre of the west wall. The remains of two other bastions in front of the temple are said to be buried in the débris of the *gopuram* (tower) over the eastern entrance, which is now almost completely in ruins. This *gopuram* was evidently once a very fine structure, being built entirely of stone except at the

very top, whereas in almost every other case all but the lowest storey of such towers consists of brick and plaster. The ruins of six other *gopurams* are said to have once existed, but there is now no trace of them. The *vimāna* or shrine in the centre of the courtyard strikes the eye from a great distance. The pyramidal tower above it reaches the great height of 174 feet. All the lower part is covered with inscriptions. They relate chiefly to grants to the temple made in the reigns of Ko Rāja-kesari-varma Udaiyār, Srī Vīra Rājendra Deva, Kulottunga Chola Deva, Kulasekhara Deva, and Vikrama Pāndya Deva. One grant was made by Sundara Pāndya in the second year of his reign, and another inscription, which is imperfect, probably refers to the Vijayanagar dynasty. There were a large number of *mantapams* (halls) and small buildings all round the inner side of the enclosing wall; but most of these have been pulled down and the materials carried off, and the rest are in ruins. Among them is a round well about 27 feet in diameter, down to which leads a flight of steps surmounted by a figure of a huge dragon (*vāli*), put up, as a tablet shows, by the *zamīndār* of Udaiyārpālaiyam. This dragon is perhaps the most striking figure in the temple precincts. It may be described as a cat-like sphinx. The steps to the well pass between its fore-legs. There is also a bull, much resembling the famous one in the Tanjore temple. It is so placed that, when the doors of the shrine are open, it can contemplate the idol at the end of a long dark corridor. The carving on the *vimāna* is very fine, and includes all the principal Saivite deities, &c. The boldness and the spirit of the chief figures and the absence of grossness in the representations bring to mind the old Jain temple, said to be of the fifth or sixth century, at Conjeeveram. These two buildings and the celebrated shrine at Tanjore are perhaps the only important instances in the Presidency in which the design culminates in the tower over the central shrine. The architectural superiority of this method of design over the later temples, of which that at Madura may be taken as a type, is obvious.

About a mile to the west of the temple an embankment of great strength runs north and south for 16 miles. It is provided with several substantial sluices, and in former times must have formed one of the largest reservoirs in India. This huge tank or lake, called Ponneri, was partly filled by a channel from the Coleroon, upwards of 60 miles in length, which entered it at its southern end; and partly by a smaller channel from the Vellār, which entered it on the north. Traces of both these still remain. The tank is now in ruins and has been useless for many years, and the bed is almost wholly overgrown with high and thick jungle, except in portions of the foreshore which have been assigned for cultivation. A scheme for the restoration of this gigantic work and for supplying it by a channel from the Upper Anicut across the Cauvery has been recently investigated and abandoned.

Traces of many ancient buildings still exist round about Gangaikondapuram, and their foundations are often quarried for bricks, some of which are 15 inches long by 8 wide and 4 deep. In a quarry now open have been found ashes, bricks, and concrete with burnt iron nails imbedded in the mass, showing that the buildings they once formed must have been destroyed by fire. The destruction of the city and tank was probably the act of an invading army. Local names still indicate the disposition of the several parts of the city: such as Māligaimedu, the site of the 'royal residence'; Edaikattu, the 'middle structure'; Ulkottai, the 'hindmost structure'; Yuddhapallam, 'battle-field'; Ayudakalavan, 'arsenal'; Pallivādai, the 'suburb occupied by the cultivators'; Pākalmedu, 'vegetable garden'; Meykāvalteru, the 'street occupied by *kāvalgārs*' (watchmen); Chunnāmbukuli, 'lime-kilns'; Tottikulam, a 'pond where cattle were watered'; Kalanikulam, a 'pond in which rice-washings were allowed to stagnate to be drunk by the cattle'; and Vannānkuli, the 'washerman's pond.'

Gangākher.—Head-quarters of a *jāgīr* in Parbhani District, Hyderābād State, situated in 18° 58′ N. and 76° 45′ E., on the south bank of the Godāvari, 14 miles north-east of Pingli on the Hyderābād-Godāvari Valley Railway. Population (1901), 5,007. It contains two schools, a State post office, and a British sub-post office, the police inspector's and sub-registrar's offices. The *ghāt*, or steps leading to the river, is built of masonry; and during the rains and part of the cold season a ferry of boats plies across the river.

Gangāpur (1).—South-western *tāluk* of Aurangābād District, Hyderābād State, with an area of 518 square miles. The population in 1901, including *jāgīrs*, was 51,413, compared with 59,638 in 1891, the decrease being due to the famines of 1897 and 1899–1900. The *tāluk* has 190 villages, of which 15 are *jāgīr*, and Gangāpur (population, 3,122) is the head-quarters. The land revenue in 1901 was 3·2 lakhs. *Regar* is the predominant soil.

Gangāpur (2).—Head-quarters of the *nizāmat* and *tahsīl* of the same name in the State of Jaipur, Rājputāna, situated in 26° 29′ N. and 76° 44′ E., about 70 miles south-east of Jaipur city, and close to the Karauli border. Population (1901), 5,155. The town possesses 3 schools attended by about 200 pupils, and a hospital with accommodation for 4 in-patients.

Gangāpur (3).—Western *tahsīl* of Benares District, United Provinces, included in the BENARES ESTATE, conterminous with *pargana* Kaswār Rājā, and lying between 25° 10′ and 25° 24′ N. and 82° 42′ and 83° E., with an area of 118 square miles. Population fell from 89,934 in 1891 to 86,703 in 1901. There are 280 villages, but no town. The demand for land revenue in 1903–4 was Rs. 1,25,000, and for cesses Rs. 3,000. The density of population, 735 persons per square mile, is high. This

is a fertile tract lying south of the Barnā river. In 1903–4 the area under cultivation was 85 square miles, of which 45 were irrigated.

Gangā-Sāgar.—Island in the Twenty-four Parganas District, Bengal. *See* SĀGAR.

Gangavādi.—The territory of the Ganga kings in Mysore, who ruled from the second to the eleventh century. It was a 'ninety-six thousand' province[1], the boundaries of which are given as—north, Marandale (not identified); east, Tondanād (the Madras country east from Mysore); west, the ocean in the direction of Chera (Cochin and Travancore); south, Kongu (Salem and Coimbatore). The inhabitants of Gangavādi are represented by the existing Gangadikāras, a contraction of Gangavādikāras.

Gangaw Subdivision.—North-western subdivision of Pakokku District, Upper Burma, comprising the GANGAW and TILIN townships.

Gangaw Township.—Northernmost township of Pakokku District, Upper Burma, lying between 21° 49′ and 22° 50′ N. and 93° 59′ and 94° 27′ E., with an area of 698 square miles. It comprises, with the Tilin township, the whole of that part of the District which drains into the Upper Chindwin and is watered by the Myittha. Gangaw is a narrow valley shut in by the Chin Hills on the west and by the Pondaung range on the east, and is to a great extent cut off from the rest of the District. Its population was 22,648 in 1891, and 24,200 in 1901 (including 1,989 Chins), distributed in 118 villages. The headquarters are at Gangaw (population, 1,300), on the Myittha river. The area cultivated in 1903–4 was 22 square miles, and the land revenue and *thathameda* amounted to Rs. 52,000.

Gangāwati Tāluk.—*Tāluk* in Raichūr District, Hyderābād State, with an area of 517 square miles, including *jāgīrs*. The population in 1901 was 65,010, compared with 55,097 in 1891. The *tāluk* contains one town, GANGĀWATI (population, 6,245), the head-quarters; and 140 villages, of which 37 are *jāgīr*. The *samasthān* of Anegundi, comprising 12 villages with a population of 4,295, is included in this *tāluk*. The Tungabhadra river separates it from the Madras District of Bellary on the south-east. The land revenue in 1901 was 1·8 lakhs. The soil includes alluvial, black cotton, and sandy varieties. The *jāgīr tāluk* of Koppal, belonging to the Sālār Jang family, is situated to the west of this *tāluk*. It has an area of 513 square miles, and a population of 85,033, and 152 villages, besides one town, KOPPAL (population, 8,903), the head-quarters.

Gangāwati Town.—Head-quarters of the *tāluk* of the same name in Raichūr District, Hyderābād State, situated in 15° 26′ N. and

[1] These numerical designations, almost invariably attached to the names of ancient divisions in Mysore, apparently refer to their revenue capacity or to the number of their *māds*.

76° 32′ E., 5 miles north of Anegundi. Two miles east of it flows the Tungabhadra river. Population (1901), 6,245. The town contains a school, a dispensary, a post office, and two old temples. It is a commercial centre, largely exporting grain and jaggery. A weekly market is held on Sundays.

Ganges (*Gangā*).—The great river of Northern India which carries off the drainage of the Southern Himālayas, and also a smaller volume received from the northern and eastern slopes of the Vindhyas. It rises in the Tehrī State, in 30° 55′ N. and 79° 7′ E., where it issues under the name of Bhāgīrathi from an ice cave at the foot of a Himālayan snow-bed near Gangotrī, 13,800 feet above the level of the sea. During its earlier course it receives the Jāhnavī from the north-west, and subsequently the Alaknandā, after which the united stream is called Ganges. It pierces the Himālayas at Sukhī, and turns south-west to Hardwār. From this point it flows south and south-east between the Meerut and Rohilkhand Divisions of the United Provinces, and then separates the latter from the Agra Division, and flows through the eastern part of Farrukhābād District. It next forms the south-western boundary of Oudh, and then crosses the Districts of Allahābād, Mirzāpur, Benares, and Ghāzīpur, after which it divides the Districts of Ghāzīpur and Balliā from Bengal. The Ganges is a considerable river even at Hardwār, where the Upper Ganges Canal starts, and it is tapped again at Naraura for the Lower Ganges Canal. It thus supplies the largest irrigation works in the United Provinces, and is also the source of the water-supply of the cities of Meerut (by a canal), Cawnpore, and Benares. Its chief tributaries are: the Rāmgangā (Farrukhābād), Jumna and Tons (Allahābād), Gumtī (Ghāzīpur), and Gogra (Balliā), while smaller affluents are the Mālin (Bijnor), Būrhgangā (Meerut), Mahāwa (Budaun), Sot or Yār-i-Wafādār (Shāhjahānpur), Būrhgangā and Kālī Nadī (Farrukhābād), Isan (Cawnpore), Pāndū (Fatehpur), Jirgo (Mirzāpur), Barnā (Benares), Gāngī and Besū (Ghāzīpur), and Chhotī Sarjū (Balliā), which is called the Tons in its upper portion. The principal towns on or near its banks in the United Provinces are: Srīnagar (on the Alaknandā), Hardwār, Garhmuktesar, Anūpshahr, Soron, Farrukhābād (now left some miles away), Kanauj, Bilhaur, Bithūr, Cawnpore, Dalmau, Mānikpur, Karā, Allahābād, Sirsā, Mirzāpur, Chunār, Benares, Ghāzīpur, and Balliā.

Impinging on the Shāhābād District of Bengal, in 25° 31′ N. and 83° 52′ E., the Ganges forms the boundary of this District, separating it from the United Provinces, till it receives as a tributary the Gogra on the north bank. It shortly afterwards receives another important tributary, the Son, from the south, then passes Patna, and obtains another accession to its volume from the Gandak, which rises in Nepāl. Farther to the east, it receives the Kosī, and then, skirting the Rājmahāl Hills, turns sharply to the south, passing near the site of the

ruined city of Gaur. About 20 miles farther on, the Ganges begins to branch out over the level country; and this spot marks the commencement of its delta, being 220 miles in a straight line, or nearly 300 by the windings of the river, from the Bay of Bengal. The present main channel, assuming the name of the PADMĀ, proceeds in a south-easterly direction past Pābna to Goalundo, where it is joined by the Jamunā, the main stream of the BRAHMAPUTRA. The bed is here several miles wide, and the river is split up into several channels, flowing between constantly shifting sandbanks and islands. During the rains the current is very strong, and even steamers find difficulty in making headway against it. This vast confluence of water rushes towards the sea, joining the great MEGHNĀ estuary in 23° 13′ N. and 90° 33′ E., after the Ganges has had a course of 540 miles in Bengal, and 1,557 miles from its source.

The Meghnā estuary, however, is only the largest and most easterly of a great number of Ganges mouths, among which may be mentioned the HOOGHLY, Mātla, Raimangal, Mālanchā, and HARINGHĀTA. The most westerly and the most important for navigation is the Hooghly, on which stands Calcutta. This receives the water of the three western-most distributary channels that start from the parent Ganges in Murshidābād District (generally known as the NADIĀ RIVERS, one of which takes again the name of Bhāgīrathi), and it is to this exit that the sanctity of the river clings. Between the Hooghly on the west and the Meghnā on the east lies the Ganges delta. The upper angle of this consists of the Districts of Murshidābād, Nadiā, Jessore, and the Twenty-four Parganas. These Districts have for the most part been raised above the level of periodical inundation by the silt deposits of the Ganges and its offshoots; and deltaic conditions now exist only in the eastern Districts of Khulnā, Farīdpur, and Backergunge, and towards the southern base of the delta, where the country sinks into a series of great swamps, intersected by a network of innumerable channels, and known as the SUNDARBANS.

In its course through Bengal, the Ganges rolls majestically down to the sea in a bountiful stream, which never becomes a merely destructive torrent in the rains and never dwindles away in the hottest summer. Embankments are seldom required to restrain its inundations, for the alluvial silt which it spills over its banks, year by year, affords to the fields a top-dressing of inexhaustible fertility. If one crop be drowned by the flood, the cultivator calculates that his second crop will abundantly requite him. In Eastern Bengal, in fact, the periodic inundations of the Ganges and its distributaries render the country immune from the results of a scanty rainfall and make artificial irrigation unnecessary.

Until some 400 years ago the course of the Ganges, after entering Bengal proper, was by the channel of the Bhāgirathi and Hooghly as

far as the modern Calcutta, whence it branched south-eastwards to the sea, down what is still known as the Adi Gangā, which corresponds for part of its course with TOLLY'S NULLAH. By degrees this channel silted up and became unequal to its task, and the main stream of the Ganges was thus obliged to seek another outlet. In this way the ICHĀMATĪ, the JALANGĪ, and the MĀTĀBHĀNGA became in turn the main stream. The river tended ever to the east: and at last, aided perhaps by one of the periodic subsidences of the unstable surface of the country, it broke eastwards right across the old drainage channels, until it was met and stopped by the Brahmaputra. Great changes still take place from time to time in the river-bed, and alter the face of the country. Extensive islands are thrown up and attach themselves to the bank; while the river deserts its old bed and seeks a new channel, it may be many miles off. Such changes are so rapid and on so vast a scale, and the eroding power of the current upon the bank is so irresistible, that it is considered perilous to build any structure of a large or permanent character on the margin.

The junction of two or more rivers, called Prayāg, is usually considered sacred; but that of the Ganges and Jumna at Allahābād, where according to popular belief a third river, the SARASWATĪ, which sinks into the sands at Bhatner in Rājputāna, reappears from its subterranean course, is one of the most holy places in India. Here, on the spit of land below the fort, a large bathing festival is held annually in the month of Māgh (January). Every twelve years the fair is called the *Kumbh melā*, as it is held when Jupiter is in Aquarius (*kumbh*) and the sun in Aries, and the efficacy of bathing is increased, large numbers of pilgrims from every part of India flocking to the junction. At the *Kumbh melā* in 1894 the attendance was estimated at a million to a million and a half.

The holiest places upon the banks of the Ganges in Bengal are SONPUR at its confluence with the Gandak, and SĀGAR ISLAND at the mouth of the Hooghly. Both places are the scene of annual bathing festivals, which are frequented by thousands of pilgrims from all parts of India. Even at the present day, the six years' pilgrimage from the source of the Ganges to its mouth, and back again, known as *pradakshina*, is performed by many; and a few fanatical devotees may be seen wearily accomplishing this meritorious penance by measuring their length.

Most rivers in India have sanctity attached to them, but the Ganges is especially sacred. Its importance in Vedic literature is slight, but in the epics and Purānas it receives much attention. Sāgar, the thirty-eighth king of the Solar Dynasty, had performed the great horse-sacrifice (*Aswamedha*) ninety-nine times. In this ceremony the horse wandered over the world, unhaltered and never guided or driven. Every country it entered was conquered by the following army, and on its return it

was sacrificed to the gods. When Sāgar drove out a horse for the hundredth time, the god Indra stole it and tied it up in Pātāl (the underworld) near the place where a sage, Kapila Muni, was meditating. Sāgar had two wives, one of whom bore Asmanjas, and the other had sixty thousand sons who were following the horse. The sons found it, and believing Kapila to be the thief abused him, and were consumed to ashes in consequence of the sage's curse. Ansmān, son of Asmanjas, had gone in search of his uncles, and finding the horse took it home. Garuda, the mythical half-man, half-bird, king of the snakes, told him that the sin of those who had abused Kapila could best be removed by bringing to earth the Ganges, which then flowed in heaven (Brahmā Lok). In spite of much prayer and the practice of austerities by Ansmān and his son, Dalīp, this could not be brought about; but Bhāgīrath, son of Dalīp, persuaded Brahmā to grant him a boon, and he chose the long-sought permission to allow the Ganges to flow on this world. Brahmā agreed, but told Bhāgīrath that the earth could not sustain the shock, and advised him to consult Siva, who consented to break the force of the river by allowing it to fall on his head. The ice-cavern beneath the glacier, from which the stream descends, is represented as the tangled hair of Siva. One branch, the Mandākinī, still flows through Brahmā Lok; a second, which passes through Pātāl, washed away the sin of the sixty thousand; and the third branch is the Ganges[1]. Besides the places which have already been referred to, Gangotrī, near the source, Devaprayāg, Garhmuktesar, Soron, Dalmau, and Benares are the principal bathing resorts. The sanctity of the river still exists everywhere, though according to prophecy it should have passed away to the Narbadā a few years ago. Dying persons are taken to expire on its banks, corpses are carried to be burned there, and the ashes of the dead are brought from long distances to be thrown into its holy stream, in the hope of attaining eternal bliss for the deceased. About the time of the regular festivals the roads to the river are crowded with pilgrims, who keep up an incessant cry of salutation to the great goddess (*Gangā jī kī jai*). On their return they carry away bottles of the sacred water to their less fortunate relations.

Till within the last forty years of the nineteenth century, after which the extension of railways provided a quicker means of transport, the magnificent stream of the Ganges formed almost the sole channel of traffic between Upper India and the seaboard, and high masonry landing-places for steamers still exist at Allahābād and other places lower down, though they are no longer used. The products of the Gangetic plain, and the cotton of the Central Provinces and Central India, used formerly to be conveyed by this route to Calcutta. At present it is

[1] A variant of the legend represents the ashes of the sixty thousand as having been purified by the BHĀGĪRATHĪ, a branch of the Ganges.

chiefly used for the carriage of wood and grain in many parts of its course, and also of oilseeds, saltpetre, stone, and sugar in the eastern portion of the United Provinces. The principal import to these Provinces is rice, but manufactured goods and metals are also carried in considerable quantities. The canal dam at Naraura in Bulandshahr District has stopped through traffic between the upper and lower courses of the Ganges.

In Bengal, however, the Ganges may yet rank as one of the most-frequented waterways in the world. The downward traffic is most brisk in the rainy season, when the river comes down in flood. During the rest of the year the boats make their way back up stream, often without cargoes, either helped by a favourable wind or laboriously towed along the bank. The most important traffic in Bengal is in food-grains and oilseeds: and, though no complete statistics are available, it appears probable that the actual amount of traffic on the Ganges by native craft has not at all diminished since the opening of the railway, to which the river is not only a rival, but a feeder. Railway stations situated on the banks form centres of collection and distribution for the surrounding country, and fishing villages like Goalundo have by this means been raised into river marts of the first magnitude. Steamer services ply along its whole course within Bengal, and many towns lie on its banks, the most important being PATNA and MONGHYR.

Six railway bridges cross the Ganges: near Roorkee, at Garhmuktesar (2,332 feet), Rājghāt, Cawnpore (2,900 feet), and Benares (3,518 feet), while the sixth, measuring 3,000 feet, was completed near Allahābād in 1905. There is no bridge below Benares, though the construction of a railway bridge near Sāra Ghāt in Bengal is contemplated. The normal flood discharge varies from 207,000 cubic feet per second at Hardwār, where the bed is steep and only 2,500 feet wide, to 300,000 at Garhmuktesar and 150,000 at Naraura (width at canal weir and about a mile above it, 3,880 feet). The bridge at Allahābād is designed to allow the discharge of a million cubic feet per second. The normal flood-level falls from 942 feet above the sea at Hardwār to 287 at Allahābād.

Ganges Canal, Lower.—An important irrigation work designed to water the southern and eastern portion of the DOĀB in the United Provinces. The canal owes its origin to the recommendations of the committee appointed in 1866 to examine the various projects for improving the UPPER GANGES CANAL. It takes off from the Ganges at Naraura in Bulandshahr District, where a solid wall 3,800 feet long, with a section of 10 feet by 9, having forty-two weir-sluices, has been thrown across the river. At mile 25 the Fatehgarh branch, 61 miles long, is given off, and soon after, at mile 34, the canal is carried on a fine aqueduct across the Kālī Nadī at Nadrai. The Bewar branch, 65 miles long, takes off 6 miles lower down, and at mile 55 the main canal meets

the old Cawnpore branch of the Upper Ganges Canal at Gopālpur, and provides most of its supply. It then passes on to the Etāwah branch of the Upper Ganges Canal and supplies it also, the main channel taking the name of the Bhognipur branch and terminating in Cawnpore District. The canal was first opened for irrigation in 1878; in 1895 the Fatehpur branch, which is a continuation of the Cawnpore branch, extending into Allahābād District, was commenced, and it was opened for irrigation in 1898. The total capital outlay on this canal to the end of 1903–4 was more than 4 crores. The system commands an area of 5,300,000 acres in the Districts of Etah, Mainpurī, Farrukhābād, Etāwah, Cawnpore, Fatehpur, and Allahābād, of which 831,000 acres were irrigated in 1903–4. The gross revenue has exceeded the working expenses since 1880–1, but the net revenue still falls, in some years, below the interest charges. In 1903–4 the canal earned 28 lakhs gross and 15 lakhs net, giving a return of 3·8 per cent. on the capital outlay. The main channel of 62 miles and 137 miles of branches are navigable. Navigation accounts are kept jointly with those of the Upper Ganges Canal.

Ganges Canal, Upper.—The largest and most important irrigation work in the United Provinces, taking off from the right bank of the GANGES river and watering the Upper Doāb. Two miles above Hardwār the Ganges divides into several channels, the most westerly of which contains a large volume of water and, after passing Hardwār, rejoins the main stream at Kankhal. This channel is held up by a temporary dam which diverts the water into the canal head-works, where the amount admitted is regulated at the Māyāpur bridge. During the first 20 miles of its course four large torrents liable to sudden floods of extreme violence have to be crossed. Two of these are carried over the canal, the third is passed through it by a level crossing provided with flood-gates, and the canal itself flows on a magnificent aqueduct over the bed of the SOLANI. At mile 22 the canal throws off the Deoband branch (52 miles long); at mile 50 the Anūpshahr branch (107 miles); and at mile 181 (at Nānū in Aligarh District) it divides into what were originally called the Cawnpore and Etāwah branches of the Ganges Canal. The LOWER GANGES CANAL now crosses these in their 32nd and 39th miles respectively, and from the points of junction they are considered to belong to it. The Upper Ganges Canal, on March 31, 1904, had 213 miles of main line, 227 miles of branches, and 2,694 miles of distributaries.

In 1827 Captain De Bude proposed a scheme for utilizing the waters of the West Kālī Nadī, along a drainage line constructed under native rule, to irrigate Meerut, Bulandshahr, and Aligarh Districts. The supply would, however, have been deficient and uncertain, and in 1836, at the suggestion of Colonel Colvin, the Ganges was examined

near Hardwār. The next year a terrible famine, which devastated the Doāb, increased the anxiety of Government to provide a satisfactory scheme. Major (afterwards Sir) Proby Cautley commenced a survey in 1839, and prepared a project which was warmly approved by the Court of Directors in 1841, the estimated cost being over a million sterling. In April, 1842, the actual works were commenced by opening the excavation between Kankhal and Hardwār. The work had, however, hardly begun when Lord Ellenborough abruptly stopped it, on the grounds that money could not be spared and that the project was unsound from an engineering point of view. Subsequently the totally inadequate grant of 2 lakhs a year was made. In 1844 Mr. Thomason, shortly after assuming office as Lieutenant-Governor, made a strong representation on the subject, and was informed that the main object of the canal was to be navigation, not irrigation. The grant was, however, increased by a lakh a year, and surveys were pressed on. A committee considered the arguments raised, and in 1847 reported favourably on the scheme. Lord Hardinge visited the head-works in the same year, and reversed the decision of his predecessor: an annual grant of 20 lakhs a year was sanctioned, with a promise of more if it could be usefully spent. The revised estimate of $1\frac{1}{2}$ million sterling was passed by the Directors in 1850, and the canal was opened in April, 1854. The works were, however, not complete; in particular, those at the Solāni river gave way, and irrigation really commenced from May, 1855. Although the canal had been extraordinarily successful, owing to the genius of its projector, Sir Proby Cautley, ten years' experience pointed out defects in the system, and in 1866 a committee sat to examine the proposals which had been made. The result of their report was the expenditure of large sums on improvements and remodelling, the chief objects of which were to increase the supply, and to reduce the excessive slope of the channel by providing more falls. They also recommended a site near Rājghāt in Alīgarh as a point from which a supplementary supply might be drawn, and this was carried out later in the LOWER GANGES CANAL.

The expenditure on capital account up to 1904 has been about 3 crores (£2,000,000 at present rate of exchange). The total area commanded by the canal at the end of 1903–4 was 3,800,000 acres in the Districts of Saharanpur, Muzaffarnagar, Meerut, Bulandshahr, Alīgarh, Muttra, Agra, Etah, and Mainpurī, of which 978,000 acres were irrigated. There is not much room for further increase. The canal also supplements the supply available in the LOWER GANGES and AGRA CANALS (by means of the Hindan cut). The gross revenue first exceeded the working expenses in 1860–1. The net revenue has been larger than the interest charges on the capital expended since 1873–4. The most successful year of working was 1900–1, when the net

revenue amounted to 11½ per cent. on the capital outlay. In 1903–4 the gross and net revenue amounted respectively to 42 and 31 lakhs, the latter representing 10·3 per cent. on the capital outlay.

Special expenditure has been undertaken to facilitate navigation by constructing locked channels round falls, and by raising bridges; and boats can pass from Roorkee to Cawnpore. The portion of the Cawnpore branch from Nānū to Gopālpur, where it meets the Lower Ganges Canal, is kept open chiefly for navigation; and both the Ganges Canals are, in this respect, considered a single system. Operations are carried on at a loss; the receipts in 1903–4 were Rs. 11,000, while the expenditure was Rs. 19,000. Grain, cotton, oilseeds, and timber are the most important commodities carried; the rafting of timber is, however, decreasing. A small income is derived from mills worked by water-power at the falls, and the water-supply of Meerut city is raised by turbines worked by the canal.

Gangoh.—Town in the Nakūr *tahsīl* of Sahāranpur District, United Provinces, situated in 29° 47′ N. and 77° 17′ E. It is the chief town in the *pargana* of the same name. Population (1901), 12,971. Hindus numbered 5,741 and Musalmāns 7,172. The town consists of an old and new quarter, the former founded by a legendary hero, Rājā Gang, from whom its name is derived, and the latter by the famous saint, Shaikh Abdul Kuddūs, who gives his title to the western suburb, where his mausoleum stands, built by Humāyūn in 1537. During the Mutiny Gangoh was frequently threatened by the rebel Gūjars under the self-styled Rājā Fathūā: but Mr. H. D. Robertson and Lieutenant Boisragon attacked and utterly defeated them towards the end of June, 1857. There are three old mosques, two of which were built by Akbar and Jahāngīr, besides a school and a dispensary. The town is liable to be flooded from a large swamp south of the site, but a scheme has been prepared to drain this. The streets are paved and most of them have brickwork drains. Gangoh is administered under Act XX of 1856, the income raised being about Rs. 3,000 a year. It is the cleanest and best kept of all the towns under Act XX in the District.

Gangotrī.—Mountain temple in the State of Tehrī, United Provinces, situated in 31° N. and 78° 57′ E. It stands at an elevation of 10,319 feet above the sea on the right bank of the Bhāgīrathi, the chief feeder of the Ganges, eight miles from its source in the Gaumukh glacier. The temple is a square building, about 20 feet high, containing small statues of Gangā, Bhāgīrathi, and other mythological personages connected with the spot. It was erected by Amar Singh, Thappa, the chief of the Gurkha commanders in Garhwāl, early in the eighteenth century. During the summer large numbers of pilgrims visit this place, and several *dharmsālas* have been built for their accommodation. Flasks filled at Gangotrī with the sacred water are sealed up by the

officiating Brahmāns and conveyed to the plains as valuable treasures. In the winter the temple is closed and the priests migrate to Mukhba, a village 10 miles away.

Gāngpur.—A Tributary State of Orissa, Bengal, lying between 21° 47′ and 22° 32′ N. and 83° 33′ and 85° 11′ E., with an area of 2,492[1] square miles. It is bounded on the north by the State of Jashpur and Rānchī District; on the east by Singhbhūm; on the south by the States of Bonai, Sambalpur, and Bāmra; and on the west by the State of Raigarh in the Central Provinces. Gāngpur consists of a long undulating table-land about 700 feet above the sea, dotted here and there with hill ranges and isolated peaks which rise to a height of 2,240 feet. In the north the descent from the higher plateau of Chotā Nāgpur is gradual; but on the south the Mahāvīra range springs abruptly from the plain in an irregular wall of tilted and disrupted rock with two flanking peaks, forming the boundary between Gāngpur and the State of Bāmra. The principal rivers are the Ib, which enters the State from Jashpur and passes through it from north to south to join the Mahānadī in Sambalpur, the Sānkh from Rānchī, and the South Koel from Singhbhūm. The two latter meet in the east of Gāngpur, and the united stream, under the name of the Brāhmanī, flows south into the plains of Orissa. The confluence of the Koel and Sankh is one of the prettiest spots in Gāngpur; and it is said by local tradition to be the scene of the amour of the sage Parāsara with the fisherman's daughter Matsya Gandhā, the offspring of which was Vyāsa, the reputed compiler of the Vedas and the Mahābhārata. These rivers are practically dry from the end of the cold season till the rains, and there is no systematic navigation on them. Tigers, leopards, wolves, hyenas, bison, and many kinds of deer abound, and peafowl are numerous.

The State was once under the suzerainty of Sambalpur, which formed part of the dominions of the Marāthā Rājās of Nāgpur. It was ceded in 1803 to the British Government by the Treaty of Deogaon, but was restored to the Marāthā Rājā in 1806. It reverted under the provisional engagement with Mādhujī Bhonsla in 1818, and was finally ceded in 1826. In 1821 the feudal supremacy of Sambalpur over Gāngpur was cancelled by the British Government, and a fresh *sanad* granted to the chief. In 1827, after the permanent cession, another *sanad* was granted for a period of five years, but this was allowed to run till 1875 before it was renewed. The last *sanad* was granted to the chief in 1899. The State was transferred from Chotā Nāgpur to Orissa in 1905.

The total revenue is Rs. 2,40,000, and the tribute payable to the

[1] This figure, which differs from the area shown in the *Census Report* of 1901, was supplied by the Surveyor-General.

British Government is Rs. 1,250. The relations of the chief with the British Government are regulated by the *sanad* granted in 1899, which was reissued in 1905 with a few verbal changes due to the transfer of the State to Orissa. Under this *sanad* the chief was formally recognized and permitted to administer his territory subject to prescribed conditions, and the tribute was fixed for a further period of twenty years, at the end of which it is liable to revision. The chief is under the general control of the Commissioner of Orissa, who is Superintendent of the Tributary Mahāls, as regards all important matters of administration, including the settlement and collection of land revenue, the imposition of taxes, the administration of justice, arrangements connected with excise, salt, and opium, and disputes in which other States are concerned: and he cannot levy import and export duties or transit dues, unless they are especially authorized by the Lieutenant-Governor. He is permitted to levy rents and certain other customary dues from his subjects, and is empowered to pass sentences of imprisonment up to five years and of fine to the extent of Rs. 200, but sentences of imprisonment for more than two years and of fine exceeding Rs. 50 require the confirmation of the Commissioner.

The recorded population increased from 191,440 in 1891 to 238,896 in 1901, the development being due partly to a more accurate enumeration and partly to the State having been opened out by the Bengal-Nāgpur Railway, which runs through the south-east corner for about 70 miles. The number of villages is 806, one of which, SUĀDI, contains the residence of the Rājā. The density is 96 persons per square mile. Hindus number 146,549, Animists 88,949, Muhammadans 1,640, and Christians 1,758. The most numerous tribes are the Oraons (47,000), Gonds (37,000), Khariās (26,000), Bhuiyās (24,000), and Mundās (19,000). The Agariās (7,000) a cultivating caste, claim to be descendants of Kshattriya immigrants from Agra. A branch of the German Evangelical Mission, with its head quarters at Kumārkelā, has been at work since 1899 and has made several converts. The Roman Catholic Jesuit Mission established in the Biru *pargana* of Rānchī claims many converts in the State, chiefly among the Oraons.

The soil of the Ib valley towards the south is extremely productive, and here the skilful and industrious Agariās make the most of their land: in the north the soil is less fertile, and the cultivators are ignorant and lazy. The principal crops are rice, sugar-cane, and oilseeds. Irrigation from rivers and streams is extensively resorted to, but large works are not numerous. The estates of Hingīr and Nāgra and certain portions of the *khālsa*, or chief's own domain, contain stretches of *sāl* (*Shorea robusta*), which have been worked since the opening of the Bengal-Nāgpur line through the State. The chief

jungle products are lac, resin, and catechu. The forests also contain a large number of edible roots and indigenous drugs. *Sabai* grass (*Ischaemum angustifolium*) grows plentifully throughout the State and is exported in large quantities. Diamonds have occasionally been found in the sands of the Ib river, and gold-washing is carried on in most of the rivers and streams by Jhorā Gonds, who thus gain a precarious livelihood. An extensive coal-field is situated in the Hingīr estate, and negotiations for its working are now in progress. Limestone and iron occur throughout the State in great abundance, especially in the north-east, where a concession of 100 square miles has been made to a European prospector; the industry is developing rapidly and promises to be important. Work has also been commenced in the dolomite deposit in the same concession, where the stone procurable is said to be extremely rich and extensive. Villages in Gāngpur are held either on feudal tenures or on farming leases. The feudal tenures date back to the early times when the vassals of the chief received grants of land in consideration of rendering military service and making certain payments in kind. These payments and the service conditions also have been gradually commuted to a quit-rent in money. The other villages are leased out to small farmers, called *gāontiās* or *ganjhus*, who pay a fixed annual rent and are remunerated by lands, called *bograi*, which are held rent-free. Rents are paid only for rice lands, but the cultivators are bound to work gratuitously for the chief in return for the uplands which they hold rent-free. The police force was reorganized in 1900, and is now managed by the chief's eldest son as District Superintendent on the lines followed in British Districts. The State contains altogether 13 police stations and outposts, and the force consists of 24 officers and 134 constables, maintained at a cost of Rs. 20,000; there is in addition a *chaukidār* in each village, who is remunerated by a grant of land. The State jail at Suādi has accommodation for 50 prisoners, and there is a dispensary at the same place, at which in- and out- patients are treated. The State maintains a middle English school, and 7 upper primary and 8 lower primary schools.

Gangtok.—Capital of Sikkim State, Bengal, situated in 27° 20′ N. and 88° 38′ E. Population (1901), 749. Gangtok contains the residence of the Mahārājā and other public buildings. It is connected with the Tīsta valley by a cart-road.

Ganjām District.—Northernmost District of the Madras Presidency, lying along the shore of the Bay of Bengal between 18° 12′ and 20° 26′ N. and 83° 30′ and 85° 12′ E., with an area of 8,372 square miles. It is called after its former head-quarters, but the derivation of the name is unknown. The fanciful etymology from *Ganji-ām*, 'the store-house of the world,' has no satisfactory authority and no sufficient

warrant in the fertility of the District. In shape Ganjām is triangular, running to a point at its southern end. Its northern boundary is formed by Orissa and the States recently transferred from the Central Provinces to Bengal, its eastern by the sea, and its western by the adjoining Madras District of Vizagapatam. Much of it is mountainous and rocky, but it is interspersed with valleys and fertile plains; pleasant groves of trees give to the scenery of the low country a greener appearance than is usually met with in the plains farther south; and with its background of wild hills, frequently covered with dark jungle, it is one of the most beautiful Districts in the Presidency, winning the affections of almost every officer who serves within it.

Physical aspects.

The Eastern Ghāts traverse it from north to south, and are nowhere more than 50 miles from the sea. At Bāruva, in the centre of the District, they are within 15 miles of the sea, and at this point are much loftier than elsewhere, the peaks of Singarāzu and Mahendragiri, the two highest points in the District, being close upon 5,000 feet. Devagiri (4,535 feet), which stands farther south behind Parlākimedi, is their next highest hill. They divide the District into two well-defined portions: the Māliahs, or hills, and the plains. The former, which are described in more detail in the separate account of them, occupy the whole of the western half. This hilly area is also known as the Agency of Ganjām. It is a wild country, for the most part inhabited by backward forest tribes, to whom it would be inexpedient to apply the whole of the ordinary law of the land, and it is consequently ruled by the Collector under special powers as Agent to the Governor. The ordinary courts of justice have no jurisdiction within it, the Collector being the chief civil and criminal tribunal, with an appeal from his decisions to the High Court and the Governor-in-Council. There are similar Agencies in the two adjoining Madras Districts of Vizagapatam and Godāvari. In Ganjām these tracts are for the most part held on a kind of feudal tenure, while the plains consist of three Government *tāluks* and several permanently settled estates.

No real lakes are situated in Ganjām; but near the coast, and sometimes farther inland, shallow depressions occur, which are filled in some cases with fresh, and in others with brackish water. These are known as *tamparās* or *sāgarams*. The largest of them is the Chilka Lake on the northern frontier.

The three principal rivers of the District, all of which are utilized for irrigation, run eastwards into the Bay. They are the Rushikulya, which with its tributaries (the chief of which are the Mahānadī and Godāhaddo) drains the northern part of the District, and the Vamsadhāra and Lāngulya, which traverse it in the extreme south. The Vamsadhāra enters Ganjām at Battili, and after running southwards

through it for 70 miles falls into the sea at Calingapatam. The Lāngulya forms, for the last 30 miles of its course, the southern boundary of the District, and enters the sea 3 miles from Chicacole, where it is crossed by the trunk road on a fine bridge.

The rocks exposed in the District are Archaean gneisses and schists of the older and younger type, together with intrusive bands of charnockite (hypersthene granulite) and biotite gneissose granite. The younger type is of a distinctly metamorphic series. Cappings of high-level horizontal laterite, as much as 200 feet thick, are common at about the 4,000 feet level. In the flat coast region, except for the thickly dotted rocky ridges and hills, recent alluvium and low-level lateritic red clay are generally present.

Botanically, most of Ganjām is included in what is classed as the moist region of the Presidency. Near the coast the wooded area consists to a large extent of scrub jungle, but it comprises tree forest inland where the rainfall is heavier; the herbaceous flora is made up of plants belonging to both the dry and moist regions. The more prominent crops and the chief growth of the forests are referred to later. The most characteristic tree of the latter is *sāl* (*Shorea robusta*). In some places along the coast casuarina has been planted, which grows very fast and is valuable as firewood.

Ganjām is a fair sporting country. Bears and hyenas are common, and wolves, leopards, and tigers are also met with. Of the deer tribe, *sāmbar*, spotted deer, barking-deer, and mouse deer occur on the slopes of the hills, where are also some *nīlgai*; and antelope are found on the plains. The four-horned antelope, bison, and wild hog are rarer. Wild dogs commit havoc among the game. It is believed by the natives that there are two kinds of them: the *bolio-kukuro*, which hunt in pairs, and the *khogo*, which hunt in packs; but the former are apparently wolves which have been mistaken for wild dogs.

The climate along the coast, close to which most of the chief towns are situated, is usually cool and healthy, but Ganjām town is notoriously malarious, and for this reason has ceased to be the District head-quarters. The Māliahs and the tracts adjoining them are also particularly malarious. The District is one of the few in the Presidency which enjoys a real cold season.

The rainfall is usually considerable, being greatest in the Agency tracts, where it averages 55 inches annually. In the plains, the rain brought by the south-west monsoon is heavier inland than on the coast, while the reverse is the case with the north-east monsoon. On the coast the fall in both monsoons is heavier at the northern stations than in the south. The annual rainfall in the District as a whole averages 45 inches, and the average number of wet days in the year is 59. The south-west current rarely fails, though it often sets in late; but the

north-east is much more precarious, and there have been three famines (see below) in the last half-century. Otherwise Ganjām has escaped serious natural calamities. A heavy flood in the Lāngulya in 1876, caused by a cyclone, destroyed six arches of the bridge at Chicacole, and floods in the Rushikulya on another occasion washed away a portion of the town of Purushottapur.

History.

Historically, Ganjām formed part of the ancient KALINGA, though at times the kingdom of VENGI encroached upon its southern border. Conquered by the Mauryan king Asoka in 260 B.C., it seems to have passed later under the Andhra kings of Vengi. Both of these were Buddhists, and Asoka has left an edict at Jaugada. The Andhras were driven out of this part of the country in the third century A.D., and made way for the early line of the Ganga kings of Kalinga. The dates of the early Gangas are very obscure, and so are their relations with the Eastern Chālukyas of Vengi: but the latter seem at one time to have ruled a part of Ganjām. The Chola conquest of Vengi and Kalinga, which took place at the end of the tenth and the beginning of the eleventh centuries, certainly included parts of Ganjām, and the great king Rājendra Chola has left a record of his victories on Mahendragiri hill. But the degree and the variation of the Chola control over Kalinga are still obscure. About the time of the Chola conquest the line of the later Ganga kings of Kalinga comes into view, who ruled, first no doubt as Chola feudatories, but later as independent sovereigns, for the next four centuries. They extended their dominions far to the north and south, and only fell before domestic treachery. The power of the Gajapatis of Orissa, whose descendants still hold considerable portions of the District, was founded in the fifteenth century by a minister of the former dynasty, who murdered his master and usurped the throne. About 1571 these last were ousted by the Kutb Shāhī dynasty of Golconda, and for the next 180 years the country was ruled from Chicacole by Muhammadans. Apart from the mosque at that town, there are scarcely any permanent traces of their dominion.

In 1687 the emperor Aurangzeb compelled Golconda to acknowledge his authority, and the governors of Chicacole were thereafter appointed by his Sūbahdārs of the Deccan. For services to two of these Sūbahdārs, the French obtained in 1753, among other tracts, the Chicacole *Sarkār*—one of the five NORTHERN CIRCĀRS—which included the present District of Ganjām. In 1757 De Bussy came to reduce it to order, but in the next year he was summoned south by Lally, then Governor of Pondicherry, to help in the siege of Madras. Immediately on his departure, Clive dispatched Colonel Forde to the south with a force from Bengal. Forde defeated De Bussy's successor and captured Masulipatam, the French head-quarters, in January, 1759. The Sūbah-

dār of the Deccan thereupon changed sides, and made a treaty with Forde agreeing to prevent the French ever settling in these parts again. By this agreement, ratified by a *farmān* from the emperor Shāh Alam in 1765, and another treaty with the Sūbahdār in 1766, the English obtained the whole of the Northern Circārs.

Ganjām, however, took longer to pacify than any area in the Presidency, and it was not until seventy years later that it was finally reduced to order. It originally consisted of the country as far south as the Pūndi river; and most of the numerous *zamīndārs* in this area (who had 34 forts and 32,000 irregular troops) were contumacious, frequently annexing Government villages, quarrelling with one another or over disputed successions, and declining to pay any tribute until compelled by force. Troops were used at different times against no less than fifteen of them; but these expeditions, though they cost time, money, and often valuable lives, had little permanent effect.

In 1803 the Chicacole division, which included the PARLĀKIMEDI ZAMĪNDĀRI, was added to the District. The disturbances which subsequently occurred in that tract lasted in a more or less open manner for nineteen years from 1813 to 1832, being chiefly caused by the factions among the eleven hill chiefs, called Bissoyis, to whom certain villages had been granted by the *zamīndār* on condition that they prevented the Savara hill tribes from raiding the low country. They not only failed to keep the Savaras in order, but themselves perpetually harassed the villages in the plains. In 1816, 4,000 or 5,000 Pindāris entered the District from Jeypore and swept through the whole of it, plundering and burning.

By 1832 the Bissoyis' doings became so intolerable that Mr. George Russell, first Member of the Board of Revenue and name-father of Russellkonda, was sent to stop them. He proclaimed martial law, captured the Bissoyis and their forts one after the other, hanged some and transported others, and gave the District a spell of quiet. In 1836 he followed a similar policy in Goomsur, and since then there have been no disturbances of importance. Two other notable results of Russell's mission were the appointment in 1836 of the Meriah Agents to put down the practice of human sacrifice among the Khonds, and the passing of the Act of 1839, by which the Collector of Ganjām, under the title of Agent to the Governor, received special powers over the hill country and its inhabitants. Russell's account of his mission and the reports of the Meriah Agents down to 1861, when they were abolished, give a vivid picture of the Ganjām of those restless days.

Except Asoka's edicts at Jaugada, the only notable antiquities in the District are several ancient temples, some of which furnish interesting examples of architecture and sculpture, and contain inscriptions throwing much light on the early history of Kalinga. The most important

are the Vaishnavite shrine at SRĪKŪRMAM and the Saivite temple at MUKHALINGAM.

Population.

The District as a whole contains 8 towns, all in the low country, and 6,145 villages; but the villages in the Māliahs are small, with an average of less than 200 inhabitants.

Population has shown a steady advance during the past thirty years, the total numbering 1,520,088 in 1871; 1,749,604 in 1881; 1,896,803 in 1891; and 2,010,256 in 1901. Migration to the Assam tea gardens and to Bengal and Burma has lately somewhat checked the increase. Statistical particulars of the *tāluks* and *tahsīls*, according to the Census of 1901, are appended:

Tāluk or *Tahsil.*	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Balliguḍā	1,390	...	472	104,714	75	— 2·3	451
Rāmagiri	1,191	...	542	74,393	62	+ 16·0	332
Udayagiri	504	...	401	76,858	152	+ 4·7	905
Goomsur	1,141	...	697	200,357	176	+ 7·8	10,818
Sunada (including Agency area)	198	...	198	23,230	117	+ 13·9	532
Aska	407	...	368	115,883	285	+ 6·4	5,091
Ganjām	308	...	324	95,882	311	+ 8·1	5,318
Purushottapur	294	...	270	102,396	348	+ 6·1	4,096
Berhampur	685	3	549	344,368	504	+ 6·5	19,398
Ichchāpuram	300	...	266	83,500	278	+ 11·6	3,813
Sompeta (including Agency area)	283	1	347	102,690	364	+ 7·0	2,360
Chicacole	373	2	305	223,373	599	+ 5·1	8,741
Narasannapeta	51	...	41	26,452	519	+ 6·3	819
Parlākimedi (including Agency area	972	1	1,015	311,534	321	+ 2·3	9,097
Tekkali	275	1	350	124,626	453	+ 7·9	3,829
Total	8,372	8	6,145	2,010,256	240	+ 5·9	76,500

The chief towns are the municipalities of BERHAMPUR, CHICACOLE, and PARLĀKIMEDI. In the plains 96 per cent. of the population are Hindus and nearly all the remainder are Animists; while in the Agency tract more than two-thirds of the total are Animists. Musalmāns and Christians are fewer than in any other Madras District. In the low country the density of population is above the average for the Presidency, but in the Agencies it is only one-third as great, being less than 100 persons per square mile. Telugu is mainly spoken in the southern half of the District, while in the north the prevailing language is Oriyā. In the Agency tract Khond is on the whole the chief vernacular, but in the Southern Māliahs Savara is most used.

Except for a few Khonds and Savaras, the people of the plains nearly

all belong to either Telugu or Oriyā castes. The Telugu castes resemble, generally, those found elsewhere. The cultivating Kāpus (150,000) are the most numerous, and then come the Kālingis (104,000), who are in greater strength in this District than in any other. Of the Oriyā castes by far the most numerous are the Brāhmans. They number nearly 8 per cent. of the Hindus and Animists of the District, a proportion which is exceeded only by the Brāhmans in South Kanara. Some classes of them differ from their fellows farther south in having no religious scruples against engaging personally in cultivation and trade.

In the Agency tract there are 90,000 persons of Oriyā-speaking castes, 44,000 of whom are Pānos (whose usual occupations are weaving and thieving); but otherwise the population consists almost entirely of Khonds (139,000) and Savaras (83,000). These two tribes are described in the article on the MĀLIAHS. They are more numerous in Ganjām than anywhere else in the Presidency.

The means of livelihood of the people in the low country differs but little from the normal. About 66 per cent. of them are engaged in agricultural and pastoral pursuits, compared with an average of 70 per cent. for the Presidency as a whole; but a larger proportion than usual returned themselves as living by unskilled labour, and probably many of these are in reality mainly agricultural labourers. In the Agency tract, however, the population subsists almost entirely by the land, the only industrial pursuit of any consequence being weaving.

Of the 3,042 native Christians in the District in 1901, 1,948 belonged to the Roman Catholic Church, which began work in the District in 1768 and has its head-quarters at Surada; and 910 to the Baptist Mission, which started operations in 1825, with its chief station at Berhampur. The Canadian Baptist Mission has stations at Chicacole, Parlākimedi, and Tekkali.

Agriculture.

The soils in the Agency tract are of three kinds—black earth, loam, and red ferruginous land; but the first, which is the best, occurs only in occasional patches, and the second, the next most fertile, is chiefly used for turmeric cultivation. In the plains, black cotton soil (*regar*) predominates, the other land being red and sandy and, to a small extent, alluvial. Of the 'dry' (unirrigated) land, three-fifths in the Goomsur *tāluk*, one-fourth in Chicacole, and one-sixth in Berhampur is of superior quality, being *regar* clay or *regar* loam. Of the 'wet' land, three-fourths in the Chicacole *tāluk* is of good quality, but in Berhampur and Goomsur the proportion is only two fifths. Rice, the most important crop in the District, is for the most part sown broadcast on 'dry' land, and then transplanted to the 'wet' fields and matured with the aid of artificial irrigation. On some 'dry' land it is raised with the aid of rainfall alone. If rain fails in a

single month in the season, the 'dry' crop is lost. Many officers have accordingly advocated the cultivation on these lands of *rāgi*, which requires less moisture; but the ryots adhere to the more precarious rice cultivation, as the produce, if only it comes to maturity, is treble the value of a crop of *rāgi*. The Oriyā ryots of the District are not industrious. The use of wells and garden cultivation are both very limited, though fencing and tree-growing are common.

Of the 8,372 square miles of the District, 4,439 are *ryotwāri* land, 3,509 *zamīndāri*, and 424 *inām*. Detailed agricultural statistics are not available for the Agency tract (except for Chokkapād Khandam, a small area managed on the *ryotwāri* system) or for *zamīndāri* or 'whole *inām*' land. Of the *ryotwāri* land shown in the revenue accounts, 1,999 square miles were classified as follows in 1903–4:—

Tāluk.	Area shown in accounts.	Forests.	Cultivable waste.	Cultivated.	Irrigated.
Udayagiri . .	9	...	1	8	...
Goomsur . .	1,162	568	48	290	80
Berhampur . .	526	28	19	349	183
Chicacole . .	302	2	18	197	115
Total	1,999	598	86	844	378

Rice and *rāgi* are the staple food-grains of the District. Rice covers nearly three-fourths, and *rāgi* nearly one-sixth, of the total area cultivated. Other important crops are green gram, horse-gram, and gingelly. In the Agency tract the staple cereal is rice, and the main 'dry' grains are *rāgi* and pulses. The special crop of the Māliahs is turmeric, which takes three years to come to maturity and requires to be shaded from the sun during its first hot season. Products of the forest areas are alum, arrowroot, myrabolams, gall-nuts, and oranges. Every village owns a large number of mango-trees scattered about the jungle round it, and their fruit and a kind of flour made from the stones of the fruit are largely eaten. *Mahuā* trees (*Bassia latifolia*) also afford food, and arrack (strong spirit) is distilled from their flowers.

Ganjām ryots are conservative and have introduced few agricultural improvements. During the seventeen years ending 1905 they have borrowed only Rs. 63,000 under the Land Improvement Loans Act. Most of this has been spent in reclaiming waste land, and wells are few in number and often only temporary pits. Not a single well has been constructed with advances from Government in either Berhampur or Goomsur.

Both bullocks and buffaloes are used for ploughing and other agricultural operations. They are bred locally, and are inferior and undersized animals, though there is no lack of pasture or fodder, even in bad years.

Of the total area of *ryotwāri* and *inām* land under cultivation 378 square miles, or 45 per cent., were irrigated in 1903–4. Of this, 213 square miles were watered from Government channels, 127 from tanks, and only 2 square miles from wells. The chief canals and channels are those belonging to the Rushikulya project and to what is known as the 'Ganjām minor rivers system.' These irrigated 92,000 acres and 79,000 acres respectively in 1903–4. The former, which is referred to in the article on the RUSHIKULYA river, supplies land in the Berhampur, Aska, and Goomsur *tāluks*, and is still being extended; while the latter, which irrigates part of the Chicacole *tāluk*, consists of the channels from the two rivers Lāngulya and Vamsadhāra, and of a hill stream known as the Garibulagedda. In the three Government *tāluks* of Berhampur, Goomsur, and Chicacole there are, including the major irrigation works, 2,505 Government tanks and 302 river and spring channels. The private works in the same area include 102 tanks and one river channel. Most of the wells in the District are mere shallow, temporary pits dug to supplement tank-irrigation. At present 2,493 of these constructions exist in the three Government *tāluks*. In Goomsur, not even one permanent well is used for irrigation, but Berhampur and Chicacole contain 1,007 and 408 respectively. The area watered from each of them averages only one acre. In the Māliahs, irrigation is entirely from hill streams and springs. The slopes of the hills and the valley through which the stream runs are levelled into terraces, and the water is led from field to field till the bottom of the slope is reached. Springs are diverted in a similar manner. These terraces are monuments of hard work and ingenuity, and have been constructed wherever there is any sufficient supply of water. They are made by the Khonds and Savaras, and in some places cover the whole side of a high hill from top to bottom.

Forests.

The Forest Act has not been yet introduced into any part of the Agency tract except a small corner of Surada. Most of the forests are in *zamīndāri* land; and even where they are at the disposal of Government the extension of the Act is held to be unnecessary and inadvisable, for the reasons that no special denudation has taken place in the valleys where the great rivers rise, that the best timber is inaccessible and so of no direct commercial value, that the introduction of the Act would involve the maintenance of a considerable establishment in a deadly climate, and that the curtailment of the existing privileges of the hillmen would lead to great discontent. Consequently the area in the District which has been constituted forest under the Act is only about 600 square miles. Of this, 570 square miles lie in Goomsur and practically all the remainder in Berhampur. The Goomsur forests are famous as containing the best *sāl* (*Shorea robusta*) in the Presidency. This timber perhaps ranks

second in utility to teak, and grows best on the alluvial deposits in the basins of the Mahānadī and Rushikulya rivers and their tributaries, where a light covering of alluvium overlies a gravelly subsoil and disintegrated rock. Small areas of inferior *sāl* are found on the *kankar* and sandy conglomerates which occur on the plateaux and terraces above these basins. The Goomsur forests were much spoilt in former days by the shifting cultivation practised by the hill tribes, and have also been overworked. Steps are now being taken for their effective protection and improvement. Besides *sāl*, the more valuable timber trees found are *Pterocarpus Marsupium*, *Terminalia tomentosa*, *Adina cordifolia*, *Soymida febrifuga*, *Stephegyne parvifolia*, ebony, and satinwood. The stock of bamboos and small timber on the outer slopes of the Māliahs and on several of the detached hills is almost inexhaustible. There is a small teak plantation in one of the Reserves, but it is not flourishing.

In the Berhampur *tāluk* the Reserves contain only firewood, bamboos, and small timber. In Chicacole they consist of a single small patch of scrub. A Government casuarina plantation has been made in Agastinaugām, three miles north of Chatrapur.

There are no mines in Ganjām. Manganese ore has been discovered in small quantities near Boyirāni in the Atagada *zamīndāri*. Mica, antimony ore, and corundum are found in parts of the Goomsur *tāluk* and the Parlākimedi *tahsīl*, but not of commercial value. Salt is manufactured in large quantities in the Government salt-pans along the coast, at Humma, Surlā, Naupada, and Calingapatam.

Trade and communications.

The chief non-agricultural industry of the District is weaving. Ordinary cloths are woven in most villages on the plains, and silk fabrics are made at Berhampur. The latter are dyed, the favourite colours being purple and red. Chicacole used to be famous for its extremely fine muslins, but the better kinds of these are now made only to order. In the Māliahs, the Pānos weave the coarse cloths which are used by the Khonds and Savaras. They are much thicker and narrower than those woven in the plains, and are of various colours. This tribe also rears the *tasar* silk-moth, and the silk produced is sent to Berhampur and to Sambalpur in Bengal. The Khonds collect the valuable red *kamela* dye, a powder with which the scarlet berries of *Mallotus philippinensis* (the monkey-face tree) are coated, and, in their ignorance of its worth, part with it for a few measures of rice or a yard or two of cloth to the dealers in the plains, who export it in considerable quantities and make large profits. In addition to the ordinary gold and silver jewels, quaint brass bangles and other ornaments are made and worn by Oriyās in the north of the District. The women of some castes wear numbers of these bracelets, to the weight of several pounds,

half-way up their arms. Fine betel-boxes and curious flexible fish of brass and silver are made at Bellugunta near Russellkonda.

A sugar factory and distillery at ASKA supplies country spirit to the excise tracts of the District, and makes various other alcoholic liquors. There is a tannery at Russellkonda. The Oriental Salt Company has a factory at Naupada, where the ordinary marine salt is converted by a patented process into a fine white granular variety, which is expected to compete favourably with the salt at present imported from Europe. In 1903–4, 4,400 tons of crushed and 750 tons of sifted salt were treated by the company's special machinery. Sea and river fisheries form an important industry. There are 21 fish-curing yards, and their out-turn is greater than that of any District except the two on the west coast. In 1903–4 nearly 3,000 tons of fish were salted in them.

The main exports of Ganjām are grain, pulses, myrabolams, hides and skins, hemp, oilseeds, turmeric, wood, salt, salted fish, and coco-nuts; while the chief imports are rice, piece-goods, twist, glassware, metals and metal goods, kerosene oil, spices, and gunny-bags. There are three ports in the District, at GOPĀLPUR, CALINGAPATAM, and BĀRUVA. The first two are open to foreign as well as coasting trade. The total value of the foreign exports and imports at these during 1903–4 was 10 lakhs and Rs. 9,000 respectively. Myrabolams are exported to London and Antwerp, hemp to London, rice to Colombo and Galle, and oilseeds and turmeric to Colombo. Matches are imported from Christiania and Hamburg, areca-nuts from Penang, coco nut oil from Galle, refined sugar from Colombo, and spirits, wines, and many miscellaneous articles from the United Kingdom.

The total value of the exports and imports carried coastwise to and from all three ports during 1903–4 was Rs. 10,87,000 and Rs. 2,60,000 respectively. The exports go chiefly to Calcutta, Madras, Bombay, Negapatam, Cochin, Calicut, Tellicherry, Cannanore, Mangalore, Rangoon, and Moulmein; they consist mainly of coir, grain and pulse, hides and skins, oilseeds, railway sleepers, apparel, and turmeric. The principal imports come from Calcutta, Bombay, Madras, Cuddalore, Cochin, and Rangoon; they are largely hardware and cutlery, metals, kerosene oil, haberdashery, and gunny-bags. There is much passenger traffic to and from Rangoon at the three ports.

Of the imports by land, grain is the chief. It comes from Orissa, salt being sent there in return, and travels largely by way of the Chilka canal, which connects the Chilka Lake with the Rushikulya river. Turmeric is largely exported from the Agency tract, not only to the low country within the District, but also to the Central Provinces and Orissa. Berhampur, Gopālpur, and Calingapatam are the chief centres of general trade. The principal trading castes are Komatis in the plains and Sondis in the Māliahs. Most of the internal trade is carried

on at weekly markets. The most important of these are held at Narasannapeta, Battili, Hiramandalam, and Lakshminarasupeta in the plains, and at Rāyagada, Chelligodo, Sarangodo, and Tikkāballi in the Māliahs. Those in the plains are managed by the local boards, and in 1903–4 Rs. 3,960 was collected in the shape of tolls.

The East Coast section of the Bengal-Nāgpur Railway (standard gauge) runs through the District from north to south, not far from and nearly parallel to the coast. At Naupada a branch runs to the salt factory there, and the 2 feet 6 inches line which the Rājā of Parlākimedi has constructed through his estate meets it at the same place.

The total length of metalled roads in the plains is 729 miles, and of unmetalled roads 12 miles, the whole being maintained from Local funds. There are avenues of trees along 650 miles. The chief is the trunk road from the Bengal frontier on the north to the borders of Vizagapatam on the south. Except the Goomsur *tāluk*, the low country is well supplied with communications. The Agency tract has 508 miles of roads, of which only 84 miles are metalled and 221 more are practicable for carts. European officials whose duty takes them to the Māliahs carry their baggage on elephants, and a certain number of these animals are allotted to each of them and maintained at Government expense. Six chief routes lead to the Māliahs from the plains, all of which are passable by loaded elephants and horses. Two of these, the Kalingia and Taptapāni *ghāts*, can be used by carts. A third, the Puipāni *ghāt*, is also, though steep, practicable for carts in the dry season. In the Goomsur Māliahs a road from Kalingia to the Bengal frontier is metalled. Another, known as the Kālipāno road, leads from Kalingia to Udayagiri, thence to Balligudā, and on to Kālāhandī in Bengal. An old military road passes from Balligudā to Rāmagiri-Udayagiri and on to Parlākimedi. This runs through the heart of the Agency tract, but owing to a series of *ghāts* it cannot be used by carts.

Famine.

Famine visited the District in 1790–2, in 1799–1801, in 1836–9, in 1865–6, in 1888–9, and in 1896–7. That of 1888–9 affected no other area, and is known as the Ganjām famine. The first three were partly due to the disturbed state of the country. Except for the cyclonic rain in November, 1888, the seasons were similar in the last three. In all of them a partial failure of the south-west monsoon was followed by an almost entire failure of the north-east monsoon. The highest numbers relieved at any one time during the course of each of them were: in 1866, 30,500 on gratuitous relief and 1,500 at relief works; in 1889, 11,632 in kitchens, 93,561 on other gratuitous relief, and 20,726 at relief works: and in 1897, 8,897 in kitchens, 79,473 on other gratuitous relief, and 46,529 at relief works. Weavers were also relieved on all three occasions. The cost of these three famines to Government, including advances

of money and the remissions of land revenue granted in consideration of the failure of crops, was 4½, 11, and 14 lakhs respectively. In all three, small-pox and cholera caused many deaths; but the small-pox of 1897, which claimed 6,028 persons as its victims in four months, was unprecedented in the annals of the District.

Administration.

For administrative purposes Ganjām is arranged into five subdivisions, of which three, CHICACOLE, BERHAMPUR, and BALLIGUDĀ, are in charge of Indian Civilians, and two, GOOMSUR and CHATRAPUR, of Deputy-Collectors recruited in India.

The *tāluks* and *zamīndāri tahsīls* included in each of these are as follows: in Chicacole, Chicacole, Narasannapeta, Tekkali, Parlākimedi, and the Parlākimedi Agency; in Berhampur, Berhampur, Ichchāpuram, Sompeta, and the Sompeta Agency; in Balligudā, the Balligudā Agency, Udayagiri Agency, and Rāmagiri Agency; in Goomsur, Goomsur, Aska, Surada, and the Surada Agency; and in Chatrapur, Ganjām and Perushottapur. The Balligudā subdivision consists entirely of Agency country, and the divisional officer is known as the Special Assistant Agent. Chicacole, Berhampur, and Goomsur are the only *tāluks* in the whole of the ordinary tracts which are not *zamīndāri* land. A *tahsīldār* and a stationary sub-magistrate are stationed at the head-quarters of each of these, and at Berhampur a town sub-magistrate as well. The *zamīndāri tahsīls* and Agencies are in charge of deputy-*tahsīldārs*. Those at Parlākimedi, Sompeta, and Surada look after both the ordinary and Agency tracts known by these names. The Deputy-Collector at Chatrapur exercises magisterial jurisdiction over a portion of the Berhampur *tāluk*. The head-quarters of the Collector, the Superintendent of police, the District Forest officer, and the District Registrar are at Chatrapur, while the District Judge, the Executive Engineer, and the District Medical and Sanitary officer live at Berhampur. Chatrapur has a Civil Surgeon; and there are two Assistant Superintendents of police in the District, one at Parlākimedi and the other at Russellkonda.

The District Judge and four District Munsifs dispose of the civil suits in the plains; but cases arising in the Māliahs, where, as already explained, the whole of the ordinary law is not in force, are dealt with by the Collector in virtue of his extraordinary powers as Agent to the Governor, by the three divisional officers in their capacity as Assistant Agents, and by six deputy-*tahsīldārs* who exercise the powers of a District Munsif in the Māliah tracts within their jurisdiction. Litigation is extremely rare in these backward hill tracts. In an average year less than one in 3,000 of their population bring any kind of suit, whereas in the Presidency as a whole the corresponding figure is one in 115. The hill people often settle their little differences by primitive methods of their own. They still resort to trial by ordeal: the parties each nominate

a representative, who endeavours to stay under water as long as possible, and the verdict goes to the side whose champion is victorious.

The chief court of criminal justice in the plains is that of the Sessions Judge, and, in the Agency tract, that of the Agent to the Governor. The senior of the three Assistant Agents is an Additional Sessions Judge for the latter, and sessions cases may be transferred to him by the Agent for disposal. Serious crime is rare in these tracts, and petty offences are usually dealt with by the heads of villages without resort to the police or the courts of law. The Khonds have a reputation for honesty and truthfulness, but the Pānos are notorious thieves. In the District, as a whole, dacoities and robberies are rare, but house-breaking and cattle-theft are frequent and are often committed by professional thieves. The number of murders or cases of culpable homicide reported averages fifteen a year; they are due in a majority of cases to jealousy or other personal motives.

Little is known of the revenue history of the District in the Hindu and Muhammadan periods. The hill country seems, from time immemorial, to have been parcelled out among military chieftains, who held hereditary posts and appropriated the entire revenues, subject to the condition of performing military service for their suzerains when called upon. The plains were held by petty non-military chiefs, some of whom represented old families, while others were little more than government officers entrusted with the collection of the revenue of various tracts. Under the Hindu governments the people seem to have paid an assessment of half the gross produce in kind; but after the Muhammadans conquered the country the *zamindārs* employed by them imposed fixed rates on the land (to which extra assessments were afterwards added), by which the ryots' share of the rice crops, the chief cultivation of the country, was nominally reduced to one-third, but actually to one-fifth of the gross produce; in the case of 'dry' grains the shares of the ryot and the government were equal. This division of produce seems to have continued till the introduction in 1817 of the *ryotwāri* settlement.

When the English assumed charge of the District in 1766, they found that the cultivation was divided into *zamīndāri* and *haveli* (or household) land. At first the Company rented out both these classes of land. On the receipt of the orders of Government directing the introduction of a permanent settlement into the Presidency, a Special Commissioner was appointed to examine the matter, and by 1804 the whole District was permanently assessed. The *zamīndāris* were confirmed to their holders in perpetuity, and the *haveli* lands were parcelled out into small estates and sold by auction to the highest bidder. Some of the *zamīndārs* and other proprietors subsequently fell into arrears; and between 1809 and 1850 the estates of these one after the other eventually reverted

to Government, and now form the Government *tāluks* of Chicacole, Berhampur, and Goomsur.

The *ryotwāri* system was first introduced in the Chicacole *tāluk* in 1817. The fields, including both arable and waste land, were measured, classified, and assessed; but there were great anomalies in the assessment, and it was not until 1878 that revenue administration reached the stage at which it now stands.

A regular survey of all the Government *tāluks* was begun in 1866 and a systematic settlement in 1875. The work was completed in 1884, and resulted in an increase in the three *tāluks* of 16 per cent. in area over that shown in the old revenue accounts, and of 10 per cent. (or Rs. 60,000) in revenue. At present the average assessment per acre on 'dry' land is R. 0–15–8 (maximum Rs. 4, minimum 4 annas), and on 'wet' land Rs. 3–12–11 (maximum Rs. 5–8, minimum Rs. 1–4).

The revenue from land and the total revenue in recent years are given below, in thousands of rupees:—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue .	14,43	16,24	18,03	17,95
Total revenue .	18,99	20,80	25,76	28,68

The Local Boards Act V of 1884 was not in force in the Agency tract till 1906, when 122 villages in the country below the Parlākimedi Hills were brought under that enactment. The local affairs of the plains, outside the three municipalities of CHICACOLE, PARLĀKIMEDI, and BERHAMPUR, are managed by the District board and the three *tāluk* boards of Chicacole, Berhampur, and Goomsur, the areas under which correspond with the three administrative subdivisions of the same names, excluding the Agency tracts in them and including, in the case of the Berhampur *tāluk* board, the jurisdiction of the Deputy-Collector at Chatrapur. The total expenditure of these boards in 1903–4 was about 4 lakhs, more than half of which was devoted to roads and buildings. The chief source of their income is, as usual, the land cess. In addition, fifteen Unions are managed by bodies called *panchāyats* established under the Local Boards Act.

The police force of the District is controlled by a Superintendent and the two Assistants already mentioned. There are 15 police inspectors and 63 police stations. Bodies of reserve police are maintained at Chatrapur and at Balligudā in the Agency tract, numbering 106 and 94 respectively, each in charge of an inspector. These are picked men, better armed than the rest of the force, and are capable of dealing with any disturbances in the Agencies. The ordinary force includes 888 head constables and constables, and 809 rural police. In addition to the District jail at Berhampur there is a smaller prison

at Russellkonda, under the charge of the divisional officer, which was established to save convicts belonging to the hill tracts from the fever which attacks them if they are brought down to the coast; and 13 subsidiary jails which, taken together, can contain 271 prisoners.

In the literacy of its population, the plains portion of the District stood seventeenth among the twenty-two Districts of the Presidency at the Census of 1901, only 4·4 per cent. (8·9 males and 0·4 females) being able to read and write. In knowledge of English the Telugus surpass the Oriyās, but the Oriyās are superior in vernacular education. The Agency tract is educationally the most backward area in the whole Presidency, only seven persons in 1,000 being able to read and write. Only 56 females in the whole tract were returned as literate at the Census of 1901, and only 26 people, including all the officials, as knowing English. Special efforts are being made to improve this state of things. In 1903–4 there were 165 schools in the Agency tract, all but one of which were of the primary grade. Telugu is taught in one of these (in the Parlākimedi Māliahs) and Oriyā in all the others. Almost all the teachers are Oriyās, and the pupils are largely Khonds, Savaras, Pānos, and Oriyās. In the District as a whole the number of pupils under instruction in 1880–1 was 13,067; in 1890–1, 37,784: in 1900–1, 38,679; and in 1903–4, 40,802. On March 31, 1904, the District contained 1,469 public educational institutions of all kinds. Of these, 1,449 were primary schools, 14 were secondary, and 4 training schools. There were two second-grade colleges, at Parlākimedi and Berhampur, and 111 private schools. Of the public institutions, 96 were managed by the Educational department, 100 by Local boards or municipalities, 951 were aided, and 322 unaided. They had 2,668 girl pupils, but all except 4 of these were in primary classes. The District is the most backward in the Presidency in female education, only 1·7 per cent. of the girls of school-going age being under instruction. Among Musalmāns, who form a smaller proportion of the population than anywhere else in the Presidency, the percentages were 76·4 for males and 19·4 for females. About 1,700 Panchama pupils were under instruction on March 31, 1904. Most of these were in 51 schools specially maintained for them. The total expenditure on education in 1903–4 was Rs. 1,89,000, of which Rs. 52,700 was derived from fees. Of the total, 68 per cent. was allotted to primary schools.

Education.

Ganjām possesses 7 hospitals and 16 dispensaries, besides 3 police hospitals at Chatrapur, Aska, and Russellkonda, with accommodation for 110 in-patients. In 1903 the number of cases treated was 229,186, of whom 1,266 were in-patients, and 4,098 operations were performed. The expenditure was Rs. 50,000, four-fifths of which was met from Local and municipal funds. The Collector and the Special Assistant

Agent take a Hospital Assistant with them on their periodical tours in the Agency tract, and thus bring medical aid within reach of the hill tribes.

During 1903–4 the number of persons successfully vaccinated was 32 per 1,000, compared with an average for the Presidency of 30. There has been a gradual improvement in the matter in recent years. Vaccination is compulsory only in the three municipalities. The number of persons successfully operated on in the hill tracts, where there is a special establishment for the purpose, was 43 per 1,000 of the population.

[For further information regarding Ganjām see the *District Manual* by T. J. Maltby (1882), S. C. Macpherson's *Report on the Khonds* (Calcutta, 1842), and the printed reports of Mr. Russell's mission and of the Meriah Agents from 1836 to 1861.]

Ganjām Tahsīl.—*Zamīndāri tahsīl* in the north-east of Ganjām District, Madras, consisting of the KALLIKOTA, Biridi, Humma, and Pālūru estates, lying between 19° 23′ and 19° 49′ N. and 84° 56′ and 85° 12′ E., adjoining the Chilka Lake and the Bay of Bengal, with an area of 308 square miles. The *tahsīl* is a picturesque tract, sloping gradually to the sea, and dotted with low hills which cause an unusually cool climate. The population in 1901 was 95,882, compared with 88,714 in 1891. They live in 324 villages. The demand for land revenue and cesses in 1903–4 was Rs. 48,500. The deputy-*tahsīldār* in charge resides at CHATRAPUR outside the *tahsīl*. The four estates of which it is made up are heavily involved in debt.

Ganjām Town. Former head-quarters of the District in Madras to which it gives its name, situated in 19° 23′ N. and 85° 5′ E., in the Berhampur *tāluk*, at the mouth of the Rushikulya river, on the trunk road and on the East Coast Railway. Population (1901), 4,397. The town itself and the remains of the old fort, built in 1768 as a defence against the Marāthās at Cuttack, stand on rising ground; but to the north the country is low and malarious. Ganjām was formerly a seat of considerable trade, and its factory and fort were presided over by a Chief and Council and protected by a garrison. But since the removal of the head-quarters of the District to BERHAMPUR in 1815 it has declined in importance, and the handsome buildings which it once contained have either fallen into ruins or been pulled down. The removal was occasioned by an epidemic of fever which carried off a large proportion of the inhabitants, both European and native. Ganjām was once a port, but this was closed in 1887 owing to the decay in its trade. It was reopened in 1893 for landing the material required for the railway which was then being built, but was closed again in 1897. There is no possibility of its ever being used for private trading, owing to the heavy surf outside and the constant

shifting of the sandbanks round about. The chief land trade consists in the export of rice to Orissa.

Gantak.—Capital of Sikkim State, Bengal. *See* GANGTOK.

Gantarāwadi.—One of the KARENNI States, Burma.

Ganutia.—Village in the Rāmpur Hāt subdivision of Bīrbhum District, Bengal, situated in 23° 52′ N. and 87° 50′ E., on the north bank of the Mor river. Population (1901), 407. Ganutia is the centre of the silk industry of Bīrbhūm. A factory was established here in 1786 by a Mr. Frushard. After various vicissitudes, which are related in Hunter's *Annals of Rural Bengal*, this gentleman succeeded in converting the forest and waste land around Ganutia into thriving and prosperous villages, and founded factories throughout the north-east of Bīrbhūm. His head factory, which is the most imposing edifice in the District, is now the property of the Bengal Silk Company. The industry has seriously declined of late years and now employs only about 500 persons.

Garai.—The name given to the upper reaches of the MADHUMATĪ river in Bengal and Eastern Bengal, forming one of the principal channels by which the waters of the Ganges are carried to the sea, especially during the monsoon when the comparatively high level of the BRAHMAPUTRA prevents an exit by the more eastern channels. At a former period, while the Ganges was still working its way eastwards, the Garai probably formed its main eastern outlet, and during the nineteenth century there seemed a likelihood of the river reverting to this channel. The Garai, which leaves the Ganges near Kushtia in Nadiā District (23° 55′ N. and 89° 9′ E.), flows in a southerly direction from Ganeshpur to Haripur, about 32 miles; it is 420 yards wide in the rains, and navigable by steamers all the year round. It is spanned by a fine railway bridge of the Eastern Bengal State Railway.

[For an account of the history of this river see Fergusson's 'Some Recent Changes in the Delta of the Ganges,' *Journal of the Geographical Society*, vol. xviii, pp. 321 seq., and Hunter's *Statistical Account of Farīdpur*, pp. 265 seq.]

Garamur.—Village in Sibsāgar District, Eastern Bengal and Assam, situated in 26° 59′ N. and 94° 9′ E., in the MĀJULI Island. It is the site of one of the three colleges or *sattras*, which are held in highest estimation by the Assamese. The Gosains or high priests of these *sattras* exercise great influence over the people, but they are loyal supporters of the Government and display an enlightened and progressive spirit. The *sattra* is chiefly supported by the offerings of its numerous disciples. It is said to have received a grant of nearly 40,000 acres of revenue-free land from the Ahom Rājās; but the proofs of title were destroyed by the Burmans, and the grants lapsed, as the Gosain, who was living at Brindāban, took no steps to support

his claims when they were under examination by Government. A grant of 331 acres of revenue-free land has, however, recently been sanctioned by the Government of India.

Garauthā.—North-eastern *tahsīl* of Jhānsi District, United Provinces, conterminous with the *pargana* of the same name, lying between 25° 23′ and 25° 49′ N. and 79° 1′ and 79° 25′ E., with an area of 466 square miles. Population fell from 88,926 in 1891 to 66,963 in 1901, the rate of decrease being the highest in the District. The density of population, 144 persons per square mile, is below the District average. There are 153 villages, but no town. The demand for land revenue in 1903–4 was Rs. 1,25,000, and for cesses Rs. 24,000. On the north-west and north the Betwā forms the boundary, while the Dhasān flows on the eastern frontier to join it. The soil is chiefly *mār* or black soil, becoming very poor near the ravines which scar this tract in every direction. For the last thirty years the growth of *kāns* (*Saccharum spontaneum*) has thrown a large area out of cultivation. In 1903–4 the cultivated area was 194 square miles, but there was practically no irrigation.

Garbyāng.—Station in Almorā District, United Provinces, on the trade route from TANAKPUR to Tibet, situated in 30° 8′ N. and 80° 52′ E., near the junction of the Kuthi Yānkti and Kālāpānī, which form the Kālī or Sārda river. The road divides at this place, one branch going to the Lipū Lekh pass, and another to the Lampiya Dhurā and Mangsha Dhurā passes. A *peshkār* is posted here to watch the interests of traders and pilgrims, and there is a branch of the American Methodist Mission. A small school has 36 pupils.

Garden Reach.—Town in the District of the Twenty-four Parganas, Bengal, situated in 22° 33′ N. and 88° 19′ E., immediately below Calcutta, of which it forms a suburb, on the east bank of the Hooghly river. The suburb is divided for administrative purposes into two portions, the Nemuckmahal Ghāt road dividing the 'Added Area' of Calcutta on the east from the Garden Reach municipality on the west. The population of the latter in 1901 was 28,211. Hindus number 12,181, Musalmāns 15,779, and Christians 187. The site of the Alīgarh fort, taken by Clive in December, 1756, during the operations for the recapture of Calcutta, may still be seen. The suburb was formerly a favourite European quarter, and contains many fine houses built between 1768 and 1780. The residence of the late ex-king of Oudh was fixed here, and many of his descendants still inhabit the place. Garden Reach is now an important industrial suburb of Calcutta, containing jute-mills, a cotton-mill, and dockyards. Until 1897 the Garden Reach municipality formed part of the South Suburban municipality, but was separated from it in that year. The income during the seven years ending 1903–4 averaged Rs. 49,000,

and the expenditure Rs. 46,000. In 1903–4 the income was Rs. 56,400, including Rs. 25,000 derived from a tax on houses and lands, Rs. 14,000 from a conservancy rate, and Rs. 11,000 from a water rate. The expenditure was Rs. 55,700. The municipality is now supplied with filtered water from the Calcutta mains.

Gargaon. Old Ahom capital in Sibsāgar District, Eastern Bengal and Assam. *See* NĀZIRĀ.

Garha. Petty State in the Central India Agency, under the Resident at Gwalior, with an area of about 44 square miles, and a population (1901) of 9,481. It was originally included in the RĀGHUGARH State; but family feuds necessitated the grant of a separate *jāgīr* to the various members of the Khīchī family, and in 1843 Bijai Singh obtained a *sanad* for fifty-two villages, with a revenue estimated at Rs. 15,000. The State is much cut up by small hills: but the soil in the valleys is fertile and bears good crops, including poppy, which is a valuable asset, the opium being exported to Ujjain. The chief is a Khīchī Chauhān Rājput of the Rāghugarh family, and bears the title of Rājā. The present holder, named Dhīrat Singh, succeeded in 1901. As he is a minor, the State is managed by a *kāmdār* under the direct supervision of the Resident. The total revenue is Rs. 22,000, and the expenditure on administration Rs. 13,000. The administrative head-quarters are at Jāmner (population, 901), where a dispensary and a school are situated. The chief place is Garha, situated on the eastern scarp of the Mālwā plateau in 25° 2′ N. and 78° 3′ E. It also has a school and a dispensary.

Garhākotā. Town in the Rehlī *tahsīl* of Saugor District, Central Provinces, situated in 23° 46′ N. and 79° 9′ E., at the junction of the Gadherī and Sonār rivers, 28 miles from Saugor on the Damoh road. Population (1901), 8,508. In the fork of the Sonār and Gadherī rivers stands an old fort, which must formerly have been of great strength. It was held by the rebels and stormed by Sir Hugh Rose in 1858. Two miles from the town in the forest is a high tower which formed part of the summer palace of a Bundelā king, and is said to have been constructed in order that both Saugor and Damoh might be visible from its summit. The municipality of Garhākotā has recently been abolished, but a town fund is raised for sanitary purposes. Garhākotā is now best known as the site of an important cattle fair held annually in the month of February. It contains vernacular middle and girls' schools, and a dispensary.

Garhchirolī. — *Tahsīl* of Chānda District, Central Provinces, constituted in 1905. It was formed by taking the *zamīndārī* estates of Bramhapurī, and those of Chānda with the exception of Ahiri, together with 1,457 square miles of the *khālsa* or land held in ordinary proprietary right, from the east of the Chānda and Bramhapurī *tahsīls*.

The area of the *tahsīl* is 3,708 square miles, and the population of this area in 1901 was 155,214, compared with 207,728 in 1891. The density is 42 persons per square mile. The *tahsīl* contains 1,098 inhabited villages. Its head-quarters are at Garhchiroli, a village of 2,077 inhabitants, 51 miles from Chānda town by road. The *tahsīl* includes 19 *zamīndāri* estates, lying to the east and south of the Wainganga river, with an area of 2,251 square miles and a population of 82,221 persons. Most of this area is hilly and thickly forested, the area of forest in the *zamīndāris* being 900 square miles. Outside the *zamīndāri* estates there are 849 square miles of Government forest. The land revenue demand in 1903–4 for the area now constituting the *tahsīl* was approximately Rs. 41,000.

Garhdiwāla.—Town in the District and *tahsīl* of Hoshiārpur, Punjab, situated in 31° 45′ N. and 75° 46′ E., 17 miles from Hoshiārpur. Population (1901), 3,652. The chief trade is in sugar. The municipality was created in 1867. The income during the ten years ending 1902–3 averaged Rs. 2,300, and the expenditure Rs. 2,200. In 1903–4 the income was Rs. 2,900, chiefly derived from octroi; and the expenditure was Rs, 2,600. It maintains a Government dispensary.

Garhī.—*Thakurāt* in the Bhopāwar Agency, Central India.

Garhi Ikhtiār Khān.—Town in the Khānpur *tahsīl* of Bahāwalpur State, Punjab, situated in 28° 40′ N. and 70° 39′ E., 84 miles south-west of Bahāwalpur town. Population (1901), 4,939. Founded by a governor of the Kalhora rulers of Sind, it was originally named Garhi Shādi Khān after him, but in 1753 a Daudputra chief wrested it from the Kalhoras. In 1806 Nawāb Bahāwal Khān II of Bahāwalpur annexed it, and founded Khānpur in its vicinity. It has a considerable trade in dates, large groves of palm-trees surrounding the town, and formerly had a great reputation for the manufacture of arms. It is administered as a municipality, with an income in 1903–4 of Rs. 1,150. chiefly from octroi.

Garhi Yāsin.—Town in the Naushahro Abro *tāluka* of Sukkur District, Sind, Bombay, situated in 27° 54′ N. and 68° 33′ E. Population (1901), 6,554. There is a considerable trade in oilseeds. The municipality, established in 1870, had an average income during the decade ending 1901 of Rs. 12,100. In 1903–4 the income was Rs. 25,000. The town contains a dispensary and two schools with 171 pupils.

Garhmuktesar.—Town in the Hāpur *tahsīl* of Meerut District, United Provinces, situated in 28° 47′ N. and 78° 6′ E., near the Ganges, on the Oudh and Rohilkhand Railway and the Delhi-Morādābād road. Population (1901), 7,616. The place is said to have been part of Hastināpur, the great city of the Kauravas; but the site now pointed out as Hastināpur is 25 miles away. It contains an ancient fort, which

was repaired by a Marāthā leader in the eighteenth century. The name is derived from the great temple of Mukteswara Mahādeo, dedicated to the goddess Gangā, which consists of four principal shrines, two on the Ganges cliff and two below it. Close by is a sacred well whose waters are said to cleanse from sin, surrounded by eighty *satī* pillars. The principal festival is held at the full moon of Kārtik, when about 200,000 pilgrims collect, the numbers being much larger at intervals of six, twelve, and forty years. The cost of the fair is met from a tax on carts and cattle, and the rent of shops. Horses were formerly exhibited, but the numbers are decreasing. On the other hand, mules are now brought in increasing numbers. The town also contains a mosque built by Ghiyās-ud-dīn Balban in 1283, and a branch of the American Methodist Mission. Garhmuktesar is administered under Act XX of 1856, with an income of about Rs. 2,000. There is little trade except in timber and bamboos, which are rafted down the river from the Dūn and Garhwāl.

Garhshankar Tahsīl. *Tahsīl* of Hoshiārpur District, Punjab, lying between 30° 59′ and 31° 31′ N. and 75° 51′ and 76° 31′ E., with an area of 509 square miles. The population in 1901 was 261,468, compared with 264,141 in 1891. GARHSHANKAR TOWN (population, 5,803) is the head-quarters. It also contains 472 villages, of which JAIJON is of some historical interest. The land revenue and cesses amounted in 1903–4 to 4·4 lakhs. The physical features of the *tahsīl* are similar to those of Hoshiārpur, except that the hills are steeper and torrent-beds less frequent. The Sutlej forms the southern boundary.

Garhshankar Town.—Head-quarters of the *tahsīl* of the same name in Hoshiārpur District, Punjab, situated in 31° 13′ N. and 76° 9′ E. Population (1901), 5,803. A fort built on the site of the present town is said to have been taken by Mahmūd of Ghazni, and subsequently given by Muhammad of Ghor to the sons of Rājā Mān Singh of Jaipur. Its inhabitants are Rājputs, who expelled the Mahtons about A.D. 1175. It possesses a considerable trade in sugar and tobacco. The municipality, founded in 1882, was abolished in 1891. The town has a vernacular middle school and a Government dispensary.

Garhwāl District.—Western District of the Kumaun Division, United Provinces, lying between 29° 26′ and 31° 5′ N. and 78° 12′ and 80° 6′ E., with an area of 5,629 square miles. It is bounded on the north by Tibet; on the south-east by Almora and Naini Tāl; on the south-west by Bijnor; and on the north-west by the State of Tehrī.

Physical aspects.

The District extends from the submontane plain across the central axis of the Himālayas to the watershed between the drainage systems of the Sutlej and the Ganges. It consists for the most part of rugged mountain ranges, which appear to be tossed about in the most intricate confusion. They can,

however, be ultimately traced to the great watershed, and by their general direction from north-east to south-west they determine the course and direction of the drainage channels. The greater part of the District is included in the basin of the Ganges, the principal tributary of which is the Alaknandā. This stream is formed by the junction of the Bishangangā with the Dhaulīgangā, both rising near the watershed and flowing south-west, their upper courses being divided from that of the Mandākinī, which joins the Alaknandā at Rudraprayāg, by a massive spur of mountains. At Devaprayāg, on the border of Tehrī State, the Alaknandā meets the Bhāgīrathi, their valleys being separated by another lofty range. The combined stream now assumes the name of the Ganges, and from the point of junction separates Garhwāl from Tehrī and subsequently from Dehra Dūn. The great central axis of the Himālayas, lying about 30 miles south of the watershed, includes two ranges of lofty snow-clad hills on either side of the Alaknandā. From the eastern range, which culminates in the giant peak of NANDĀ DEVĪ, a series of spurs divides the valleys of the Birehī, Mandākinī, and Pindar, all tributaries of the Alaknandā, from each other. Farther south the Dūdātolī range forms the boundary between the Ganges basin and the Rāmgangā, which drains the south-east of the District. The principal peaks are: Trisūl, 23,382 feet; Dūnagiri, 23,181 feet; Kāmet, 25,413 feet; Badrīnāth, 23,210 feet; and Kedārnāth, 22,853 feet. The rivers flow in narrow valleys which may rather be described as gorges or ravines, and in their lower courses some of them are used for rafting timber. There are a few small lakes; but the GOHNĀ Lake is the only one of importance. A narrow strip of Bhābar or waterless forest land, some 2 or 3 miles in breadth, intervening between the southern base of the hills and the alluvial lowlands of Rohilkhand, forms the only level portion of the District.

On the south the narrow sub-Himālayan zone displays a great sequence of fresh-water deposits resembling the geological formation of the SIWĀLIKS. The outer Himālayan zone and central axis include enormous tracts of highland country and snowy peaks, composed in their southern half of slates, massive limestones sometimes succeeded by bands of mesozoic (?) limestone, and Nummulitic shales, and in their more northern portion of schistose slates, quartz-schists, and basic lava-flows. The schistose slates pass into mica-schists, with isolated patches of gneissose granites or massive bands, as along the central axis. To the north of the central axis, the Tibetan watershed, in the neighbourhood of the Nītī pass, introduces an entirely new and vast sequence of marine strata from Silurian to Cretaceous, including a fine development of Trias.

The Bhābar and the hills immediately above it are covered with a dense forest growth, the principal tree being *sāl* (*Shorea robusta*).

From about 4,000 to 6,000 feet the place of *sāl* is taken by *chīr* (*Pinus longifolia*), which then yields to the *bānj* oak (*Quercus incana*) and the tree rhododendron. Above 8,000 another oak, *tilonj* (*Quercus dilatata*), is found, and above 10,000 feet the chief trees are various firs, yew, and cypress. The birch grows up to 12,000 feet, but beyond this limit lies a vast expanse of grass, variegated in the summer by rich flowers of Alpine species.

Elephants are found in the Bhābar, and tigers in the same locality and in the lower hills. Leopards are common in all parts of the District. Three kinds of bear are known, and other beasts of prey include the wolf, jackal, and wild dog. *Sāmbar* or *jarau* and *gural* are also found. The District is rich in bird life, and the rivers contain fish, including mahseer.

The great variations in altitude cause a corresponding diversity in the climate of different parts of the District. In the Bhābar conditions resemble those of the adjacent submontane Districts. Heat is excessive in the river valleys from March to October, while the temperature falls very low in the winter. In open situations the climate is more equable.

The maximum rainfall occurs at the outer edge of the Himālayas, and in the interior near the foot of the snows. In these localities the annual amount is about 100 inches. Where there are no high mountains the precipitation is much less, and at Srīnagar only 37 inches are received, though in places of the same altitude situated near lofty ranges the fall is as much as 50 inches. The snow-line is at about 18,000 feet in the summer, but in the winter snow falls as low as 4,000 feet in the north of the District and 5,000 feet in the south.

The early history of Garhwāl is extremely obscure. Part of it was probably included in the kingdom of Brahmapura referred to by the Chinese traveller of the seventh century. The earliest dynasty of which records exist was that of the Katyūrīs. According to tradition, they had their origin at Joshīmath in the north of the District, and thence spread to the south-east and into Almorā. The country was subsequently divided among a series of petty chiefs. Local tradition states that a Rājā, named Ajaya Pāla, reduced the petty chiefs about the middle or close of the fourteenth century and settled at Dewalgarh; but a successor, named Mahīpat Shāh, who lived early in the seventeenth century and founded Srīnagar, was possibly the first of the line to establish real independence. The Garhwāl Rājās first came into conflict with their neighbours, the Chands of Almorā, about 1581, when Rudra Chand attempted, but without success, to invade Garhwāl. Subsequent attempts were also repulsed. In 1654 Shāh Jahān dispatched an expedition to coerce Rājā Pirthī Shāh, which ended in the separation of Dehra Dūn from Garhwāl. The same Rājā, a few years later, robbed the unfortunate refugee, Sulaimān Shikoh,

History.

son of Dārā Shikoh, and delivered him up to Aurangzeb. Towards the close of the seventeenth century the Chand Rājās again attempted to take Garhwāl, and Jagat Chand (1708–20) drove the Rājā from Srīnagar, which was formally bestowed on a Brāhman. Pradīp Shāh (1717–72), however, recovered Garhwāl, and held the Dūn till, in 1757, Najīb Khān, the Rohilla, established his authority there. In 1779 Lalat Shāh of Garhwāl defeated the usurper who was ruling in Kumaun, and allowed his son, Parduman Shāh, to become Rājā of that territory. A few years later, on the death of his brother, Parduman Shāh held both Garhwāl and Kumaun for a year; but he then preferred the more certain tenure of his own dominions to the intrigues of Almorā, and retired to Srīnagar. The Gurkhas conquered Almorā early in 1790 and made an attempt on Garhwāl, but withdrew owing to trouble with the Chinese in Tibet. Internal dissensions prevented another advance for some years; but in 1803 the Gurkhas overran Garhwāl and also took Dehra Dūn. Parduman Shāh fled to the plains and collected a force, but perished near Dehra with most of his Garhwālī retainers in 1804. The Gurkha rule was severe; and when the British conquered Kumaun in 1815, in consequence of aggressions by the Gurkhas, the change was hailed with delight by the hill-men. The whole Division was administered directly by a Commissioner; but in 1837 Garhwāl became a separate subdivision under an Assistant Commissioner, and in 1891 was constituted a District.

The District contains a number of temples held sacred by the Hindus of all parts of India. Among these may be mentioned the shrines of BADRĪNĀTH, JOSHĪMATH, KEDĀRNĀTH, and PĀNDUKESHWAR. At Gopeshwar an iron trident 10 feet high bears an inscription of the twelfth century, recording the victories of Anekamalla, possibly a ruler of Nepāl. Many copperplates are preserved in temples or by individuals, which are valuable for their historic interest.

Population.

Garhwāl contains 3 towns and 3,600 villages. Population is increasing steadily. The numbers at the last four enumerations were as follows: (1872) 310,288, (1881) 345,629, (1891) 407,818, and (1901) 429,900. The whole District forms a single *tahsīl*, sometimes called Paurī from its head-quarters. The towns are the cantonment of LANSDOWNE, SRĪNAGAR, and KOTDWĀRA. PAURĪ, the District head-quarters, is a mere village. The following table gives the chief statistics of population in 1901:—

Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
	Towns.	Villages.				
5,629	3	3,600	429,900	76	+ 5·4	27,410

Nearly 99 per cent. of the total are Hindus, and Musalmāns number only 4,400. The density of population is low, as usual in Himālayan tracts. About 97 per cent. of the people speak the Garhwālī dialect of Central Pahārī.

More than 97 per cent. of the total Hindu population are included in three castes: Rājputs or Kshattriyas (245,000), Brāhmans (101,000), and Doms (68,000). The two former are subdivided into the descendants of settlers from the plains, and members of the great Khas tribe who are regarded as autochthonous. The Doms are labourers and artisans. Garhwālīs and Kumaunīs still preserve a certain degree of antagonism towards each other. The District is essentially agricultural, and agriculture supports 89 per cent. of the total. Two battalions of the Indian army are recruited entirely in Garhwāl.

There were 588 native Christians in 1901, of whom 536 were Methodists. The American Methodist Mission was founded in 1859 and has a number of stations in the District.

Agriculture.

The most striking feature of the cultivated area is its scattered nature. The richest land lies in the river valleys where these widen out, and in places the rivers have left a series of terraces. Elsewhere cultivation is confined to those parts of the hill-side which are the least steep, and even here terracing is required, each field being protected by an outer wall of stones. There is also some temporary cultivation, called *katil*, in which the land is not terraced. The shrubs and bushes are cut and burnt, and the land is dug with a hoe. After cropping it remains fallow for a number of years. In the extreme north crops are sown in the spring and reaped in the autumn; but in the greater part of the District two crops are grown, ripening in the spring and in the autumn, as in the plains. The Bhābar or submontane tract resembles the plains, but cultivation here entirely depends on irrigation.

The tenures are those of the Kumaun Division. Detailed agricultural statistics are not maintained, but the total cultivated area in 1903–4 was 410 square miles. The principal food-crops are rice, *marua* (*Eleusine coracana*), *jhangorā* (*Oplismenus frumentaceus*), wheat, and barley. The District also produces small millets, amaranth, sesamum, peas, pulses, pepper, ginger, turmeric, and mustard. Rice grows up to about 5,000 feet, and *jhangorā* and *maruā* to about 6,000. Above that altitude amaranth is the chief autumn crop. Only one crop can be grown annually above 8,000 feet, and here *phāpar* or buckwheat (*Fagopyrum tataricum*) is largely cultivated. Wheat grows up to 10,000 feet, and barley and mustard up to 11,000 feet. In the Bhābar, maize, tobacco, and cotton are also cultivated.

Between 1864 and 1896 the cultivated area increased by about 50 per cent., and the rise in population is causing a further increase.

Apart from the fact that the area under the plough is rising, the cultivated land is also steadily improving. The soil on the hill-sides is usually very thin: and when fresh land is broken up, only a small excavation can be made in the first year. The soil is gradually improved by the weathering of rock and the annual cultivation, and the fields become broader and higher, the outer walls being gradually raised. There have, however, been no improvements in agricultural methods, and no new staples have been introduced. Advances from Government are taken only in adverse seasons, and 2¼ lakhs was advanced in 1890–1 and 1892–3.

About two per cent. of the cultivated area is irrigated. In the hills irrigation is usually supplied by small channels conducted from rivers along the hill-sides to the fields. Only the smaller streams are used for this purpose, and the supply is effected entirely by gravitation, no artificial means of lifting being employed. Cultivation in the Bhābar is entirely dependent on irrigation, which is supplied by small canals.

Forests.

The outer ranges of hills are covered with forests which have been formally 'reserved' and are administered by officers of the Forest department. Their area is 579 square miles. Bamboos and *sāl* are the chief products, and firewood and grass are also extracted. The hills near Lansdowne are covered with pines and oak. In addition to these forests, the whole of the waste land has been declared 'District-protected' forest in charge of the Deputy-Commissioner, and simple regulations for conserving the forests have been framed, with beneficial results. The 'reserved' forests belong to the Ganges and Garhwāl Forest divisions, and bring in a revenue of about 1·5 lakhs annually, while the District forests yield about Rs. 20,000.

Copper and iron were formerly worked to some extent, but only for local use, and little is extracted now. Minute quantities of gold are found in some of the rivers. Lead, arsenic, lignite, graphite, sulphur, gypsum, soapstone, asbestos, alum, and stone-lac have also been observed.

Trade and communications.

The manufactures of the District are few and unimportant. Hemp is woven into coarse cloth and rope, and blankets are made. Leathern goods, mats, baskets, wooden bowls, and glass bangles are made for local use. Stone is carved in one or two places.

The most important trade is with Tibet. Salt, wool, sheep and goats, ponies, and borax are imported, and grain, cloth, and cash exported. The trade is chiefly in the hands of the Bhotiās, who alone are permitted to cross the frontier, and the merchandise is carried on yaks, *jūbas* (a cross between the yak and the cow), asses, sheep, and goats, or even by the Bhotiās themselves. In the west of the District there is

some trade with the State of Tehrī, which exports grain in return for salt from Tibet. The borax from Tibet and some portion of the other imports are taken to Kotdwāra or Rāmnagar at the foot of the hills. Other exports include *ghī*, chillies, ginger, and turmeric, the produce of the lower valleys, and forest products. The resources of the District are considerably increased by the pilgrim traffic to the sacred shrines, and by the money earned by the hundreds of men who work as coolies in the hill stations of Simla, Nainī Tāl, and Mussoorie throughout the summer. SRĪNAGAR and KOTDWĀRA are the two chief marts in the District, but most of the trade is done in villages.

A branch of the Oudh and Rohilkhand Railway from Najībābād to Kotdwāra just reaches the foot of the hills. There are 1,063 miles of road, of which only one mile is metalled. Of the total, 462 miles are maintained by the Public Works department, 352 miles being repaired at the cost of Provincial revenues. Avenues of trees are maintained on 6 miles. The roads are almost entirely bridle-paths, and in places are barely practicable for laden animals; but a cart-road is under construction from Kotdwāra to Lansdowne. The pilgrim route and the roads from Kotdwāra to Lansdowne and Srīnagar are the chief tracks.

Famine.

Garhwāl is more subject to distress from drought than the neighbouring District of Almorā; but the scarcity is usually local. In 1867 the spring crops failed in the southern half of the District; Government advanced Rs. 10,000, and the people carried up grain from the Bhābar. The scarcity of 1869–70 was little felt, as the export of grain was forbidden. When traffic was allowed, large profits were made by the export of grain to Bijnor. The District suffered severely in 1877–8, when many deaths occurred from privation. In 1889–90 both the autumn and spring crops failed, and Government imported grain and gave advances. A similar failure in 1892, which affected most of the District, was met in the same way. In 1896 relief works were opened and Rs. 27,000 was spent: but the works were abandoned when the rate of wages was reduced below the market rate.

Administration.

The Deputy-Commissioner is assisted by three Deputy-Collectors recruited in India, of whom one is stationed at head-quarters, one at Lansdowne, and one at Chamolī. Each of these is in charge of a subdivision of the District, the limits of which can be varied by the Deputy-Commissioner. There is only one *tahsīldār*, who is posted to Paurī, the District head-quarters.

The Deputy-Commissioner, the Deputy-Collectors, and the *tahsīldār* all have civil, revenue, and criminal powers, the first named being District Judge. The Commissioner of Kumaun sits as a High Court in civil cases and as a Sessions Judge. Crime is very light.

The short rule of the Gurkhas was sufficiently harsh to cause a great diminution in the prosperity of Garhwāl. A formal settlement of the

land revenue was indeed made, but the local officers disregarded it. In the last year of the Gurkha government only Rs. 37,700 could be collected, out of a demand of Rs. 91,300. The first British settlement was made in 1815, as a temporary arrangement for one year, by farming whole *parganas* to the *pargana* headmen for the sum collected in the previous year, which yielded Rs. 36,000. Succeeding settlements were made by villages; but the revenue was still fixed on the basis of previous collections for a whole *pargana* at a time, and was distributed over villages by the village headmen. Six revisions were carried out between 1816 and 1833, and the revenue rose to Rs. 69,200. In 1822 the first attempt was made to prepare a rough record-of-rights, which consisted merely of a statement of the nominal boundaries of each village, an enumeration of the blocks of cultivation with the estimated area of each, and the names of the proprietors. In 1837 Garhwāl was placed in charge of a separate officer temporarily subordinate to the Commissioner of Bareilly, who made the first regular settlement. Each village was inspected and a fresh estimate was made of the cultivated area, which was divided into six classes, according to its quality. The new demand was fixed for twenty years on a consideration of this estimate and of the previous fiscal history of the village, the total amounting to Rs. 68,700. At the same time a careful record-of-rights was prepared in great detail, and was the means of settling innumerable disputes. The next revision was preceded by a complete measurement of the cultivated area, and was carried out on a new plan. It was assumed, after calculating the out-turn of the principal crops, that terraced land generally was worth so much an acre. Land was divided into five classes, and a scale of relative value was fixed. The valuation was made by reducing the total area to a common standard and applying the general rate; but other checks were also used, and in particular the population of each village was considered. The revision was completed in 1864, and the demand was raised from Rs. 69,300 to Rs. 96,300. The revenue was collected in full with an ease unknown in any District of the plains. In 1890 preparations commenced for a new revision which was to be based on a scientific survey; but after a year's experience it was found that a complete survey would cost 5 lakhs, and the cadastral survey was completed for only 971 square miles. A modification of the system followed in the plains, by which villages are classified in circles according to their general quality, was introduced; but on the whole the methods of the previous settlement were adhered to, and a new valuation of produce and a revised scale of relative values were used to calculate the land revenue. In the area which was not surveyed cadastrally, the assessment was first fixed for each *pattī* (a division of a *pargana*) and distributed in consultation with the village headmen. In the extreme north, the produce of the neigh-

bouring jungles was also taken into account. The result was a total assessment of Rs. 1,66,000. The small Bhābar cultivation is treated for the most part as a Government estate on which rent is fixed by the Deputy-Commissioner. The gross revenue of the District is included in that of the KUMAUN DIVISION.

There are no municipalities in Garhwāl, but two towns are administered under Act XX of 1856. Beyond the limits of these, local affairs are managed by the District board, which in 1903–4 had a total income of Rs. 61,000, chiefly derived from a grant from Provincial revenues. The expenditure in the same year was Rs. 64,000.

Regular police are permanently maintained at Srīnagar and at Kotdwāra, and during the pilgrim season at six other places. The whole force consists of 11 subordinate officers, 130 constables, and 6 town police, and is under the District Superintendent of Kumaun. Elsewhere there are no police, but the *patwāris* have powers corresponding to those of sub-inspectors in the plains. The District jail contained a daily average of 12 prisoners in 1903.

Garhwāl takes a very high place as regards the literacy of its inhabitants, of whom 6·4 per cent. (13 males and 0·2 females) could read and write in 1901. The number of public schools increased from 59 in 1880–1 to 76 in 1900–1, and the number of pupils from 2,746 to 2,813. In 1903-4 there were 118 such schools with 4,527 pupils, of whom only 15 were girls. All the pupils but 187 were in primary classes. The District also contained three private schools with 350 pupils. Two schools are managed by Government, and 101 by the District board, which contributed Rs. 22,000 out of a total expenditure on education of Rs. 31,000. Receipts from fees were only Rs. 1,200.

There are 10 hospitals and dispensaries with accommodation for 84 in-patients. In 1903 the number of cases treated was 58,000, including 653 in-patients, and 1,514 operations were performed. The expenditure amounted to Rs. 12,000, about Rs. 10,000 of which is derived from endowments of land called *sadābart*.

About 41,000 persons were successfully vaccinated in 1903–4, representing the very high proportion of 95 per 1,000 of population.

[*N.-W. P. Gazetteers*, vols. x–xii, 1882–6 (under revision); E. K. Pauw, *Settlement Report*, 1896.]

Garhwāl State.—State in the United Provinces. *See* TEHRĪ STATE.

Garmali-Moti.—Petty State in KĀTHIĀWĀR, Bombay.

Garmali-Nāni.—Petty State in KĀTHIĀWĀR, Bombay.

Gāro Hills.—District in the south-western corner of Assam, lying between 25° 9′ and 26° 1′ N. and 89° 49′ and 91° 2′ E., with an area of 3,140 square miles. It is bounded on the north by Goālpāra District; on the east by the Khāsi and Jaintiā Hills; and on the west

and south by the Eastern Bengal Districts of Rangpur and Mymensingh. As its name implies, the greater portion of the District consists of hills, which form the western extremity of the range dividing the valleys of the Brahmaputra and the Surmā. These hills rise sharply from the plain on the south, and attain their highest elevation in the Turā and Arbela ranges, which lie parallel to one another, east and west, near the centre of the District. The highest peak, Nokrek (4,652 feet), is a little to the east of Turā station. On the north a succession of low hills fall away towards the Brahmaputra. The ranges include many steep ridges separated from one another by deep valleys, and, except where they have been cleared for cultivation, are covered with dense forest. At the foot of the hills is a fringe of level land, into which outlying spurs project, but which otherwise does not differ from the adjoining plains. The principal river is the SOMESWARI, which rises to the north of Turā station and falls into the Kāngsa river in Mymensingh. Other important streams flowing towards the south are the Bhugai, Nitai, and Maheshkhāli, all of which are used for floating timber, while from the northern side of the watershed the Krishnai, Dudhnai, Jinjiram, and other minor streams fall into the Brahmaputra. There are no lakes or *bhīls* in the hills, but near Phulbāri lies a large marsh, which is leased as a fishery. The general appearance of the District is wild and picturesque. Some of the rivers flow through rocky gorges, which are overgrown with trees, creepers, and giant ferns to the water's edge, and nowhere is the scenery tame or uninteresting. On a clear day a magnificent view over hill and plain is obtained from the summit of Turā hill, and the course of the Brahmaputra can be traced for many miles.

Physical aspects.

The greater portion of the District is formed of gneissic rock, overlaid by sandstones and conglomerates belonging to the Cretaceous system. On the top of these rest limestones and sandstones of Nummulitic age, while sandstones of Upper Tertiary origin form low hills along the Mymensingh border.

In their natural condition the hills are covered with dense forest, most of which is evergreen, though *sāl* and other deciduous trees are also found. Dense bamboo jungle springs up on land which has been cleared for cultivation and then left to fallow, and the bottoms of the valleys are often covered with high reeds and grass.

The hills abound in game, including elephants, tigers, leopards, bears, bison, deer, and a species of wild goat or serow (*Nemorhaedus bubalinus*); and in the low country buffalo and occasionally rhinoceros are found. In 1904, 17 persons were killed by wild animals, and rewards were paid for the destruction of 50 tigers and leopards and 54 bears. Since 1878 elephants have been hunted almost every year by the Government

Khedda department, about 190 animals being annually captured; but operations have recently been suspended, to allow the herds a little rest. Small game include peafowl, jungle-fowl, partridges, snipe, pheasants, and hares; while excellent mahseer fishing is to be obtained in the rivers.

The whole of the District is malarious and unhealthy, and *kala azār* here made its first appearance in Assam. This disease is an acute form of malarial poisoning, which has been a cause of dreadful mortality in the Brahmaputra Valley. The elevation is not, as a rule, sufficient to produce any material reduction in the temperature; but the heavy rainfall, and the evaporation which goes on over the immense expanse of forest, tend to cool the air during the rainy season. The rainfall is recorded only at Turā, where about 125 inches usually fall in the year. As in the rest of Assam, there is heavy rain in March, April, and May, a time when in Northern India precipitation is at its minimum.

The earthquake of 1897 was felt very severely in the Gāro Hills, but as there are no masonry buildings in the District, the actual damage done was less than in other places. Violent storms frequently pass over the country at the foot of the hills in March and April. In 1900 two cyclones swept over this portion of the District, uprooting trees and destroying everything in their path. Fourteen persons were killed and nine injured, but more damage was done in the neighbouring District of Goālpāra.

History.

Practically nothing is known of the early history of the District. Ethnologically the Gāros are a section of the great Bodo race, which at one time occupied a large part of the valley of the Brahmaputra, and were probably driven from the plains into the hills by early Hindu invaders from Bengal. The earliest notices of the Gāros describe them as being in a state of intermittent conflict with the *zamīndārs* of the large estates lying at the foot of the hills. These *zamīndārs* were, in all probability, themselves sprung from the great Bodo stock to which the Gāros belong, but in power and civilization had advanced far beyond their highland kinsmen. The exactions levied by the subordinates of these border chiefs irritated the hillmen, and the belief that the spirits of their headmen required the souls of others to attend them in the next world acted as a further incitement to the dispatch of raiding parties. At the end of the eighteenth century, the Gāros inhabiting the outer ranges had been brought to some extent under the authority of the *zamīndārs*, but the villages in the interior were entirely independent. As early as 1790 the British Government had tried to put an end to these disturbances by appointing one of the most powerful Gāro chiefs a *zamīndār* under the Company, but their efforts were frustrated by the turbulence of the Goālpāra *zamīndārs*. In 1816 Mr. Scott was deputed

to the frontier, and steps were taken to release the tributary Gāros from the control of the Bengali landlords. It was difficult, however, to put down all oppression, and the hillmen continued to be turbulent. In 1848 an expedition was sent into the hills to punish the Dasanni Gāros for having murdered one of their headmen, with all his family, because he attempted to collect the tribute due from them to Government. In 1852 seven Gāro raids took place, in which 44 persons were killed, and a blockade was established along the frontier, which produced some effect; but in 1856 the tribes broke out again and successive raids were made upon the plains. Between May, 1857, and October, 1859, nine incursions were made into Goālpāra and 20 heads were taken. An expedition was dispatched into the hills in 1861, the effects of which lasted for a few years; but in 1866 a most murderous raid was made into Mymensingh District, and it was decided to post an officer, Lieutenant Williamson, in the hills. The success with which this experiment was attended was very striking. Raids ceased, and many independent villages submitted of their own accord. The hills were constituted a separate District in 1869. In 1870 the survey, which had been carried through the neighbouring hills, entered the District, and it was determined to take this opportunity of exploring independent Gāro territory. No opposition was offered at first, but in the following year a survey cooly was seized and murdered by the villagers of Rongmagiri. An expedition was accordingly dispatched at the beginning of the cold weather, and in the summer of 1872 some villages, which had attacked Gāros who had assisted the expedition, were punished by the Deputy-Commissioner. It was then decided that the whole of the country should be brought under control; and in 1872–3 three detachments of police marched through the independent territory from the south, north, and west. Little resistance was experienced, and since that date the history of the District has been one of profound peace.

Population.

The population of the Gāro Hills rose from 121,570 in 1891, the first year in which a regular Census was taken, to 138,274 in 1901, or by 13·7 per cent. The people live in 1,026 villages, and the density of population is 44 persons per square mile. About 82 per cent. of the population in 1901 were still faithful to their animistic beliefs, 10 per cent. were Hindus, and 6 per cent. Muhammadans. The head-quarters of the American Baptist Mission are at Turā, and almost all the native Christians (3,629) are members of this sect. Gāro is the language of 77 per cent. of the population, and 5 per cent. use Rabhā, which is also a dialect of the Bodo group.

As the name of the hills implies, the great majority of the population are Gāros, who numbered 103,500, or 75 per cent. of the whole. To these should be added nearly all the native Christians. Of the same stock are the Rabhās (7,700), the Kochs (4,300), and the Haijongs

(5,300), though the last two profess to be Hindus by religion. The language spoken by the Haijongs is akin to Bengali, but from their appearance it is evident that they have a large admixture of Gāro blood. The economic organization of the hillmen is naturally of the most simple character, and 96 per cent. of the population returned agriculture as their means of livelihood in 1901.

Linguistically, the Gāros belong to the Bodo group, and there seem good grounds for supposing that they are members of the great Tibeto-Burman race, whose cradle is said to have been north-western China between the upper waters of the Yang-tse-kiang and the Ho-ang-ho. The Tibeto-Burmans sent forth successive waves of emigrants, who spread down the valley of the Brahmaputra and the great rivers, such as the Chindwin, the Irrawaddy, and the Mekong, that flow towards the south. The Gāros are believed to be closely related to the Kāchāris, Rabhās, Mechs, and other tribes inhabiting the Assam Valley, but to belong to a wave of immigrants subsequent to, and distinct from, that which left the Khāsis in the hills to the east. According to their own traditions, they came originally from Tibet and settled in Cooch Behār. From there they were driven to the neighbourhood of Jogighopā, where they remained 400 years, but were again compelled to fly towards the south by the king of the country and his ally, the ruler of Cooch Behār. Their next wanderings were towards Gauhāti, where they were enslaved by the Assamese, but released by a Khāsi prince, who settled them in the neighbourhood of Boko. The place was, however, infested with tigers, and the Gāros then moved into the hills in which they are now found.

The name they use among themselves is not Gāro, but Achikrang, 'hill people,' or Manderang, 'men.' The Gāros classify themselves by geographical divisions (*jal*) and by exogamous septs (*chachi*), sub-divided into *mahāris* or families. There are altogether about fifteen *jals*, the most important of which are the Abeng, who live to the west of Turā, the Atong in the lower, the Matchi in the central, and the Matjangchi in the upper Someswari valley, the Awi and Akawi in the low country round Dāmrā, the Chisak to the north of the Awi, the Matabeng in the hills north of Turā, and the Migam on the borders of the Khāsi Hills. The great majority of these divisions do not appear to denote racial distinctions. The Migam seem to have intermarried with the Khāsis, and the Atong have some connexion with the Kochs. There are differences of dialect, but customs, as a rule, are similar. The Abeng are the most numerous section, but the Atong have made more progress, and the Awi dialect is used in the publications of the Turā mission, as they were the first Gāros to come under missionary influence. There are two main exogamous septs, the Sangma and the Marak. A third sept called Momin is found among

the Awi. The septs are again divided into numerous families called *maharis*. There is no restriction on intermarriage between members of different *jals*, provided that they do not belong to the same sept. The village organization at the present day is of a very democratic character; but if their legends are to be believed, the Gāros were originally ruled by chiefs. In appearance they are squat and sturdy, with oblique eyes, large head, thick lips, and large and ugly features, which have a peculiarly flattened appearance. In disposition they are cheerful and friendly.

The villages are often built on the side of the hills, and are unfortified, unlike those of the Nāgās and Lushais, who prior to the British occupation of their country lived in a perpetual state of warfare. They consist, in fact, of small hamlets, containing but a few houses, and in no other District in the Province are the villages so small. The houses are chiefly constructed of bamboo, and though one end rests on the earth, the other, which overhangs the slope of the hill, is supported on bamboo posts, and is some height above the ground. They are often from 80 to 100 feet in length, and are divided into different compartments; but, owing to the absence of windows, they are dark and gloomy, and the fire smouldering on the hearth serves only to accentuate the darkness.

The Gāro costume is as scanty as is compatible with decency. The men wear a very narrow cloth, which is passed between the legs and fastened round the waist. The woman's cloth, which is also of the scantiest description, is fastened round the body below the navel, the two top corners meeting over the thigh; the bottom corners are left unfastened, as otherwise the petticoat would be too tight for comfort. The women load their ears with masses of brass earrings, and individuals have been seen with more than 60 brass rings, $6\frac{1}{2}$ inches in circumference and weighing altogether just under 2 lb., in the lobe of a single ear. The lobe, though enormously distended, was not broken; but the weight of the rings was to a great extent supported by a string passed over the head. The Gāro weapons consist of spear, sword, and shield. The sword, which is peculiar to these hills, is a two-edged instrument, the blade and handle forming one piece. The shield is composed of thin strips of bamboo woven together so as to be almost proof against a spear-thrust. The staple article of food is rice, but Gāros will eat practically anything.

The Gāros are not exclusive in matters matrimonial, and will intermarry with any persons except Jugis or sweepers. Owing to the conditions under which they live, mixed marriages are, however, far from common. The proposal comes from the family of the bride, and though his parents' consent must of course be obtained, the wishes of the person most concerned are sometimes not consulted. If he dislikes

the girl, the bridegroom runs away, and after he has done this and been recaptured twice or thrice, he is allowed to go for good and all. The essential portions of the ceremony are an address from the priest and the slaughter of a cock and hen. Divorce is recognized, and widows are allowed to marry, but are expected to marry in their husband's family. Polygamy is permitted, provided that the consent of the first wife be obtained. Contrary to the usual customs of the animistic tribes, girls who are heiresses are sometimes married before the age of puberty. Inheritance goes through the female, and property frequently passes through the daughter to the son-in-law. Where this is the case, the latter is compelled to marry his mother-in-law, if she is still alive, and a man not unfrequently occupies the position of husband towards mother and daughter at the same time. When a woman dies, the family property passes to her youngest, or occasionally to her eldest, daughter. The husband is, however, allowed to retain possession of the estate if he can succeed in obtaining one of his first wife's family as his second spouse. In spite of the liberal exposure of their persons, the women are chaste and make good and steady wives; and, as far as the orthodox standards of sexual morality are concerned, they compare favourably with the Khāsi women, their neighbours on the east, who swathe themselves in a multitude of garments.

The dead are burned and the calcined bones buried in the neighbourhood of the homestead. The villagers are feasted, and in each house can be seen a bullock which is kept fatted up in preparation for the next funeral, and serves as a perpetual *memento mori*. A post is erected near the porch in memory of the deceased, and houses which have been in the same position for many years have sometimes as many as fifty posts, standing like a gigantic sheaf of corn before them. A great man's post is carved into a rude effigy of his features, clothed in his dress of state, and further ornamented with his umbrella and his head covering, if he had one.

The Gāros appear to believe in a supreme deity and in a future life; but, as is usual in the hills, the greater part of their religious activities is devoted to the propitiation of evil spirits, who are supposed to be the cause of the misfortunes that befall them. The following is an accurate description of a Gāro sacrifice:—

'The priest squatted before a curious flat shield of split bamboo and cane, and muttered strangely to himself, as though under the influence of some drug. A villager kept dragging a kid in a circle round and round the priest and his curious god, and each time as it passed the priest dabbed it on the head with a little flour and water. Finally a little of the mixture was forced into its mouth and it was summarily beheaded. The blood was allowed to pour upon a plate of rice, which, with the tail, was offered to the deity. The rest of the animal went to form part of the feast.'

The people, as a whole, are well-to-do, and have accumulated property. Some of their most treasured possessions are metal gongs, to which they attach a fictitious value. The intrinsic worth of these articles is small, and new gongs do not cost more than a few rupees, but one collection of 60 old ones is known to have been sold for Rs. 3,000, a large price to obtain from a semi-savage community.

Agriculture.

In the hills the Gāros cultivate their land on the system known as *jhum*. A spot of land is selected on the hill-side, and the jungle cut down during the cold season. Towards the end of March, the trees and brushwood are burned as they lie, and the rice crop is planted in April at the commencement of the rains. Shortly afterwards, the seeds of vegetables, cotton, pepper, and pulses are sown in the same clearing; and each crop is reaped in rotation as it comes to maturity. Miscellaneous crops include potatoes, *arhar* (*Cajanus indicus*), reared as food for the lac insect, ginger, indigo, and turmeric. In the second year, rice only is grown; and after two years' cultivation the clearing is abandoned and suffered to lie fallow for about ten years. Neither plough nor spade is used, except in the few Hinduized villages bordering on the plains. The sole implements of agriculture are a short *dao* fixed in a long handle with which jungle is cleared, and a small hoe. The cotton is short in staple and poor in quality, but contains a small proportion of seed and has been found suited for mixing with woollen fabrics.

There are no means of ascertaining the area under cultivation in the hills; but in the submontane villages, which contain a little over one-fourth of the total population, the land is measured every year by the local revenue officials. The area under the principal crops in this tract in 1903–4 was: rice 23,000 acres, mustard 3,700, and jute 1,800 acres; but in the District as a whole cotton is the most important staple after rice. The area under cultivation has expanded with the growing population, but no figures can be quoted to show the extent to which this has taken place. Irrigation is unknown; it would be impossible in the hills except with a system of artificially constructed terraces, and in the plains it is not required. Loans are occasionally made by Government to the cultivators, as there are very few money-lenders in the District, but only small sums are thus distributed.

In the hills cattle are used only for food, and are, as a rule, fat and sturdy animals, as the Gāros, like other hill tribes, leave all the milk to the calf.

Forests.

There are eighteen patches of 'reserved' forests dotted about the District, which cover altogether an area of 139 square miles. A considerable portion of these Reserves is stocked with *sāl* (*Shorea robusta*), but the difficulty experienced in getting the timber to market has hitherto prevented them from being

worked with any success. Other valuable trees are *sam* (*Artocarpus Chaplasha*), *gomari* (*Gmelina arborea*), *paroli* (*Stereospermum chelonoides*), and *koroi* (*Albizzia procera*). On three occasions leases of the Dāmbu Reserve have been given to private persons on favourable terms; but in every case the concession was abandoned, as the holder found that he was unable to work it at a profit. The whole of the hills are covered with mixed evergreen and *sāl* forest and bamboo jungle, in which the Gāros are allowed to cultivate, and from which they may take anything which they require for their own use. Royalty must, however, be paid on all timber removed for sale. These forests are managed by the Forest department, and more timber is sold from them than from the Reserves.

Minerals.

Outcrops of coal, all of which are of Cretaceous origin, have been found in the Gāro Hills, from Samding in the north-west corner of the District to Siju, which is situated at the point where the Someswari river pierces the main range. The most important field is situated a little farther up the valley of that river in the neighbourhood of the Darangiri, but, though the quantity of coal is very large, the field has not been worked, owing to the lack of means of transport. A syndicate has recently obtained a prospecting licence. Petroleum oil has been found at Dholakhāl in the Someswari valley. There are deposits of limestone in the valley of the Maheshkhāli, and of fine potter's clay near the base of the Cretaceous rocks of the western range. None of these minerals is at present worked.

Trade and communications.

There are no special local manufactures in the hills. The Gāro women weave a coarse cotton cloth for the scanty garments of themselves and the men, and baskets and bamboo mats are also made for sale. The cloth is generally coloured with a blue dye and ornamented with red stripes. Rude pottery is made in certain villages, but all metal utensils are imported.

Trade is chiefly carried on at the small markets situated at the passes leading into the plains. The most important are: on the southern border, Khata, Mahendraganj, Dālu, Ghoshgaon, and Bāghmāra: on the north, Nibāri; and on the north-west border, Phulbāri and Singrimāri. In the hills the two chief markets are at Turā and Gārobādha. The principal articles of export are cotton, timber and other forest produce, boats, chillies, and lac from the hills, and mustard and jute from the plains; the imports received in exchange consist of rice, dried fish, cattle, goats, fowls, pigs, cloth, and ornaments. The raw cotton is bought up by Mārwāri merchants to be shipped to Sirājganj, but Turā is the only place in which they have established shops.

Two cart-roads leave Turā, one to Rowmarighāt on the Brahma-

putra, the other to Dālu on the Mymensingh border. A cart-road has also been constructed by the lessee of the Dāmbu forest to Dāmrā, a distance of 24 miles; bridle-paths run to Sālmāra and Dāmrā. Altogether, 73 miles of cart-roads and 126 miles of bridle-paths were maintained by the Public Works department in 1903-4. The remaining means of communication are the tracks made by the Gāros from one village to another.

Administration.

The District does not contain any subdivisions, and only a small staff is employed on its administration. Public works are in charge of the Executive Engineer stationed at Dhubri, and the Forest officer is usually a native subordinate. The officer in charge of the civil and military police is generally invested with magisterial powers.

The Gāro Hills are administered under a code of Regulations specially framed by the Chief Commissioner on their behalf. The High Court at Calcutta has no jurisdiction; and the Deputy-Commissioner is empowered to try civil suits of any value, and to pass sentence of death subject to confirmation by the Chief Commissioner. Petty criminal and civil cases are decided by village officers called *laskars*, who are also entrusted with the greater part of the duties assigned to the police in other Districts. The Codes of Civil and Criminal Procedure are not in force, but the courts, though not bound by the letter, are guided by the spirit of these laws. In the Gāro polity almost every form of wrong can be atoned for by the payment of pecuniary compensation; but the hillmen have no sense of a statute of limitations, and complaints are sometimes preferred with regard to offences and civil causes of action which occurred many years before. The people have now become peaceful and law-abiding, and there is little litigation either criminal or civil.

Land revenue is not assessed in the hills, but the Gāros pay a tax of Rs. 2 per house, irrespective of the area brought under cultivation. In the villages in the plains settlement is made annually with the cultivators, the ordinary rates charged being Rs. 3 per acre for homestead, Rs. 1-8-0 for transplanted rice land, and Rs. 1-2-0 for land growing other crops. About one-third of the settled area falls within the boundaries of the estates of the neighbouring *zamīndārs*, who receive 75 per cent. of the collections, but are not allowed to interfere in the management. The total revenue of the District and the revenue realized from house tax are shown in the table on the next page, in thousands of rupees.

The peace of the District is maintained by a battalion of military police, with a sanctioned strength of 24 officers and 178 men, under the command of the District Superintendent of police. The civil police force consists of one sub-inspector and 66 head constables and

men, who are employed only in the villages at the foot of the hills. There is a small jail at Turā, with accommodation for 36 prisoners.

	1880–1.	1890–1.	1900–1.	1903–4.
Revenue from house-tax	14	35	40	40
Total revenue . .	46*	1,05	1,18	1,84

* Exclusive of forest revenue.

Education is in a very backward condition. The number of pupils under instruction in 1880–1, 1890–1, 1900–1, and 1903–4 was 458, 593, 1,538, and 1,870 respectively. At the Census of 1901 only 0·8 per cent. of the population (1·5 males and 0·2 females) were returned as literate. Primary education, which is largely in the hands of the American Baptist Mission, has made considerable progress of recent years. In 1903–4 there were 94 primary schools in the District, and one training school. The number of girls under instruction was 276. Of the male population of school-going age 15 per cent., and of the females 3 per cent., were under instruction. The expenditure on education was Rs. 11,000, of which only Rs. 98 was derived from fees.

The District contains 2 hospitals and 2 dispensaries, with accommodation for 15 in-patients. In 1904 the number of cases treated was 19,000, of whom 200 were in-patients, and 300 operations were performed. The expenditure amounted to Rs. 5,000, the whole of which was met from Provincial revenues.

The Gāros are fully alive to the advantages of vaccination. In 1903–4, 77 per 1,000 of the population were protected, and nearly half the population were vaccinated between 1896 and 1900. The result is that small-pox has been almost stamped out in the hills, and deaths from that disease are very rare.

[A. Mackenzie, *History of the Relations of Government with the Hill Tribes of the North-East Frontier of Bengal* (Calcutta, 1884); Sir W. W. Hunter, *A Statistical Account of Assam* (1879); B. C. Allen, *District Gazetteer for the Gāro Hills* (1906).]

Garot.—Head-quarters of the Rāmpura-Bhānpura district and of the *pargana* of the same name in Indore State, Central India, situated in 24° 19′ N. and 75° 42′ E. Population (1901), 3,456. The town appears to have been originally a Bhīl settlement, which fell to the Chandrāwat Rājputs of Rāmpura in the sixteenth century. Historically, Garot is important as the place from which Colonel Monson commenced his retreat before Jaswant Rao Holkar, which culminated in the disaster in the Mukundwāra pass, in 1804. At Pīplia village, 4 miles north-east of Garot, Monson's rear-guard, under Lucan and

Amar Singh of Kocla, made the desperate stand against the whole Marāthā army which enabled Monson to retire. The cenotaph of Amar Singh still stands on the field; Lucan, whom Tod erroneously supposes to have been also killed, was taken to Kotah, where he died of his wounds. In 1811 Jaswant Rao Holkar was removed from Bhānpura to Garot, as the madness from which he was then suffering was attributed to a local demon, who haunted the former place; later on he was taken back to Bhānpura, and died there the same year. At one time the Sondhiās, who form the greater part of the surrounding population, caused much trouble by their turbulent behaviour, and a detachment of the Mehidpur Contingent was stationed in the town from 1834 to 1842.

Besides the *zila* and *pargana* offices and the *Sūbah's* official residence, a school, a dispensary, and an inspection bungalow are situated in the town. The decrease in prosperity has been caused by its distance from roads and railways. It has lately, however, been made the head-quarters of the district, and the Nāgda-Muttra branch of the Bombay, Baroda, and Central India Railway will pass about 3 miles east of the town. A metalled road to Chandwāsa, Bālia, and Rāmpura is under construction.

[J. Tod, *Rajasthan*, vol. ii, 'Personal Narrative,' ch. xii.]

Garothā. — *Tahsīl* in Jhānsi District, United Provinces. *See* GARAUTHĀ.

Garrauli.—A petty *sanad* State in Central India, under the Bundelkhand Agency, with an area of about 37 square miles. Population (1901), 5,231. This *jāgīr* was recognized by a *sanad* granted in 1812 by the British Government to Dīwān Gopāl Singh, Bundelā, descended from a branch of the Orchhā family. Gopāl Singh seized the *pargana* of Kotrī during the invasion of Alī Bahādur, and was one of the most active and daring of the military adventurers who opposed the occupation of Bundelkhand by the British. For years he resisted all efforts of persuasion or force to reduce him to submission, and surrendered only when he saw the absolute hopelessness of further opposition. On the conditions of a full pardon and provision in land he submitted, an additional inducement being the grant for life of eighteen villages by the Mahārājā of Pannā. The present *jāgīrdār*, Dīwān Chandra Bhān Singh, succeeded his grandfather Parīchhat as a minor in 1884, and was granted powers in 1904. In 1905, however, it was found necessary to put the administration under the chief's mother. The State contains 18 villages and a cultivated area of 11 square miles, and the revenue is Rs. 25,000. The chief place, Garrauli, is situated in 25° 5′ N. and 79° 21′ E., on the right bank of the Dhasān, 8 miles from Nowgong. Population (1901), 878.

Gārulia.—Town in the Barrackpore subdivision of the District

of the Twenty-four Parganas, Bengal, situated in 22° 49′ N. and 88° 22′ E., on the east bank of the Hooghly river. Population (1901), 7,375. It is a busy industrial place, containing jute and cotton mills. The village of SYĀMNAGAR is within the town. Gārulia was included within the North Barrackpore municipality until 1896, when it was constituted a separate municipality. The income of the municipality during the eight years since its constitution has averaged Rs. 9,000, and the expenditure Rs. 8,000. In 1903–4 the income was Rs. 18,000, including a loan of Rs. 5,000 from Government, while the same sum was realized from a tax on persons (or property tax). The expenditure was Rs. 13,000.

Gārvi.—Petty State in the DĀNGS, Bombay.

Garwā.—Town in the Palāmau District of Bengal, situated in 24° 10′ N. and 83° 50′ E., on the Dānro river. Population (1901), 3,610. Garwā is the chief distributing centre for the surplus produce of the District, and of a great part of Surgujā State. Stick-lac, resin, catechu, cocoons of *tasar* silk, hides, oilseeds, *ghī*, cotton, and iron are here collected for export; the imports are food-grains, brass vessels, piece-goods, blankets, silk, salt, tobacco, spices, drugs, &c. The market is held in the dry season on the sands of the Dānro river.

Gauhāti Subdivision.—Subdivision of Kāmrūp District, Eastern Bengal and Assam, lying between 25° 43′ and 26° 53′ N. and 90° 56′ and 92° 11′ E., on both sides of the Brahmaputra, with an area of 2,584 square miles. It had a population in 1901 of 473,252, compared with 498,544 in 1891. It contains one town, GAUHĀTI (population, 11,661), the head-quarters of the District; and 1,116 villages. The demand for land revenue and cesses in 1903–4 amounted to Rs. 10,97,000. South of the river the country is much broken up by outlying spurs of the Assam Range and by isolated hills which crop up above the alluvium, but on the north a wide plain stretches right up to the frontier of Bhutān. The centre of this plain is densely populated, and in the Nalbāri *tahsīl* there are as many as 613 persons per square mile; but near the hills stretch large tracts of waste land, and the subdivision as a whole supports only 183 persons per square mile. The decrease during the last intercensal period was due to the ravages of *kalā āzār*, malarial fever, and cholera. The average rainfall at Gauhāti is only 67 inches in the year, but nearer the hills, both on the north and south, it is as much as 75 or 80 inches. The majority of the population consist of respectable Sūdra castes, such as the Kalitā and Kewat, but a large tract lying between the Gohain Kamala Alī and the Bhutān hills is almost exclusively occupied by the Kāchāri tribe. *Sali*, or transplanted winter rice, forms the staple crop; but the subdivision was most injuriously affected by the earthquake of 1897, which covered some of the most valuable land with

deposits of sand, and increased the liability to flood, from which th District was never free, by disturbing the beds of rivers and drainag channels. Mustard and *hao*, a long-stemmed variety of winter rice, ar grown near the Brahmaputra, and in recent years jute has been raise on a commercial scale. The Kāchāris in the north irrigate their field from the hill streams; elsewhere drains and embankments rather tha irrigation channels are required. The tea industry is of comparativel small importance. In 1904 there were 19 gardens with 3,659 acre under plant, which gave employment to 7 Europeans and 2,41 natives. The subdivision contains many places which are objects o pilgrimage to the devout Hindu, such as KĀMĀKHYA, HĀJO, Basistha Umānanda, Aswakrānta opposite Gauhāti, where the footprint o Krishna is to be seen embedded in the rock, and Chitrāchal, wher there is a temple dedicated to the nine planets, which marked th eastern boundary of old Gauhāti.

Gauhāti Town (*Goa-hathi* = 'high land covered with areca-palms' —Head-quarters of Kāmrūp District, Eastern Bengal and Assan situated in 26° 11′ N. and 91° 45′ E., on both banks of the Brahma putra river. The principal portion of the town is, however, on the le or southern bank. This lies on the trunk road from Bengal to Sadiy and is the terminus of the Assam Valley branch of the Assam-Beng Railway. A line is under construction along the north bank of th Brahmaputra, which will connect the northern portion with Calcutta b the Eastern Bengal State Railway. An excellent metalled road run from South Gauhāti to Shillong, the head-quarters of the Provinc A steam ferry crosses the Brahmaputra, and the town is a port of ca for the river steamers. The population of North and South Gauhāti i 1901 was 14,244. The majority of the inhabitants, as in most of th towns of Assam, are foreigners. Modern Gauhāti is identified wit Prāgjyotishapura, the capital of king Bhagadatta, who is mentione in the Mahābhārata. Its subsequent history is uncertain, but in th sixteenth century it was included in the Koch kingdom. In th seventeenth century it was the sport of the armies of the Muhan madans and Ahoms, and in the short space of fifty years was taken an retaken no less than eight times. In 1681 the Muhammadans we driven out of Kāmrūp, and from that time onward Gauhāti becan the residence of the Ahom governor of Lower Assam. In 1786, whe Rangpur was captured by the Moamarias, the Ahom Rājā transferr his capital to Gauhāti. The extensive earthworks which protect it o the land side, the numerous large tanks, and the brick and mason remains which are found in every direction beneath the soil, all clear show that the place was originally an important city, with a considerab population, which occupied both banks of the Brahmaputra. Th portion which lies on the north of the river is said to have been bu

by Parīkshit, a Koch king who flourished at the end of the sixteenth century, and was the ancestor of the present Bijni family. By the end of the eighteenth century Gauhāti had, however, fallen from its high estate, and Buchanan Hamilton, writing in 1809, describes it as a 'very poor place.' From 1826, when Assam was ceded to the British, till 1874, when the Province was separated from Bengal, Gauhāti was the head-quarters of the Assam Division, and it is still the head-quarters of the Commissioner and the Judge of the Assam Valley Districts, as well as of the ordinary District staff. The most noteworthy event in its recent history was the earthquake of 1897, which destroyed all the Government offices and wrecked every masonry building in the place. The town has since been rebuilt, and hardly any traces are now to be seen of this great catastrophe. The situation of Gauhāti is extremely picturesque. To the south it is surrounded by a semicircle of thickly wooded hills, while in front rolls the mighty Brahmaputra, which during the rains is nearly a mile across. In the centre of the stream lies a rocky island, the farther bank is fringed with graceful palms, and the view to the north is again shut in by ranges of low hills. Such a site, though beautiful, is far from healthy, and at one time the mortality in the town was very high. Improvements in the drainage and water-supply have done much to remedy this defect, but owing to its sheltered situation and the comparatively low rainfall (67 inches) the climate in the summer is rather oppressive. In addition to the ordinary public buildings, there are a town hall, a hospital with 29 beds, and a jail with accommodation for 352 prisoners. The convicts are chiefly employed on gardening, oil-pressing, and weaving. Branches of the American Baptist Mission and of the Roman Catholic Mission are located in the town, while the numerous temples situated in Gauhāti itself and in its immediate vicinity render it an object of pilgrimage to Hindus from all parts of India.

Gauhāti was constituted a municipality, under (Bengal) Act V of 1876, in 1878, and (Bengal) Act III of 1884 was subsequently introduced in 1887. The municipal receipts and expenditure during the ten years ending 1902–3 averaged Rs. 43,000. In 1903–4 the income was Rs. 49,000, including taxes on houses and lands (Rs. 8,900), water rate (Rs. 10,000), revenue from markets and slaughterhouses (Rs. 5,400), and a contribution from Provincial revenues (Rs. 10,000). The expenditure was Rs. 51,000, the chief items being water-supply (Rs. 10,600), conservancy (Rs. 16,800), and public works (Rs. 11,200). The water-supply is pumped from the Brahmaputra, passed through filtering beds, and distributed by standpipes all over the town. Since the completion of these works in 1887, cholera, which used to be very prevalent, has almost disappeared. The town is the principal centre of trade in Lower Assam. The exports to Calcutta consist of mustard

seed, cotton, silk, cloth, lac, and other forest produce: the principal imports are salt, cotton piece-goods and thread, grain and pulse, and kerosene and other oils. Nearly the whole of the business is in the hands of Mārwāri merchants, who have recently made some attempt to work up raw material obtained from the Assamese instead of exporting it in that condition to Calcutta. Two steam mills have been started for cotton-ginning, flour-grinding, and the manufacture of mustard oil. The larger mill has a daily out-turn of about 1,200 gallons of oil. The chief educational institutions are a second-grade college—the Cotton College—which teaches up to the First Arts standard, and two high schools. The Government school was opened in 1835 and the college in 1901. In 1903-4 the college had an average attendance of 64 students.

Gaur.—Ruined city and ancient capital in Mālda District, Eastern Bengal and Assam, situated in 24° 54′ N. and 88° 8′ E., on a deserted channel of the Ganges. The date of the foundation of the city is involved in obscurity, and the whole course of its history down to the day when it was finally deserted is only to be conjectured. It is known, however, that it was the metropolis of Bengal under its Hindu kings; and local traditions connect some of its ruins with the names of Ballāl Sen and Lakshman Sen, from the last of whom it took the name Lakshmanavatī or Lakhnautī. The name Gaur is also of great antiquity, but was more strictly applicable to the kingdom (called Gauriyā Bangālā) than to the city. It is, according to Cunningham, derived from *gur*, the common name for molasses or raw sugar, for which this country has always been famous, the city being, in all probability, the great export mart for all the northern Districts in the days when the Ganges flowed past it. The recorded history of Gaur begins with its conquest in 1198 by the Muhammadans, who retained it as the chief seat of their power in Bengal for more than three centuries, and erected numerous mosques and other buildings, a few of which yet remain in a tolerable state of preservation. After the Afghān kings of Bengal established their independence, they founded about 1350 another capital, called Fīrozābād, at PANDUA, which appears to have been the seat of government till the capital was again transferred to Gaur by Jalāl-ud-dīn Muhammad Shāh seventy years later. From that time, the royal residence remained at Gaur, which was known by various names, such as Jannatābād, or the 'abode of paradise,' Fatehābād, Husainābād, and Nusratābād, the first name being given to it by Humāyūn during his residence here in 1538. After the conquest of Bengal by Sher Shāh in 1539, the seat of government was again removed to TĀNDĀ or Tānrā, a few miles south-west of Gaur, on the bank of the then main channel of the Ganges, which was gradually receding westwards; and shortly afterwards Gaur was depopulated by pestilence when Munim Khān, after defeating Daud Shāh, the last of the Afghān dynasty, who

had denied the suzerainty of the emperor Akbar, proceeded here with his army during the rainy season of 1575. Thousands of the troops and inhabitants died daily; the people were unable to bury or burn the dead: and the corpses of Hindus and Musalmāns alike were thrown into the marshes and tanks, and into the adjoining river Bhāgīrathi. The few people that survived the plague left the city; and the imperial general, who had resolved to maintain Gaur as the seat of the government and to restore its former magnificence, himself fell a victim to the general contagion. Gaur was never again populated to any extent, although various additions were made to its buildings from time to time, such as the Lukāchuri, or eastern gate of the fort, which was erected by Sultān Shujā in 1650. This prince was a disciple of Niāmat-ullah-Walī, a saint who lived in Firozpur, the southern suburb of Gaur, where his tomb still exists; and though his capital was at Rājmahāl, he appears to have spent some time in this city.

The final desertion of Gaur dates from the time when the Mughal viceroys removed the seat of government to Dacca and Murshidābād; but as late as 1683, when William Hedges visited the place, the palace and most of the buildings were fairly intact. The greatest damage done to the ruins has, however, been due to human agency. They have been a quarry not only for the brick houses of the neighbouring towns and villages, but also for the mosques, palaces, and public monuments of Murshidābād; and the towns of Old Mālda and English Bāzār have been constructed almost entirely with bricks from Gaur. Mr. Reuben Burrow, who visited the ruins in the year 1787, wrote as follows:—

'These tombs were not long ago in perfect order and were held in a manner sacred, till they were torn to pieces for the sake of stone; indeed such of the gates as happened to have no stone in them are almost perfect; but wherever a piece of stone happened to be placed, the most elegant buildings have been destroyed to get it out, so that there is now scarce a piece left except a part in the round tower, which happens to have been preserved by the peculiar construction of the building.'

Mr. Creighton, who was in charge of the indigo factory at Gomalti towards the end of the eighteenth century, wrote:—

'Rājmahāl, Mālda, and Murshidābād for centuries have been supplied from hence with materials for building, and bricks and stones are continually carried away to other parts of the country on carts, bullocks, and in boats by the natives for the purpose of modern edifices.'

According to Grant, the *Nizāmat Daftar* received Rs. 800 annually from two local *zamīndārs* as a fee for the privilege of demolishing the venerable ruins, and stripping from them their highly-prized enamelled tiles and the so-called Gaur marble. During the last fifty years, however, extensive clearances of jungle have been effected, and the

wanton destruction of the buildings has been stopped; but the damage already done is unfortunately irreparable. Dr. Buchanan Hamilton, who visited Gaur in 1810, has left an elaborate description of the ruins as they then appeared, from which the following account is mainly condensed. It must be remembered, however, that their dilapidation rapidly advanced since that time till within a few years ago, when it was stopped by Government.

The city with its suburbs covered an area variously estimated at from 22 to 30 square miles; and the dimensions of the city proper were about $7\frac{1}{2}$ miles in length from north to south, and from 1 to 2 miles in breadth, giving a total area of about 13 square miles. The west side of the city was throughout washed by the main stream of the Ganges, the eastern side being protected partly by the Mahānandā and partly by a line of perennial swamps, representing a former channel of the Ganges. To the south but little protection was needed, for the junction of the Mahānandā and the Ganges a little lower down would have prevented an invader from choosing such a circumscribed base of operations. To the north, which was the most accessible quarter, an artificial bulwark was required: and this was afforded by a line of fortifications about 6 miles in length, extending in an irregular curve from the old channel of the Bhāgīrathi at Sonātalā to near the Mahānandā at Bholā Hāt. This rampart, which was mainly composed of earth, was about 100 feet wide at its base. At the north-east part of the curve was a gate protected by a strong projecting outwork in the form of a quadrant, through which a high embanked road passed north and south.

North of the rampart was the site of the ruins of the palace where Ballāl Sen is said to have resided, consisting, like the palace at RĀMPAL in Dacca District, of a square of about 400 yards surrounded by a ditch. No trace, however, can now be found of these ruins, which were still extant in the time of Buchanan Hamilton. Behind the rampart was the northern suburb of the city. It was of vast extent, in the shape of a quadrant of a circle, with an area of about 6,000 square yards. The eastern portion is now occupied by marshes, but the western portion near the Bhāgīrathi is enclosed by earthworks and contains the remains of many public buildings. Here is situated the Sāgardīghi, the most celebrated artificial piece of water in Bengal, which was formed by deepening and embanking natural hollows existing in the high clay lands. Its dimensions are nearly 1,600 yards from north to south and more than 800 yards from east to west. The banks are occupied by Muhammadan buildings, of which the most conspicuous is the tomb of Makhdūm Shaikh Akhi Sirāj, one of the saints of Gaur, who came here from Delhi and died in 1357. In the neighbourhood are the two most frequented places of Hindu pilgrimage in the District: namely, Sādullahpur *ghāt* and the Duārbāsinī shrine. The

ghāt, which formed the chief descent to the old bed of the Ganges, is said to have been the only burning *ghāt* which the Muhammadan rulers allowed their Hindu subjects to use, and dead bodies of Hindus are still brought here from great distances to be burned.

Immediately to the south lies the city itself, which towards each suburb and along the Ganges was defended by a strong rampart and a ditch. On the side facing the Mahānandā the rampart was doubled, and in most parts there were two, and in some parts three, immense ditches. These works were designed for embankments against inundation, and were utilized as drains and as fortifications, the double embankment having, apparently, been constructed to prevent the Ganges from cutting away the site of Gaur, when the main body of its water began to gravitate westwards in the early part of the sixteenth century. The encroachments of the river were successfully checked by these works, combined with the hardness of the clay of the high lands on which Gaur was built; and the Ganges cut fresh channels west of the embanked city, instead of sweeping it away. The base of the outer embankment was measured in one place by Mr. Creighton and found to be 150 feet thick. By far the greater portion of the city appears to have been densely inhabited. Broad roads from east to west traversed the northern portion at irregular intervals; and there were also water channels affording easy communication between different parts of the city, as well as a regular system of drainage for carrying off the rain-water to the large natural and artificial reservoirs. Somewhat to the south, on the banks of the Bhāgīrathi, was the citadel or *kila*, a work evidently of the Muhammadan period, extending in the form of an irregular pentagon about a mile in length from north to south and about 600 to 800 yards broad. The rampart which encircled this was strongly built of earth and brick, with many flanking angles and bastions. The main entrance was to the north through a noble gate called the Dākhil Darwaza, the erection of which is ascribed to Bārbak Shāh (1459–74). The palace at the south-east corner of the citadel was surrounded by a wall of brick, 66 feet high and 18 feet broad at the base and 8½ feet at the top; only a portion of this wall, which is called the Baisgazī wall or Ghordaur ('racecourse'), is still standing. In the interior the remains of several cross-walls are visible, but the arrangement of the apartments cannot be ascertained. A little north of the palace were the royal tombs, where Alā-ud-dīn Husain and other independent kings of Bengal were buried, but these have now entirely disappeared. Within the citadel close to the Lukāchuri Gate is the Kadam Rasūl mosque, erected in 1530 over a stone bearing the impression of Muhammad's foot. It is still used as a place of worship, and is consequently in fairly good preservation. Near it is the Chikkā mosque, so called from the number of bats infesting its interior, which,

according to some traditions, was used not as a mosque but as a court-house or a prison. Just outside the east wall of the citadel stands a lofty tower known as the Fīroz Mināra. Local tradition ascribes this tower to the reign of Alā-ud-dīn Husain Shāh; and a plausible hypothesis is that Fīroz Mināra is a translation of the Sanskrit *Jai Stambha*, or 'tower of victory,' and that it was erected by Husain Shāh after the conquest of Assam. According to some writers, it was built by Saif-ud-dīn Fīroz. Farther away along the eastern wall of the citadel stand the Tāntipāra and Lotan mosques, both of which date from 1475–80. The former is famous for its moulded brickwork. The latter, which consists of a single chamber 34 feet square, with a corridor in front 34 feet by 11 feet, is the only building with glazed tiles which has escaped the vandal despoilers of previous generations. The name Lotan has been explained as a corruption of *natin* or 'dancing girl,' the tradition being that the mosque was erected by a woman of that profession.

About a mile and a half north of the citadel is a plot of land of 600 square yards surrounded by a rampart and a ditch, known as the Flower Garden. South-east of this is the Piyāsbāri, or 'abode of thirst,' a tank of considerable dimensions. It is said to have formerly contained brackish water, and tradition relates that condemned criminals were allowed to drink nothing but the water from this tank, and thus perished of thirst. Between the Piyāsbāri and the citadel is the Great Golden mosque, generally known as the Baradarwāzī of Rāmkel, which is 180 feet from north to south, 60 feet from east to west, and 20 feet high to the top of the cornice; it was formerly covered with 33 domes, and was built by Nusrat Shāh in 1526. Another structure of considerable interest was the fine central gate in the south wall of the city, which fell to pieces in the earthquake of 1897. It was called the Kotwālī Darwāzā, presumably from the circumstance that the superintendent of police was stationed here.

Southwards from this gate stretches an immense suburb called Fīrozpur. It extends as far as Pukhariyā, a distance of about 7 miles, though its width is comparatively small, and it bears abundant traces of having been at one time densely populated. Towards the east and south lay an embankment and a ditch, probably designed to ward off the floods, which have now formed long marshes in that direction. The most prominent building in this suburb is the Golden or Eunuch's mosque, erected during the reign of Husain Shāh, which is called the Small Golden mosque to distinguish it from that mentioned above. It has some very fine carvings and is the best preserved mosque with stone facings at Gaur. Another monument of some interest is the tomb of Niāmat-ullah Walī, the spiritual guide of Shāh Shujā, which is to this day carefully tended by his descendants.

Government has since 1900 taken steps for the preservation of certain

of the more interesting or prominent buildings: namely, the Fīroz Minār, the Kadam Rasūl mosque, the Great Golden mosque, and the Small Golden mosque; the tomb of Fateh Khān (said to have been a son of Dilāwar Khān, a general of Aurangzeb), situated outside the enclosure of the Kadam Rasūl; the east gate of the fort, called Lukāchuri, which was built by Shāh Shujā when he temporarily endeavoured to revive the city long after its desertion; the Chikkā mosque near the palace; the Dākhil Gate, forming the northern entrance to the fort; the Tāntipāra mosque; and the Lotan mosque.

[M. Martin (Buchanan Hamilton), *Eastern India*, vol. iii (1831); G. H. Ravenshaw, *Gaur, its Ruins and Inscriptions* (1878); A. Cunningham, *Archaeological Survey Reports*, vol. xv, pp. 39–94; *Reports of the Archaeological Surveyor, Bengal Circle* (1900–1, 1902–3, and 1903–4); and *Archaeological Survey of India, Annual Report* (1902–3), pp. 51–55.]

Gaurā.—Town in the Deoriā *tahsīl* of Gorakhpur District, United Provinces, situated in 26° 17′ N. and 83° 43′ E., close to BARHAJ, of which it practically forms a suburb. Population (1901), 7,965. Gaurā is administered, together with Barhaj, under Act XX of 1856. There are several sugar factories, but not much trade besides.

Gaurihār.—A petty *sanad* State in Central India, under the Bundelkhand Agency, with an area of 73 square miles. Population (1901), 7,760. The chief is a Jijhotia Brāhman. His ancestors originally held the village of Mahāpura (now in Charkhārī). Rājā Rām Tiwārī was governor of the fort of Bhuragarh (Bāndā District), under Rājā Gumān Singh of Ajaigarh; but during the confusion caused by Alī Bahādur's invasion, he rebelled and became the leader of a marauding band. The Ajaigarh chief was unable to reduce him to order, and the British, after their occupation of Bundelkhand, were obliged to offer a reward of Rs. 30,000 for his capture. Rājā Rām, however, thereupon surrendered, on the condition that he should receive land on terms similar to those granted to the other Bundelā chiefs. The grant was made in 1807. Rājā Rām died in 1846, and was succeeded by Rājdhar Rudra Singh Tiwārī, who rescued some Europeans during the Mutiny, and was rewarded with the title of Rao Bahādur and a *khilat* of Rs. 10,000. In 1862 he received a *sanad* of adoption. The present chief is Prithwīpāl Singh, who was born in 1886 and succeeded in 1904. The State contains 22 villages. Of the total area, 12 square miles, or 16 per cent., are cultivated, and 39 square miles, or 53 per cent., are cultivable; the rest is jungle and waste. The chief administers the estate when not a minor, but all serious matters are referred to the Political Agent for disposal. The revenue is Rs. 27,000. The chief place, Gaurihār, is situated in 25° 15′ N. and 80° 12′ E., 15 miles by country track from Bāndā, on the Jhānsi-Mānikpu

section of the Great Indian Peninsula Railway. Population (1901), 1,457.

Gauripur.—A permanently settled estate in Goālpāra District, Eastern Bengal and Assam, lying between 25° 38′ and 26° 19′ N. and 89° 50′ and 90° 6′ E., and consisting of *parganas* Ghurlā, Jāmirā, Makrampur, and Kalumalupāra, with other smaller *parganas*. The estate covers an area of 583 square miles, and the rent roll is about Rs. 2,34,000; but the land revenue demand is only Rs. 5,396, and the demand on account of local rates Rs. 25,000. This extremely low rate of assessment is due to the fact that under Mughal rule Goālpāra was a frontier District. The *zamīndārs* were required to keep the peace of the marches, and in return to pay a tribute that was little more than nominal. At the time of the Permanent Settlement this tribute was accepted as the land revenue, though no settlement was ever made in detail, and it is doubtful whether the District ever came within the purview of the Permanent Settlement at all. The family seat of the *zamīndār* is at Gauripur, which is a flourishing village about 6 miles north of Dhubri. It contains a high school, a dispensary, and a busy market. A colony of Mārwāri merchants carry on a large trade in jute, grain, and piece-goods; and the place contains blacksmiths, wheelwrights, potters, goldsmiths, confectioners, and the complement of shopkeepers and artisans found in a small Indian town.

Gautampurā.—Town in the Indore district of Indore State, Central India, situated in 22° 59′ N. and 75° 35′ E., 33 miles north-west of Indore city, and 3 miles from the Chambal Station on the Rājputāna-Mālwā Railway. It is usually called Runaji-Gautampurā, to distinguish it from other towns of the same name. Population (1901), 3,103. The town is comparatively a modern one, having been founded by Gautama Bai, wife of Malhār Rao Holkar (1728–66), after whom it was called. A curious concession was made regarding residence in the town, all malefactors, even murderers, being safe from pursuit within its walls. Under the patronage of the Rānī and her famous daughter-in-law, Ahalyā Bai, the place soon reached a flourishing state. Gautampurā is reputed for its calico-printing industry, the products of which find a ready market at Indore and in the neighbourhood. A committee has been lately (1905) constituted for the control of municipal affairs. In the town are a large temple to Siva as Achaleshwar Mahādeo, built by Gautama Bai, several smaller edifices, and a monastery of the Rāmsanehī sect of devotees, besides a school and a dispensary.

Gavridād.—Petty State in KĀTHIĀWĀR, Bombay.

Gāwilgarh Hills.—A hill range in Berār, which branches off from the SĀTPURĀ mountains, and lies between 21° 10′ and 21° 47′ N. and 76° 40′ and 77° 53′ E. It is named from the fort of GĀWĪLGARH,

which is situated on its southern side. The range is mentioned in the *Ain-i-Akbarī* under the name of Banda. It passes in a south-westerly direction through Betūl, the Melghāt or upland country of Amraotī, and the southern portion of Nimār, terminating at the junction of the Tāpti with its principal tributary, the Pūrna. In the Melghāt the crest of the range attains an average elevation of 3,400 feet above sea-level, the highest point, Bairāt, being 3,989 feet. The mean height of the lower hills, bordering on the Tāpti, is about 1,650 feet. The range is composed of Deccan trap, of the Upper Cretaceous or lower eocene group. The chief passes are Malharā on the east, Deulghāt on the west, and Bingāra on the extreme west; the first two have been made practicable for wheeled traffic, and the same may be said of communications in the Melghāt generally.

Gāwīlgarh Fort.—A deserted hill fortress in the Sātpurās, in the Melghāt *tāluk* of Amraotī District, Berār, situated in 21° 22′ N. and 77° 23′ E., on the watershed between the Pūrna and Taptī rivers, at an elevation of 3,595 feet. It is impossible to say when the Gāwīlgarh hill was first fortified, but the name seems to point to its having been at one time a Gaoli stronghold. The fort as it stands is the work of Muhammadan builders, and cannot be assigned to an earlier date than that given by Firishta, who tells us that it was built by the Bahmani king, Ahmad Shāh Wali, when he halted at Ellichpur from 1425 to 1428. It was improved and thoroughly repaired in 1488 by Fath-ullāh Imād-ul-mulk, as appears from a partially obliterated inscription over the south-western gate. Imād-ul-mulk, who as viceroy of the province under the *roi fainéant*, Mahmūd Shāh Bahmani, had been for some years the actual ruler of Berār, was forced in 1490 by the pretensions of the minister, Amīr Barīd, to proclaim himself independent. He founded the short-lived Imād Shāhī dynasty, whose principal stronghold was Gāwīlgarh. The fort was again improved and repaired in 1577 by the officers of Murtazā Nizām Shāh of Ahmadnagar, owing to a premature report that Akbar was marching on the Deccan. The *Burj-i-Bahrām*, a bastion in the south-west face, contains an inscription recording its construction by Bahrām Khān on this occasion. The date (A. H. 985 = A. D. 1577) is given in a chronogram.

The fort was captured from the officer who held it on behalf of the king of Ahmadnagar by Saiyid Yusuf Khān Mashhadī and Shaikh Abul Fazl in 1597–8, less than two years after Berār had been formally ceded to Akbar. In the second Marāthā War the fortress was held by Benī Singh for Raghujī Bhonsla, and was stormed by General Arthur Wellesley on December 15, 1803. It was dismantled in 1853.

The principal building still standing in the fort is the large *masjid*, a handsome stone building in the Pathan style of architecture. The front of the mosque is formed of seven arches, the central arch being

slightly higher than the rest; and the covered portion was formerly three arches deep, and had twenty-one domes, but the western wall has fallen away and carried with it a row of domes, so that only fourteen now remain. A low minaret at the north-eastern angle has some handsome stone lattice-work. The gate now known as the Delhi Gate has two *bas-reliefs*, each representing a double-headed eagle holding elephants in its beaks and claws. This bird is the fabulous *gandabherunda*, the emblem of the Hindu empire of Vijayanagar in the Carnatic: and the occurrence of the emblem on a gate of the old military capital of Berār is particularly interesting, for it enables us to assign the gate to Fath-ullāh Imād-ul-mulk, who was, as Firishta tells us, a Brāhman of Vijayanagar captured in boyhood and brought up as a Musalmān. The *gandabherunda* on the Delhi Gate is a proof that he was proud of his origin.

Gayā District. District in the Patna Division of Bengal, lying between 24° 17′ and 25° 19′ N. and 84° 0′ and 86° 3′ E., with an area of 4,712 square miles. It is bounded on the north by Patna District; on the east by Monghyr and Hazāribāgh; on the south by Hazāribāgh and Palāmau; and on the west by Shāhābād, from which it is separated by the Son river.

Physical aspects.

The southern part of the District is elevated and occupies the declivity from the Chotā Nāgpur plateau, from which numerous ridges and spurs project into the plains. About 10 miles south of Gayā town the surface becomes more level; but semi-isolated ranges stand out from the plains, and still farther to the north separate ridges and isolated peaks crop up here and there. The chief hills are: the Durvāsarishi and Mahābar hills in the south of the Nawāda subdivision, which rise to a height of 2,202 and 1,832 feet above sea-level, the former being the highest point in the District; the Māher (1,612 feet) and Hasrā hills, the Ganjās and Bhindas, the Jethian range running from the neighbourhood of Buddh Gayā to Rājgīr and Giriak, and the Pahrā, Cherkī, and Gayā hills in the head-quarters subdivision; the Pawai, Dugul, and Pachār hills in the Aurangābād subdivision; and the Barābar and Kowādol hills in the Jahānābād subdivision. The general level falls somewhat rapidly towards the north, and numerous hill streams from the highlands of Chotā Nāgpur flow northwards across the District in more or less parallel courses. The chief of these from east to west are the Sakri, Dhanarjī, Tilayā, Dhādhār, Paimār, Phalgu, Jamunā, Morhar, Dhawā, Madar, Adrī, and Pūnpūn; and the Son, which forms the western boundary of the District. The two last-named rivers are the only ones which reach the Ganges. The water brought down by the other streams is nearly all used up in the network of *pains* or artificial irrigation channels: the Dhawā and

Madar are tributaries of the Pūnpūn, and the Morhar and Phalgu also eventually join that river; while other streams, after being thus diverted for the purposes of irrigation, cannot be traced or mingle in the rainy season in a huge *jhīl* in the Bārh subdivision (of Patna). The Phalgu, which is formed by the junction of the Lilājān and Mohana rivers about 2 miles below Buddh-Gayā, flows past the town of Gayā, and then northwards under the foot of the Barābar Hills. This river and the Pūnpūn are regarded by the Hindus as sacred streams, and to bathe in them is the duty of every pilgrim who performs the Gayā *tirtha* or pilgrimage. The most important river is the Son, its bed being nearly as broad as that of the Ganges, though it becomes almost dry in the hot months. During the rains the current is very rapid and navigation difficult, in consequence of which the river is used only by small craft up to about 20 tons burden for a few months in the year. Between Barun on the Gayā bank and Dehrī on the Shāhābād side a stone causeway leads the grand trunk road across the bed. Just above this causeway is the great anicut of the Son Canals system, and below the causeway the river is spanned by one of the longest railway bridges in the world, comprising 98 spans of 100 feet each; it is made of iron girders laid on stone-built pillars.

A considerable part of the District is occupied by the Gangetic alluvium, but older rocks rise above its level chiefly in the south and east. These are composed for the most part of a foliated gneiss, consisting of a great variety of crystalline rocks forming parallel bands and known as the Bengal gneiss. It is a subdivision of the Archaean system, which contains the oldest rocks of the earth's crust. Scattered at intervals amid the Bengal gneiss in the east of the District are several outcrops of another very ancient series, resembling that described in Southern India under the name of Dhārwār schists and constituting another subdivision of the Archaean system. Owing to the predominance of massive beds of quartzite, these beds stand out as abrupt ridges and constitute all the most conspicuous hills of the District. Not only are these rocks everywhere altered by 'regional metamorphism,' caused by the great pressure that has thrown them into close-set synclinal and anticlinal folds, as expressed by the elongated shape of the ridges and high dips of the strata with the inducement of slaty cleavage; but they have also been affected to a great extent by contact metamorphism from the intrusion of great masses of granite and innumerable veins of coarse granitic pegmatite, by which the slates have been further transformed into crystalline schists. In its more massive form the granite is relatively fine-grained and very homogeneous, and it weathers into great rounded hummocks that have suggested the name of 'dome-gneiss' by which it is sometimes known. It is the narrow sheets of the same intrusive

group, where they cut across the metamorphosed schists as excessively coarse granitic pegmatites, that are of most economical importance on account of the mica which they contain.

The Rājgīr hills, consisting of slaty schists and quartzites, are less metamorphosed; but contact effects are well seen in the Māher hills, and in the detached spurs forming the south-western continuation of the Rājgīr range near Gayā, where idols and utensils are extensively wrought from the soft serpentinous rock of the converted schists.

The Tālcher rocks, which constitute the basement beds of the coal-bearing Gondwāna series, are seen at the small village of Gangti, 20 miles south-west-by-west of Sherghāti: and also 4 miles west-by-south of Imāmganj, in the bed of the Morhar river, where they occupy a small outcrop entirely surrounded by alluvium. This outcrop is of great interest, as indicating the possibility that coal-measures may exist beneath the alluvial formation in this part of the Gangetic plain [1].

In the north the rice-fields have the usual weeds of such localities. Near villages there are often considerable groves of mango-trees and palmyras (*Borassus flabellifer*), some date palms (*Phoenix sylvestris*), and numerous isolated examples of *Tamarindus* and other semi-spontaneous and more or less useful species. There are no Government forests, but the hills on the south are completely covered with dense jungle; here the fuel-supply of the District is obtained, and the lac industry is a considerable source of income to the landlords. The principal trees are the *pīpal* (*Ficus religiosa*), *nīm* (*Melia Azadirachta*), banyan (*Ficus indica*), *siris* (*Albizzia odoratissima*), *mahuā* (*Bassia latifolia*), *palās* (*Butea frondosa*), *sissū* (*Dalbergia Sissoo*), tamarind (*Tamarindus indica*), *jāmun* (*Eugenia Jambolana*), *sāl* (*Shorea robusta*), *babūl* (*Acacia arabica*), cotton-tree (*Bombax malabaricum*), and *kahuā* (*Terminalia Arjuna*). Flowering shrubs and creepers grow luxuriantly in the hills after the rains; and during the cold season wild plums and other small edible berries are common in these tracts, and form part of the food-supply of the poorer classes.

Tigers are found in the hills in the south, and leopards, hyenas, bears, and wild hog on most of the hills in the District. *Sāmbar* (*Cervus unicolor*), spotted deer (*Cervus axis*), 'ravine deer' (*Gazella bennetti*), four-horned antelope (*Tetracerus quadricornis*), and barking-deer (*Cervulus muntjac*) live in the jungles in the south: but their numbers are rapidly decreasing. The antelope (*Antilope cervicapra*) is still occasionally found. Wolves and wild dogs are comparatively rare. A few *nīlgai* (*Boselaphus tragocamelus*) still frequent the banks of the Son. Peafowl, jungle-fowl (*Gallus ferrugineus*), black

[1] T. H. Holland, 'Mica Deposits of India,' *Memoirs, Geological Survey of India*, vol. xxxiv, pt. i. This account was contributed by Mr. E. Vredenburg, Deputy-Superintendent, Geological Survey of India.

partridge (*Francolinus vulgaris*), grey partridge (*Francolinus pondicerianus*), and spur-fowl (*Galloperdix sp.*) are found in and along the skirts of the southern hills.

By reason of its distance from the sea, Gayā has greater extremes of climate than the south and east of Bengal. The mean temperature varies from 64° in January to 93° in May, and the highest average maximum is 105° in May. Owing to the hot and dry westerly winds which prevail in March and April, the humidity at that season averages only 51 per cent. With the approach of the monsoon the humidity increases, and then remains steady at from 84 to 87 per cent. throughout July and August. The annual rainfall averages 42 inches, of which 5·6 fall in June, 12·1 in July, 11·8 in August, and 6·4 in September. The strength of the monsoon during the month of September is of special importance to the cultivator, as the winter rice harvest is largely dependent on a good supply of rain at that season.

Local floods are occasionally caused by the rivers breaching their banks after abnormally heavy rain in the hills, or by a river leaving its bed and appropriating the channel of a *pain* or irrigation canal. A case of this nature occurred in 1896–7, when the Sakri river changed its course and flooded the lands of some villages in the Nawāda subdivision, converting a considerable area of fertile land into a sandy waste. In September, 1901, in consequence of the sudden simultaneous rise of the Son and the Ganges, the former river topped its bank near Arwal and flooded Badrābād and other villages, many mud-built houses falling in.

History.

The modern District was comprised, with the country now included in Patna and Shāhābād, within the ancient kingdom of MAGADHA. Both Patna and Gayā, which formed part of the Muhammadan *Sūbah* of BIHĀR, passed into the hands of the English in 1765, being at first administered from Patna. This arrangement lasted till 1781, when Bihār was made into a District under a Collector and a Judge-Magistrate. In 1814 the south of the District was placed under the jurisdiction of a special Joint-Magistrate, stationed at Sherghāti. In 1865 Gayā was separated from Patna and constituted an independent Collectorate.

Though Gayā was not the scene of fighting during the Mutiny of 1857, yet an incident took place in the District worthy of record. The sepoys in the cantonments at Dinapore mutinied in July and escaped into Shāhābād. After the first attack upon them by a British force had resulted in disaster, orders were issued by the Commissioner of Patna to all the civil officers within his jurisdiction to withdraw their establishments and retire on Dinapore. A small garrison of the 64th Regiment, together with a few Sikhs, was then stationed at Gayā town. In obedience to the written orders of the Commissioner, the handful of

soldiers and civilians at Gayā started on the road to Patna, leaving behind about 7 lakhs in the treasury. But on the way bolder counsels prevailed. Mr. Money, the Magistrate of the District, and Mr. Hollings, an uncovenanted official in the opium agency, determined to return to Gayā and save what they could from the general pillage that would inevitably follow upon the abandonment of the town. The detachment of the 64th Regiment was also sent back. The town was found still at peace. By the time that carriage had been collected for the treasure the Patna road had become unsafe, and the only means of retreat was by the grand trunk road to Calcutta. As soon as the little party had started a second time, they were attacked by a mixed rabble of released prisoners and the former jail-guards. They repulsed the attack, and conveyed the treasure safely to Calcutta.

The District is full of places of the greatest archaeological interest, and the rocky hills teem with associations of the ancient religion of Buddha. As a place of Hindu pilgrimage, the town of GAYĀ is of comparatively modern interest, but at BUDDH (or Bodh) GAYĀ, 7 miles to the south, are remains of great religious and archaeological importance. Many Buddhist images are to be found in the neighbourhood and also at Punāwān, 14 miles east of Gayā. Two miles south of Punāwān is Hasrā hill, identified by Dr. Stein with the Kukkutapada-giri of Fa Hian and Hiuen Tsiang. There are many scattered remains of undoubted Buddhist origin in the valley between the Sobhnāth hill and Hasrā hill proper; while in the neighbouring village of Bishnupur Tarwā are some finely cut Buddhist images. At Kurkihār, 7 miles to the north-east, is a large mound, from which many Buddhist sculptures have been unearthed. About 11 miles to the north-east lies the village of Jethian, identified with the Yashtivana of Hiuen Tsiang, in the neighbourhood of which there are several sites associated with the wanderings of Buddha. At Konch is a curious brick-built temple, and traces of Buddhist influence are observable in sculptures round about. Seven miles south-east of Gayā is the Dhongrā hill, which is clearly identifiable with the Prāgbodhi mountain of Hiuen Tsiang, and contains a cave in which Gautama is supposed to have rested before he went to Buddh Gayā. At Gunerī are many Buddhist images and remains marking the site apparently of the Srī Guna Charita monastery. The above remains are all in the head-quarters subdivision, in the extreme north of which lie the BARĀBAR HILLS with their famous rock-cut caves. Not far from these hills to the west is the isolated rocky peak of Kowādol, at the base of which is a huge stone image of Buddha; it probably marks the site of the ancient Buddhist monastery of Silābhadra.

In the Nawāda subdivision at Sītāmarhi, about 7 miles south-west of Hisuā, is a cave hewn in a large isolated boulder of granite. Tradition relates that here Sītā, the wife of Rāma, gave birth to Lava while in

exile. Many legends also cluster round RAJAULĪ, with its picturesque hills and pretty valleys. At AFSAR are several remains, including a fine statue of the Varāha or Boar incarnation of Vishnu.

In the Jahānābād subdivision, about 3 miles north of the Barābar Hills, stands Dharāwat, near the site of another Buddhist monastery called Gunāmati. South of this, on the slope of a low ridge of hills, many Buddhist remains have been found. At Dāpthu, there are some finely carved images and ruins of temples; and not far from here, lying half-buried in an open field, is a large carved monolith of granite. At Jāru and Banwāria, on the east side of the Phalgu river, are the ruins of what must have been a large temple, and there are other remains of interest at Kāko, Ghenjan, and Ner.

In the Aurangābād subdivision a fine stone temple stands at DEO and a similar one at Umgā. Large Buddhist images and many remains are found at Mānda; and at Bhurha, 2 miles farther east, are some finely carved *chaityas* and images, and some remains marking the site of a monastery. Deokulī, Cheon, and Pachār also contain remains of Brāhmanical, Buddhist, and Jain interest.

Population.

The recorded population of the present area rose from 1,947,824 in 1872 to 2,124,682 in 1881 and to 2,138,331 in 1891, but fell again to 2,059,933 in 1901. The population is not progressive, and much of the increase between 1872 and 1881 must have been due to better enumeration. The decrease at the Census of 1901 was largely due to the ravages of the plague. The greatest loss took place in the central police circles, where plague was most prevalent; but a slight decadence for which plague was not to blame occurred in the south-west, where the land is high and barren and the crops are scanty and uncertain. The Nawāda subdivision in the east and a small tract which benefits by irrigation from the Son in the north-west added to their population.

The principal statistics of the Census of 1901 are shown below:—

Subdivision.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Gayā . .	1,905	3	2,999	751,855	395	— 9·7	26,638
Nawāda .	955	2	1,752	453,868	475	+ 3·2	15,166
Aurangābād .	1,246	2	2,042	467,675	375	— 1·0	16,695
Jahānābād .	606	1	1,078	386,535	638	— 1·8	16,264
District total	4,712	8	7,871	2,059,933	437	— 3·7	74,763

Of the towns, GAYĀ, the District head-quarters, TEKĀRI, and DAUDNAGAR are municipalities. The other chief towns are AURANGĀBĀD,

Nawada, and Jahanabad. The density of the population is greatest in the north, rising to 666 persons per square mile in the Jahānābād *thāna*; along the southern boundary, where a considerable area belongs geographically to the Chotā Nāgpur plateau, it is very sparse, and in the Bārāchati *thāna* there are only 257 persons per square mile. Gayā sends out numerous emigrants to the adjoining Districts of Hazāribāgh and Palāmau, but the most marked feature connected with migration is the great number of natives of the District who earn a livelihood in distant parts. No less than 58,952, or 2·8 per cent. of the population, were residing in Bengal proper at the time of the Census of 1901, and of these 36,953 were enumerated in Calcutta. These emigrants are employed chiefly as *darwāns*, peons, and weavers in jute-mills: and they remit a large portion of their earnings for the support of their families, whom they seldom take with them. It was estimated in 1893 that as much as Rs. 8,40,000 was thus annually remitted to the District. The vernacular of Gayā is the Magahī dialect of Bihārī: the Awadhī dialect of Eastern Hindī is spoken by Muhammadans. Of the total population, 1,840,382 persons (89·3 per cent.) are Hindus and 219,124 (10·64 per cent.) Muhammadans.

The Goālās (306,000) are the most numerous Hindu caste, next to whom come Bābhans (163,000) and Koiris (145,000). There are several aboriginal or semi-Hinduized tribes, the principal being Bhuiyās (112,000), Dosādhs (108,000), Musahars (55,000), and Rajwārs (53,000). The most common higher castes are Brāhmans (64,000), Rājputs (111,000), and Kāyasths (39,000). The Brāhmans include a number of persons who, though not regular or orthodox Brāhmans, are allowed a kind of brevet rank: among these the most remarkable are the Gayāwāls (*see* Gayā Town) and the Dhāmins. Many of the functional castes are well represented, such as Kahārs (110,000), Chamārs (81,000), Telis (58,000), Kurmīs (41,000), Barhais (39,000), and Hajjāms and Pāsīs (38,000 each). Among Muhammadans, Jolāhās (74,000) are the most numerous. Agriculture supports 65·1 per cent. of the population, industries 14 per cent., commerce 0·6 per cent., and the professions 1·9 per cent.

Christians number only 253, of whom 40 are natives: the missions at work are the London Baptist Missionary Society, the London Baptist Zanāna Missionary Society, and the World's Faith Missionary Association.

Agriculture.

The northern portion of the District, extending southwards to about 10 miles beyond Gayā town and constituting about two-thirds of the whole area, is fairly level and is mostly under cultivation. Farther south the rise towards the hills of Chotā Nāgpur is more rapid, the country is intersected with hills and ravines, the proportion of sand in the soil is much higher, and a large

area is composed of hill and scrub-covered jungle, which extends for several miles below the hills. Cultivation in this tract is far more scanty; but in recent years large areas of waste have been reclaimed, and the process will probably be accelerated with the opening of new lines of railway and the general improvement of communications. Between the numerous rivers the land is higher: in the south these *doābs* can only be irrigated with difficulty, and *rabi* and *bhadoi* crops are most grown. Farther north, where the surface is more level, most of them can be watered by channels from the rivers and from *āhars*, and rice is largely grown. In the west near the Son a considerable area, which was formerly sandy and infertile, is irrigated from the Patna canal and its distributaries. In the northern tract the soil is generally alluvial, consisting chiefly of clay with a small proportion of sand. In the south, however, sand generally predominates. In some parts the soil is impregnated with carbonate of soda.

The chief agricultural statistics for 1903–4 are given below, areas being in square miles:—

Subdivision.	Total.	Cultivated.	Cultivable waste.	Irrigated.*
Gayā . . .	1,905	1,049	92	...
Nawāda . .	955	498	37	...
Aurangābād .	1,246	657	98	52
Jahānābād . .	606	508	20	33
Total	4,712	2,712	247	85

* This column represents the area irrigated from Government canals. Statistics showing the area irrigated from private channels, tanks, wells, &c., are not available; but it is estimated that in the whole District the area irrigated from all sources is 75 per cent. of the total cultivated area.

The area twice cropped is estimated at 287 square miles. The most important staple is rice, grown on 1,382 square miles or about 51 per cent. of the cultivated area. Besides this, a great variety of crops are raised; and it is not unusual to find four crops—such as gram, wheat, sesamum, and linseed—grown together in the same field: to this fact and to the protection afforded by the Son Canals and the indigenous system of irrigation followed in the District may be ascribed the comparative immunity it enjoys from famine. Wheat covers about 249 square miles; and the other important cereals and pulses are gram, *maruā*, maize, barley, *khesāri*, *masūr*, peas, *urd*, and *mūng*. *Bājra* and *jowār* are cultivated to a large extent on high lands. Oilseeds cover 329 square miles, the chief crop being linseed, grown on 160 square miles. Gayā is one of the chief opium-producing Districts in Bengal, and 75 square miles are devoted to the cultivation of the poppy. Sugar-cane is widely grown, as also are potatoes, yams and other vegetables, and *pān* or betel-leaf.

In the ten years ending 1901 2, 2·83 lakhs was advanced under the Land Improvement Loans Act and Rs. 67,000 under the Agriculturists' Loans Act; the loans are chiefly used for the improvement or extension of the means of irrigation.

The local cattle are small but sturdy. Extensive pasture lands exist in the thinly cultivated tracts in the south, but elsewhere the cattle are largely fed on chopped straw. Sheep are reared extensively by the Gareri caste, especially near the hills where grazing is plentiful; and their wool is used in the manufacture of carpets, rugs, and blankets. Goats are common, and pigs are kept by Bhuiyās, Musahars, Dosādhs, and Doms. A veterinary dispensary is maintained at Gayā by the District board. Numerous religious gatherings are held at various places in the District, especially in Gayā town, which is a place of pilgrimage throughout the year; to some of these cattle and ponies are brought for sale, but no special fair is held for the sale of cattle.

Agricultural prosperity depends almost entirely on irrigation. It is supplied in the west by two branches of the Son Canals system. The Eastern Main Canal, which was originally intended to pass across Gayā into Monghyr, runs eastward for 8 miles to the Pūnpūn river, and the Patna Canal runs northwards for 43 miles before entering Patna District. One-fifth of the District is thus irrigated, the area actually supplied with water from these canals and their distributaries in 1903–4 being 85 square miles. The remainder is cut into parallel strips by a number of rivers which flow from south to north. Between each pair of rivers is necessarily a watershed, and in the slope leading from it to the river reservoirs are constructed. These are filled either by the rain-water which comes down the slope, this system being known as *genrābandi*, or from a water channel (*pain*) which passes along the side, and takes off from the river at a higher level. As the rivers fall only 6 feet in the mile, the channels are sometimes carried to a considerable distance, and Dr. Grierson writes of having seen one 20 miles long. Whenever a flood comes down, during the rainy season, it fills all the reservoirs (*āhars*) attached to each channel. Well-irrigation is largely resorted to in the neighbourhood of villages, where less expensive methods are not practicable. Though no accurate statistics are available, it is believed that about 156 square miles are irrigated by these means.

Minerals.

The principal mineral product is mica, which is found at Sapahī, Singar, Basron, Chatkarī, and Belam in the Nawāda subdivision, and in smaller quantities among the hills in the south on the border of Hazāribāgh. The seams are reached by blasting; and the sheets of mica are then dug out, separated, clipped, and sorted and packed according to size, and dispatched to Calcutta for export to America and Europe. In 1903 the only mines

worked regularly were those at Sapahī, Basron, Singar, and Belam. The average number of labourers employed was 464; they are drawn from the ordinary labouring classes, and are paid a daily wage varying from 2 to 6 annas, according to age, sex, and skill. The output, which varies according to the demand in the market, amounted in 1903 to 122 tons. Iron ore is found in considerable quantities at Pachambā in the Nawāda subdivision and at Lodhwe in the head-quarters subdivision, but is not now worked. It also exists in the Barābar Hills, where there were formerly smelting works under European management; it is now being worked again to a small extent. Granite, syenite, and laterite are quarried in many of the hills for building purposes and road-metalling. The so-called Gayā black stone, of which ornaments, bowls, and figures are carved, is quarried at Pathalkatī in the Atrī *thāna*, and worked chiefly by stone-carvers who claim to be of Brāhman descent and to have come from Jaipur. Pottery clay exists in many places, and nodules of limestone are found in scattered localities. Saltpetre is manufactured, chiefly in the Jahānābād subdivision, from efflorescences on the clay of village sites.

Trade and communications.

The manufactures include lac, sugar, *tasar* and cotton cloth, brass utensils, stoneware, gold and silver ornaments, blankets, rugs and carpets. Paper was formerly made on a large scale at Arwal, but the industry has entirely died out. Silk cloth is woven to a considerable extent at Mānpur near Gayā, and in a smaller degree at Kādirganj in the Nawāda subdivision and Daudnagar. Carpets and rugs are manufactured at Obrā and Daudnagar. Brass utensils are also made in large quantities at the latter town. Carving in wood was formerly an important industry, and the carvers had attained much proficiency, as is evident from some examples still existing in the balconies, doors, and windows of Old Gayā; but the art has almost died out. Cane chairs are made at Gayā, but not to any great extent. Small statues of animals and figures of gods are carved by a few artists at Gayā from black stone. Sugar refining is on the wane, but raw sugar is largely manufactured for export. The lac insect is cultivated, generally on the *palās*-tree (*Butea frondosa*) in the southern jungles; and the manufactured product, which is prepared in about forty factories, is exported chiefly to Calcutta. The average annual out-turn is estimated at 50,000 maunds.

The principal exports are food-grains, especially rice, oilseeds, pepper, crude opium, raw sugar, *mahuā* flowers, saltpetre, mica, lac, blankets, carpets, stone and brass utensils, hides, prepared tobacco, and betel-leaves. Among the imports are salt, coal, coke, piece-goods and shawls, kerosene oil, tea, cotton, timber, tobacco (unmanufactured dry leaves), iron, spices of all kinds, dried and fresh fruits, refined

sugar, paper, and various articles of European manufacture. The bulk of the trade is with Calcutta, but unrefined sugar finds its way in large quantities to the Central Provinces, Rājputāna, Central India, and Berār. The chief centres of trade are Gayā, Tekāri, Guruā, Rānīganj, and Imāmganj in the head-quarters subdivision; Rajaulī and Akbarpur in Nawāda; Jahānābād and Arwal in Jahānābād; and Daudnagar, Deo, Mahārājganj, Tarwā, Khiriāwān, Rafiganj, and Jamhor in the Aurangābād subdivision. Owing to the opening of new railways, which now tap most of the trade routes in the District, several other places are rising in importance, the most noticeable being Nawāda. Feeder-roads have been constructed by the District board, and trade tends more and more to converge upon the railway stations. For the conveyance of produce, bullock-carts are used, but pack-bullocks also are still very largely employed, especially in the hilly parts. The principal classes engaged in trade are the various Baniyā castes and Mārwāris: some Mughals deal in sugar, cloths, and shawls.

The Patna-Gayā branch connects Gayā with the main line of the East Indian Railway at Bankipore, $34\frac{1}{2}$ miles of it lying within the District. Three other lines have recently been opened: namely, the South Bihār branch, which runs east from Gayā to Luckeesarai through the Nawāda subdivision, 58 miles falling within the District: the Mughal Sarai-Gayā branch from Gayā through the Aurangābād subdivision to Mughal Sarai, 51 miles lying within Gayā; and the Barun-Daltonganj branch, which leaves the latter line at Barun on the Son and runs for $23\frac{1}{4}$ miles before it enters Palāmau District. A fifth line from Gayā to Katrasgarh, of which 34 miles fall within Gayā District, has recently been completed, and, with the Mughal Sarai-Gayā line, forms the grand chord-line to Calcutta.

The District is intersected by numerous excellent roads, of which 202 miles are metalled and 719 miles unmetalled, in addition to 628 miles of village tracks. The chief lines are: the grand trunk road, with a length of 51 miles maintained from Provincial funds: the Kharhat-Rajaulī road, running from Bihār to Nawāda and southwards; the Gayā-Salīmpur road, which is a portion of the Patna-Gayā road, running parallel to the Patna-Gayā Railway; and the Gayā-Nawāda road, with several feeder-roads leading from it to the stations on the South Bihār Railway.

A small steamer plies weekly on the Patna Canal, but it carries very little merchandise. None of the small rivers is navigable. Most of them, where not bridged, are provided with ferries during the rainy season, but the only large ferry is that across the Son from Daudnagar to Nāsriganj in Shāhābād District.

Owing to the construction of the Son Canals, the indigenous system of irrigation which prevails, and the improvement in communications

which has taken place since 1874, the District is not seriously affected by famines. The whole of the western border is protected by the Son Canals, and almost all the remainder of the District by the local system of reservoirs and channels described above. A great variety of crops are grown, and it rarely happens that famine obtains a grip over any considerable area. The famine of 1866 affected 1,300 square miles; but the majority of the people were able to support themselves, and the relief operations were on a comparatively small scale, costing only Rs. 22,000, of which Rs. 12,000 was raised by local subscription. In 1874 also the District was not seriously involved; the food-supply was augmented by private trade, and the Government had only to supplement it by a small amount of grain, and by the provision of relief works on the canals. The total expenditure on that occasion was 1·38 lakhs. Slight scarcities occurred in 1888–9 and 1891–2, while in 1896–7, when severe famine was felt over a large part of India, prices rose very high, and the landless labourers suffered much in consequence. No regular works were opened, but 50,000 persons were gratuitously relieved, most of them being travellers passing through the District in search of labour. The total expenditure was only about Rs. 18,000, all of which was subscribed locally.

Famine.

For administrative purposes the District is divided into four subdivisions, with head-quarters at Sāhibganj (Gayā Town), Nawāda, Jahānābād, and Aurangābād. The District head-quarters staff subordinate to the Magistrate-Collector consists of three or four Deputy-Magistrate-Collectors, besides two special Deputy-Collectors for excise and partition work. A Joint-Magistrate is usually deputed to Gayā for the cold-season months, and one or two Sub-Deputy-Collectors and an Assistant Magistrate-Collector are also occasionally posted to the District. The Nawāda, Jahānābād, and Aurangābād subdivisions are in charge of Deputy-Magistrate-Collectors, and sometimes, in the case of the two subdivisions first named, of Assistant Magistrates.

Administration.

The civil courts are those of the District and Sessions Judge, two Sub-Judges, and four Munsifs, one of whom sits at Aurangābād. The criminal courts include those of the District and Sessions Judge, the District Magistrate, and the above-mentioned Joint, Assistant, and Deputy-Magistrates. A special magistrate is authorized under section 14 of the Criminal Procedure Code to try cases connected with breaches of the Irrigation laws. The District was formerly notorious for the prevalence of crime, especially in the south, which was in a lawless state, dacoities and highway robberies being frequent. Now, though dacoities are occasionally committed, the commonest offences are burglary, cattle-stealing, and riots caused by disputes about irrigation.

Owing to changes in the jurisdiction of the District and the destruction of records at the time of the Mutiny, early statistics of the land revenue are not available. The current demand has risen from 13·8 lakhs in 1870–1 to 14·39 lakhs in 1903–4. Subdivision of estates has gone on rapidly, there being in the latter year 7,876 estates, of which 7,828 with a demand of 13·40 lakhs were permanently settled, 15 with a demand of Rs. 47,000 temporarily settled, and the remainder were held direct by Government. Among special tenures may be mentioned *altamghā* grants, or lands given in perpetuity as a reward for conspicuous military service; *ghātwāli* lands, assigned for the maintenance of guards and patrols on roads and passes; and *madat-māsh*, lands granted to favourites and others. About 70 per cent. of the cultivated land is held under the system of *bhaoli* or produce rents. There are two kinds: *dānābandi*, where the crop is appraised while standing in the field; and *batai* or *agorbatai*, where the crop is taken to the threshing-floor and divided equally between the landlord and tenant after the labourers engaged in cutting and carrying it have been given their share. Under the *dānābandi* system also the crop is supposed to be divided equally, but in practice the landlord's share is generally $\frac{9}{16}$ths and often even more. In the case of cash rents three kinds of tenure obtain: namely, the ordinary *nagdī*, *shikmī*, and *chakath*. A *shikmī* tenure in this District means a tenure held on a cash rent fixed for ever. A *chakath* holding is one in which the rent is fixed for a term of years; the term is also often applied to settlements made for the reclamation of cultivable waste. Another local tenure is the *paran* or *paranpheri*, under which rice land held on the *bhaoli* system and suited to the growth of sugar-cane or poppy is settled at a specially high rate of rent in the years when these crops are grown. The following rates of rent per acre may be regarded as fairly general: rice land, if fit for only a single crop, Rs. 1–8–0 to Rs. 8, and if yielding a double crop, Rs. 3 to Rs. 10; land on which wheat, barley, gram, pulses, and oilseeds are grown, Rs. 2 to Rs. 8; sugar-cane and poppy land, Rs. 3 to Rs. 16; land growing *bhādoi* crops such as maize, *marua*, or *jowār*, Rs. 1–8–0 to Rs. 5; and land growing potatoes, Rs. 4 to Rs. 16. The Government estates in the District and part of the Tekāri estate with a total area of 582 square miles were cadastrally surveyed and settled between 1893 and 1898. The incidence of land revenue was found to be R. 0–10–5 per acre and the rent Rs. 4 0–10, the land revenue demand thus amounting to only 16 per cent. of the rent. Over the whole District the maximum and minimum rent rates per acre are about Rs. 16 and 8 annas respectively, the average being Rs. 5 12–0. The average holding of a ryot is about 6 acres. Recently the Deo and Maksudpur estates, with an area of 92 and 132 square miles respectively, have also come under survey and settlement.

The following table shows the collections of land revenue and of total revenue (principal heads only), in thousands of rupees: -

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	14,35	14,67	14,69	14,34
Total revenue . .	24,91	24,82	28,52	30,08

Outside the municipalities of GAYĀ, TEKĀRI, and DAUDNAGAR, local affairs are managed by the District board, with subordinate local boards in each subdivision except the head-quarters subdivision. In 1903–4 its income was Rs. 3,26,000, of which Rs. 2,26,000 was derived from rates; and the expenditure was Rs. 3,07,000, including Rs. 2,04,000 spent on public works and Rs. 45,000 on education.

In 1903 the District contained 14 police stations and 22 outposts: and the force subordinate to the District Superintendent consisted of 5 inspectors, 49 sub-inspectors, 56 head constables, and 659 constables. The rural police consisted of 389 *daffadārs* and 3,648 *chaukīdārs*. The District jail at Gayā has accommodation for 542 prisoners, and subsidiary jails at Nawāda, Jahānābād, and Aurangābād for 105.

Gayā District is backward in point of education, and only 3·6 per cent. of the population (7·2 males and 0·2 females) could read and write in 1901. The number of pupils in the schools increased from 19,118 in 1880–1 to 26,250 in 1892–3 and to 26,849 in 1900–1. In 1903–4 37,824 boys and 2,303 girls were at school, being respectively 24·9 and 1·4 per cent. of the children of school-going age. The number of educational institutions, public and private, in that year was 1,598, including 19 secondary, 979 primary, and 600 special schools. The expenditure on education was Rs. 1,49,000, of which Rs. 14,000 was met from Provincial funds, Rs. 45,000 from District funds, Rs. 3,000 from municipal funds, and Rs. 51,000 from fees. The chief institutions are the Government school and two private schools at Gayā town, and a school maintained by the Tekāri Rāj at Tekāri, all teaching English up to the matriculation standard.

In 1903 the District contained 15 dispensaries, of which 10 had accommodation for 182 in-patients; the cases of 90,000 out-patients and 2,300 in-patients were treated, and 7,000 operations were performed. The expenditure was Rs. 67,000, of which Rs. 3,000 was met by Government contributions, Rs. 22,000 from Local funds and Rs. 7,000 from municipal funds, and Rs. 25,000 from subscriptions. The chief institutions are the pilgrim and *zanāna* hospitals at Gayā town.

Vaccination is compulsory only in municipal areas, but the practice is steadily gaining ground, and the people as a whole are beginning to

realize its efficacy. In 1903–4 the number of persons successfully vaccinated was 58,000, or 29·5 per 1,000.

[M. Martin (Buchanan-Hamilton), *Eastern India*, vol. i (1838); G. A. Grierson, *Notes on the District of Gayā* (Calcutta, 1893); L. S. S. O'Malley, *District Gazetteer* (Calcutta, 1906).]

Gayā Subdivision.—Head-quarters subdivision of Gayā District, Bengal, lying between 24° 17′ and 25° 5′ N. and 84° 17′ and 85° 24′ E., with an area of 1,905 square miles. The population in 1901 was 751,855, compared with 832,442 in 1891. A plague epidemic was raging at the time of the Census of 1901, which not only caused many deaths and a considerable exodus, but also made the work of enumeration exceptionally difficult. The subdivision comprises two tracts, that to the north being a level plain dotted with isolated hills and containing some long hill ranges, that to the south an undulating country with several hills forming the northern fringe of the Chotā Nāgpur plateau. The density for the whole subdivision is only 395 persons per square mile, and the population along the south is very sparse. It contains three towns, GAYĀ (population, 71,288), its head-quarters, TEKĀRI (6,437), the residence of the Tekāri family (*see* TEKĀRI RĀJ), and SHERGHĀTI (2,641); and 2,999 villages. Gayā town, which possesses a very ancient history, is an important place of pilgrimage, and at BUDDH GAYĀ are remains of unusual religious and archaeological importance. The subdivision contains numerous other remains of great interest, which have been referred to in the articles on GAYĀ DISTRICT and BARĀBAR HILLS.

Gayā Town.—Chief town, and, with Sāhibganj, the administrative head-quarters of Gayā District, Bengal, situated in 24° 49′ N. and 85° 1′ E., on the left bank of the Phalgu river, on branches of the East Indian Railway leading to Patna, Mughal Sarai, Luckeesarai, and Katrasgarh. The town is divided into two adjoining parts, Gayā proper or the old town, and Sāhibganj or the new town. The old town, which contains the famous temple of Vishnupada and other sacred shrines, is chiefly inhabited by the Gayāwāl priests. The new town (Sāhibganj) is the administrative head-quarters of the District, and contains all the public offices, revenue, magisterial, civil, opium, police, &c., the dwelling-houses of the European officers and residents, and also the police station and lines, hospitals, circuit and *dāk* bungalows, railway offices, a church, a public library, a school, and a racecourse. The jail building, which was formerly in the midst of the new town, has now been removed to a distance. It has accommodation for 542 prisoners, who are employed on oil-pressing, breaking of road metal, weaving of *daris* and *newār*, manufacture of bamboo baskets, money-bags, string and mats, jute twine, and cotton rope. The streets of the old town are narrow, but those of the new town are

generally straight and broad with numerous cross-roads. There are many brick houses, often three storeys high. The population, which was 66,843 in 1872, rose to 76,415 in 1881 and to 80,383 in 1891, but fell in 1901 to 71,288, the heavy decrease probably being entirely due to the plague which was raging at the time of the Census. Of those enumerated, 54,223, or 76 per cent., were Hindus, and 16,778, or 23 per cent., Musalmāns, while among the others were 156 Christians and 121 Jains. Gayā was constituted a municipality in 1865. The income during the decade ending 1901-2 averaged Rs. 88,000, and the expenditure Rs. 83,000. In 1903-4 the income was Rs. 1,13,000, including Rs. 50,000 derived from a tax on houses and lands, Rs. 23,000 from a conservancy rate, Rs. 9,000 from a tax on vehicles, and Rs. 5,000 as revenue from markets. The incidence of taxation was Rs. 1-2-8 per head of the population. In the same year the expenditure amounted to Rs. 1,06,000, the chief items being Rs. 4,000 spent on lighting, Rs. 2,000 on drainage, Rs. 42,000 on conservancy, Rs. 16,000 on medical relief, Rs. 8,000 on roads, and Rs. 2,000 on education. A scheme of water-supply is under consideration, but has been deferred for lack of funds.

According to the Bhāgavat Purāna, Gayā was the name of a king who dwelt in the town in the Tretā Yuga. The more generally accepted legend, however, is that contained in the Vāyu Purāna, according to which Gayā was the name of an Asura, or demon of giant size, who by long and austere penance and devotion obtained the quality of holiness to such an extent that all who saw or touched him were admitted to heaven. Yama, the lord of hell, grew jealous and, pleading that his post was becoming a sinecure, appealed to the gods, who, after conferring in council, visited Gayā and persuaded the demon to grant his pure and holy body as a place of sacrifice. To this Gayā assented, and lay down with his head resting where the old town of Gayā now is. Yama then placed a sacred rock (*dharmasila*) on his head; but this was not sufficient to keep him quiet until Vishnu promised the rock should be the holiest spot on earth, that the *devas* should rest there, that the locality should be known as *Gayā-kshettra*, and that whoever offered funeral cakes and performed the funeral ceremonies there should be translated with their ancestors to the heaven of Brahmā. This legend, purporting to explain the reason for the peculiar sanctity of the spot which is an object of pilgrimage to every member of the Hindu religion, contains, in the opinion of the late Dr. Rājendralāla Mitra, an allegory of the final victory of Brāhmanism over Buddhism, which had flourished strongly in and around Gayā for many centuries. The pilgrimage to Gayā is undertaken by thousands of Hindus from every part of India. There are forty-five places at which the pilgrims should offer *pindas* or funeral

cakes in the *Gayā-kshettra*, an area extending from 5 miles north-west of Gayā to 7 miles south. The whole forty-five are rarely visited now, the majority of pilgrims contenting themselves with seven and often with three only. The Vishnupada, a temple built over the foot-print of Vishnu on the solid rock that crops up on the west bank of the Phalgu river, and round which the old town of Gayā proper was built, may be regarded as the centre of this pilgrimage, and is the largest and most important temple in Gayā. It faces east, the façade being very striking. It is an ugly octagonal building about 100 feet high, with many very clumsy mouldings. The threshold is guarded by high folding doors plated with silver. In the centre is an octagonal basin plated with silver, which surrounds the impress on the rock of the god's foot about 16 inches in length. Pilgrims to the temple stand round the basin and throw in their offerings of rice and water. To the south of the temple, almost touching it, is a handsome pillared hall or porch, where the bare rock shows itself; in fact the pillars are let into the solid rock for a foundation. This temple is said to have been erected in the eighteenth century by Ahalyā Bai, widow of Holkar of Indore, on the site of a more ancient temple. The Gayāwāls are the hereditary officiating priests, possessing the exclusive privilege to grant to the pilgrims the blessing without which their visit would be ineffectual, and they take advantage of their position to obtain from the pilgrims such gifts as they are able to afford. The poorest pilgrim can rarely get through the functions required of him under five rupees, while certain princes are reputed to have spent more than a lakh.

[M. Martin (Buchanan-Hamilton), *Eastern India*, vol. i (1838): L. S. S. O'Malley, *District Gazetteer of Gayā* (Calcutta, 1906).]

Gedi.—Petty State in KĀTHIĀWĀR, Bombay.

Geonkhālī.—Village in the Tamlūk subdivision of Midnapore District, Bengal, situated in 22° 10′ N. and 87° 57′ E., on the right bank of the Hooghly river at the entrance of the Orissa Coast canal. Population (1901), 524. It is a considerable trading centre. A steam ferry crosses from Diamond Harbour in connexion with the Eastern Bengal State Railway. There is a lighthouse here, known as the Cowcolly lighthouse.

Georgegarh (*Jahāzgarh*).—Village in the Jhajjar *tahsīl* of Rohtak District, Punjab, situated in 28° 37′ N. and 76° 36′ E. Population (1901), 1,285. It was founded by George Thomas, who built a fort to overawe the towns of Beri and Jhajjar, which was besieged and taken by a large Marāthā force under Louis Bourquin, Thomas being obliged to retire to Hānsi (1801). A large cattle fair is held here twice a year.

Gersoppa Falls.—The Gersoppa Falls are situated in 14° 14′ N. and 74° 49′ E., on the Bombay-Mysore frontier, about 18 miles east of Gersoppa, and 35 miles east of Honāvar (North Kanara District), from

which they can best be visited. They are locally known as the Jog Falls, from the neighbouring village of Jog. The waterfall is on the Sharāvatī river, which, with a breadth above the falls of about 230 feet, hurls itself over a cliff 830 feet high, in four separate cascades, known as the Rājā (or Horseshoe) Fall, the Roarer, the Rocket, and La Dame Blanche. The best time to see the falls is early in December, when the river is low enough to make it possible to cross to the left or Mysore bank. Between June and November, when the river is flooded, the banks are shrouded in clouds of mist. From Gersoppa village the road climbs about 10 miles through noble stretches of forest to the crest of the Gersoppa or Malemani pass, and from the crest passes 8 miles farther to the falls. Close underwood hides all trace of the river, till, at the bungalow near the falls, the plateau commands a glorious view. The rock of the river-bed and the cliff over which the river falls are gneiss associated with hypogene schists. The Gersoppa Falls eclipse every other in India and have few rivals in the world for height, volume, and beauty combined. The varying effects of light and shade at different times of the day are among their greatest beauties. In the afternoon, as the sun sinks to the west, a lovely rainbow spans the waters: at night, the moon at times throws across the spray a belt of faintly-tinted light. On a dark night, rockets, blazing torches, or bundles of burning straw cast over the cliff light the raging waters with a fitful and weird glare. The best sight of the chasm is gained by lying down and peering over a pinnacle of rock, which stands out from the edge of the cliff. The finest general view of the falls is from the Mysore bank. From the right bank of the river a rough bamboo bridge crosses the Rājā channel to the rocks beyond. The path then keeps well above the edge of the cliff, among large rocks, over small channels, and across seven or eight of the broader streams by rude bamboo and palm-stem bridges. On the left or Mysore bank a well-kept path leads through shady woods to a point called Watkins's Platform, which commands a view across the chasm to the deep cleft where the waters of the Rājā and the Roarer join and plunge into the pool below. Hence a farther path through the woods leads down a series of steep steps to the open hill-side, which slopes to the bed of the river. The edge of the pool affords a fine general view of the falls, of the magnificent rugged chasm, and of the deep winding gorge through which, in the course of ages, the waters of the river have untiringly eaten their way.

Gersoppa Village (='the cashew-nut').—Village in the Honāvar *tāluka* of North Kanara District, Bombay, situated in 14° 14′ N. and 74° 39′ E., on the Sharāvatī, about 18 miles east of Honāvar and a similar distance from the falls known by this name. The village is pleasantly placed on the left bank of the river, shaded by a grove of coco-nuts. About a mile and a half east of Gersoppa are the extensive

ruins of Nagarbastikere, which was the capital of the Jain chiefs of Gersoppa (1409–1610), and is locally believed to have contained, in its prosperous days, 100,000 houses and 84 temples. The chief object of interest is a cross-shaped Jain temple, with four doors and four images. There are five other ruinous temples, in which are a few images and inscriptions. The temple of Varddhamān or Mahāvīra-swamī contains a fine black stone image of Mahāvīra, the twenty-fourth or last Jain Tīrthankar. There are four inscribed stones in Varddhamān's temple.

According to tradition the Vijayanagar kings (1336–1565) raised a Jain family of Gersoppa to power in Kanara, and Buchanan records a grant to a temple of Gunvanti near Manki in 1409 by Itchappa Wodearu Pritani, the Gersoppa chief, by order of Pratāp Dev Rai Trilochia of the family of Harihar. Itchappa's granddaughter became almost independent of the Vijayanagar kings. The chiefship seems to have been very often held by women, as almost all the writers of the sixteenth and early part of the seventeenth century refer to the queen of Gersoppa or Bhatkal. In the early years of the seventeenth century Bhaira Devī of Gersoppa, the last of the name, was attacked and defeated by Venkatappa Naik, the chief of Bednur. According to a local account, she died in 1608. In 1623 the Italian traveller Della Valle describes the place as once a famous city, the seat of a queen, the metropolis of a province. The city and palace had fallen to ruin and were overgrown with trees; nothing was left but some peasants' huts. So famous was the country for its pepper that the Portuguese called the queen of Gersoppa 'Rainha da Pimenta,' or the Pepper-Queen.

Gevrai.—Northern *tāluk* of Bhīr District, Hyderābād State, with an area of 506 square miles. The population in 1901, including *jāgīrs*, was 58,361, compared with 81,119 in 1891, the decrease being due to the famines of 1897 and 1899–1900. The *tāluk* has 135 villages, of which 16 are *jāgīr*; and Gevrai (population, 3,965) is the head-quarters. The land revenue in 1901 was 2·3 lakhs. The Godāvari in the north separates the *tāluk* from Aurangābād District.

Ghaggar.—River of Northern India. It rises on the lower slopes of the Himālayas in the Native State of Sirmūr, in 30° 4′ N. and 77° 14′ E. Passing within three miles of Ambāla town and touching British territory, it traverses the Native State of Patiāla, where it receives the Saraswatī, enters Hissār District, and finally loses itself in Bīkaner territory near Hanumāngarh, formerly called Bhatnair. The river was once an affluent of the Indus, the dry bed of the old channel being still traceable. It is not a perennial stream, but depends on the monsoon rainfall for its supply. At present every village through which the stream passes in its upper course diverts a portion of its waters for irrigation, and no less than 10,000 acres in Ambāla District alone are

supplied from this source. The dams thus erected check the course of the stream, while the consequent deposit of silt, greatly facilitated by the dams, has permanently diminished the power of the water to force its way across the dead level of the Karnāl or Patiāla plains. Near Jakhāl station on the Southern Punjab Railway a District canal, the Rangoi, takes off from the main stream, and irrigates an average of 12,000 acres annually. The Bīkaner Darbār constantly complained that the dams constructed in Hissār District prevented the water of the river from entering their territory; and in 1896 it was decided to construct a weir at the lower end of the Dhanūr lake at Otu, which supplies two canals, one on the north and the other on the south bank. The work was completed at a cost of 6 lakhs, of which the Bīkaner State contributed nearly half. The two canals are nearly 95 miles in length ($51\frac{1}{4}$ miles in Bīkaner and about $43\frac{1}{2}$ in British territory), and have more than 23 miles of distributaries. They form the most important irrigation works in the Bīkaner State, and have supplied about 10,000 acres annually since 1897–8.

The Ghaggar water, in or near the hills, when used for drinking, produces disastrous results, causing fever, enlarged spleen, and goitre; families are indeed said to die out in the fourth generation, and the villages along its banks are greatly under-populated. Only the prospect of obtaining exceptional returns for their labours can induce cultivators to settle in such an unhealthy region. During the lower portion of its course in Hissār District the bed of the river is dry from November to June, and yields excellent crops of wheat and rice. Even in the rains the water-supply is very capricious, and from time to time it fails entirely except in the immediate neighbourhood of the hills.

Ghaggar Canals.—An Imperial system of minor canals in the Punjab, taking off from the Ghaggar. Owing to the waste of water in the lakes and swamps of that river, and the insanitary condition to which the low-lying lands in the valley below Sirsa were reduced, it was agreed between the British Government and the State of Bīkaner that the Dhanūr lake, about 8 miles from Sirsa, should be converted into a reservoir by the construction of a masonry weir at Otu, and that irrigation should be effected by two canals, the northern and southern, taking off from each end of the weir, with a combined capacity of 1,000 cubic feet per second. The Bīkaner State was to share the canal supplies and meet a proportionate part of the cost. The canals were constructed with famine labour in 1896–7, and began to irrigate in the monsoon of 1897. The areas commanded in British and Bīkaner territory are 130 and 117 square miles, and the irrigable areas are 53 and 35 square miles, respectively. There are 95 miles of main canals and 24 of distributaries; and the total capital outlay to the end of March, 1904, was 6·3 lakhs, of which 2·8 lakhs was debited to Bīkaner.

These canals are never likely to show any return on their capital cost, as only part of the irrigated area is assessed to canal occupiers' rates, the remainder being assessed to land revenue only.

Ghāgrā.—River in the United Provinces and Bengal. *See* GOGRA.

Ghanaur. Southern *tahsīl* of the Pinjaur *nizāmat*, Patiāla State, Punjab, lying between 30° 4′ and 30° 29′ N. and 76° 29′ and 76° 50′ E., with an area of 186 square miles. The population in 1901 was 45,344, compared with 49,842 in 1891. The *tahsīl* contains 171 villages, of which Ghanaur is the head-quarters. The land revenue and cesses in 1903–4 amounted to 2 lakhs.

Ghātāl Subdivision.—Northern subdivision of Midnapore District, Bengal, lying between 22° 28′ and 22° 52′ N. and 87° 28′ and 87° 53′ E., with an area of 372 square miles. The subdivision slopes back from the bank of the Rūpnārāyan; the soil is a rich alluvium, but much of its area is liable to floods, and though excellent crops are obtained, the inhabitants suffer greatly from malaria. The population in 1901 was 324,991, compared with 327,902 in 1891, the density being 874 persons per square mile. It contains five towns, GHĀTĀL (population, 14,525), its head-quarters, CHANDRAKONĀ (9,309), KHIRPAI (5,045), RĀMJIBANPUR (10,264), and KAHRĀR (9,508); and 1,042 villages.

Ghātāl Town.—Head-quarters of the subdivision of the same name in Midnapore District, Bengal, situated in 22° 40′ N. and 87° 43′ E., on the Silai river near its junction with the Rūpnārāyan. Population (1901), 14,525. A Dutch factory was formerly situated here. Ghātāl is an important trade centre and is connected with Calcutta by a daily service of steamers. Cloth and *tasar* silk are manufactured. It was constituted a municipality in 1869. The income and expenditure during the decade ending 1901–2 averaged Rs. 7,700 and Rs. 7,400 respectively. In 1903–4 the income was Rs. 9,400, mainly from a tax on persons (or property tax); and the expenditure was Rs. 9,300. The town contains the usual public offices; a sub-jail has accommodation for 18 prisoners.

Ghātampur.—Southern *tahsīl* of Cawnpore District, United Provinces, conterminous with the *pargana* of the same name, lying along the Jumna, between 25° 56′ and 26° 19′ N. and 79° 58′ and 80° 21′ E., with an area of 341 square miles. Population increased from 117,797 in 1891 to 124,662 in 1901. There are 233 villages, but no town. The demand for land revenue in 1903–4 was Rs. 2,76,000, and for cesses Rs. 44,000. The density of population, 366 persons per square mile, is the lowest in the District. The *tahsīl* is divided into two portions by the small stream called Non. The northern half is a tract of fertile loam, while the southern is occupied by soils resembling those found in BUNDELKHAND, and is much cut up in parts by wild and bare ravines. In 1903–4 the area under cultivation was 216

square miles, of which 62 are irrigated. The Bhognīpur branch of the Lower Ganges Canal supplies five-sixths of the irrigated area.

Ghāts, The (etymologically, 'a pass through a mountain,' or 'landing-stairs from a river'; in this case the 'passes' or 'landing-stairs' from the coast to the inner plateau).—Two ranges of mountains, forming the eastern and the western walls which support the triangular table-land of Southern India. The Eastern Ghāts run in fragmentary spurs and ranges down the east side of the Peninsula, receding inland and leaving broad tracts between their base and the coast. The Western Ghāts form the great sea-wall for the west side of the Peninsula, with only a narrow strip between them and the shore. At one point they rise in precipices and headlands out of the ocean, and truly look like colossal 'landing-stairs' from the sea. The Eastern and the Western Ghāts meet at an angle in the Nīlgiris, and so complete the three sides of the interior table-land. The inner plateau has an elevation seldom exceeding 2,000 to 3,000 feet. Its best-known hills are the NĪLGIRIS ('blue mountains'), which contain the summer capital of Madras, Ootacamund (7,000 feet). The highest point is Anaimudi peak in Travancore State (8,837 feet), while Dodabetta in the Nīlgiri District reaches 8,760 feet. This wide region of highlands sends its waters chiefly to the east coast. The drainage from the northern edge of the three-sided table-land enclosed by the Ghāts falls into the Ganges. The Narbadā runs along the southern base of the Vindhyas which form that edge, and carries their drainage due west into the Gulf of Cambay. The Tāpti flows almost parallel to the Narbadā, a little to the southward, and bears to the same gulf the waters from the SĀTPURĀ Hills. But from this point, proceeding southwards, the Western Ghāts rise into a high unbroken barrier between the Bombay coast and the waters of the inner table-land. The drainage has therefore to make its way right across India to the eastwards, now twisting round hill ranges, now rushing down the valleys between them, until the rain which the Bombay sea-breeze drops upon the Western Ghāts finally falls into the Bay of Bengal. In this way the three great rivers of the Madras Presidency—the Godāvari, Kistna, and Cauvery—rise in the mountains overhanging the Bombay coast, and traverse the whole breadth of the central table-land before they reach the ocean on the eastern shores of India.

The entire geography of the two coasts of the Peninsula is determined by the characteristics of these two mountain ranges. On the east, the country is comparatively open, and everywhere accessible to the spread of civilization. It is here that all the great kingdoms of Southern India fixed their capitals. Along the west, only a narrow strip of lowland intervenes between the barrier range and the seaboard. The inhabitants are cut off from communication with the interior, and have been left to

develop a civilization of their own. Again, the east coast is a comparatively dry region. Except in the deltas of the great rivers, the crops are dependent upon a local rainfall which rarely exceeds 40 inches in the year. The soil is poor, the general elevation high, and the mountains are not profusely covered with forest. In this region the chief aim of the Forest department is to preserve a sufficient supply of trees for fuel.

On the west all these physical conditions are reversed. The rivers are mere hill-torrents, but the south-west monsoon brings an unfailing rainfall in such abundance as to clothe even the hill slopes of the southern portion with a most luxuriant vegetation. The annual fall all along the coast from Surat to Malabar averages 100 inches, which increases to 300 inches high up among the mountains. What the western coast loses in regular cultivation it gains in the natural wealth of its primaeval forests, which display the most magnificent scenery in all India and supply most valuable timber.

(For further information *see* GHĀTS, EASTERN, and GHĀTS, WESTERN.)

Ghāts, Eastern.—The triangular table-land of Southern India is flanked and upheld by two ranges of mountains, which run roughly parallel to its eastern and western seaboard and eventually meet in the high plateau of the Nīlgiris. These are known by the generic names of the Eastern and Western Ghāts, though various portions of them bear local appellations. The Eastern Ghāts are a disjointed line of small confused ranges which begin in Orissa, pass into Ganjām, the northernmost District of the Madras Presidency, and run through a greater or less extent of all the Districts which lie between Ganjām and the Nīlgiri plateau. They are about 2,000 feet in elevation on an average, and their highest peaks are less than 6,000 feet. In Ganjām and Vizagapatam they run close to the shore of the Bay of Bengal, but as they travel southwards they recede farther inland, and leave a stretch of low country from 100 to 150 miles wide between their easternmost spurs and the sea. To the west of them lies a level upland plain, averaging from 1,000 to 2,000 feet in height, one section of which is known as the DECCAN.

The Eastern Ghāts belong to no one geological formation, and the rocks of which they consist vary in structure and origin with the country through which they pass. The various sections of the range, indeed, differ greatly in other characteristics also. In the Agency tracts of the three northernmost Districts, Ganjām, Vizagapatam, and Godāvari, the range consists of a confused tangle of low and very malarious hills, which have an annual rainfall of from 50 to 80 inches, and are covered with a sparse forest valuable only for the *sāl* (*Shorea robusta*) and teak it contains. In these inhospitable hills, parts of which go by the local name of the MĀLIAHS, dwell several backward hill tribes which are not met

with elsewhere, such as the Khonds, who almost within living memory practised human sacrifice to secure favourable crops; the Savaras, who still use bows and arrows; the shy Koyis of the Godāvari Agency; and other smaller communities. The chief peak in this part of the range is MAHENDRAGIRI in Ganjām, which is close on 5,000 feet above the sea.

Farther south, in Kurnool District, the range widens out to form the NALLAMALAI HILLS. Here the annual rainfall is only from 30 to 40 inches, the forest is more sparse, and the peaks are less bold than in the Agencies, scarcely ever exceeding 3,000 feet. Malaria still infests them, however, and they are likewise inhabited by primitive people, the Chenchus of the Nallamalais differing altogether ethnologically from the dwellers in the plains below them.

Still farther southwards, in Cuddapah, the Eastern Ghāts are known as the PĀLKONDA HILLS, and by other local names. Here they are less malarious, though uninhabited, and the forest growth upon them has changed and contains much of the valuable red-sanders tree (*Pterocarpus santalinus*).

In North Arcot, Salem, and Coimbatore the range is very broken and contains no well-marked lines, until in the last-named District the BILIGIRI-RANGAN HILLS, which lie close to the Nīlgiri plateau, are reached.

Few rivers rise in the range. In the north, where the rainfall is heaviest, the RUSHIKULYA and the LĀNGULYA and one or two considerable tributaries of the Godāvari have their sources among its valleys: but farther southwards no streams of importance flow from it. It is not usually a watershed. The various great rivers which rise in or near the moister Western Ghāts—the GODĀVARI, KISTNA, PENNER, PONNAIYĀR, and CAUVERY—have all forced their way through the many gaps which occur in its long course.

Ghāts, Western. A range of mountains about 1,000 miles in length, forming the western boundary of the Deccan and the watershed between the rivers of Peninsular India. The Sanskrit name is Sahyādri. The range, which will be treated here with reference to its course through Bombay, Mysore and Coorg, and Madras, may be said to begin at the Kundaibāri pass in the south-western corner of the Khāndesh District of Bombay Presidency, though the hills that run eastward from the pass to Chimtāna, and overlook the lower Tāpti valley, belong to the same system. From Kundaibāri (21° 6′ N. and 74° 11′ E.) the chain runs southward with an average elevation which seldom exceeds 4,000 feet, in a line roughly parallel with the coast, from which its distance varies from 20 to 65 miles. For about 100 miles, up to a point near Trimbak, its direction is somewhat west of south; and it is flanked on the west by the thickly wooded and unhealthy table-land of Peint, Mokhāda, and Jawhār (1,500 feet),

which forms a step and a barrier between the Konkan lowlands and the plateau of the Deccan (about 2,000 feet). South of Trimbak the scarp of the western face is more abrupt: and for 40 miles, as far as the Mālsej pass, the trend is south-by-east, changing to south-by-west from Mālsej to Khandāla and Vāgjai (60 miles), and again to south-by-east from here until the chain passes out of the Bombay Presidency into Mysore near Gersoppa (14° 10′ N. and 74° 50′ E.). On the eastern side the Ghāts throw out many spurs or lateral ranges that run from west to east, and divide from one another the valleys of the Godāvari, Bhīma, and Kistna river systems. The chief of these cross-ranges are the SĀTMĀLAS, between the Tāpti and Godāvari valleys; the two ranges that break off from the main chain near Harischandragarh and run south-eastwards into the Nizām's Dominions, enclosing the triangular plateau on which Ahmadnagar stands, and which is the watershed between the Godāvari and the Bhīma: and the Mahādeo range, that runs eastward and southward from Kamālgarh and passes into the barren uplands of Atpādi and Jath, forming the watershed between the Bhīma and the Kistna systems. North of the latitude of Goa, the Bombay part of the range consists of eocene trap and basalt, often capped with laterite, while farther south are found such older rocks as gneiss and transitional sandstones. The flat-topped hills, often crowned with bare wall-like masses of basalt or laterite, are clothed on their lower slopes with jungles of teak and bamboo in the north: with *jāmbul* (*Eugenia Jambolana*), *ain* (*Terminalia tomentosa*), and *nāna* (*Lagerstroemia parviflora*) in the centre: and with teak, blackwood, and bamboo in the south.

On the main range and its spurs stand a hundred forts, many of which are famous in Marāthā history. From north to south the most notable points in the range are the Kundaibāri pass, a very ancient trade route between Broach and the Deccan; the twin forts of Sālher and Mulher guarding the Bābhulna pass; TRIMBAK at the source of the holy river Godāvari; the Thal pass by which the Bombay-Agra road and the northern branch of the Great Indian Peninsula Railway ascend the Ghāts; the Pimpri pass, a very old trade route south between Nāsik and Kalyān or Sopāra, guarded by the twin forts of Alang and Kulang: Kalsūbai (5,427 feet), the highest peak in the range; Harischandragarh (4,691 feet); the Nāna pass, a very old route between Junnar and the Konkan; Shivner, the fort of Junnar; Bhīmashankar, at the source of the Bhīma; Chākan, an old Musalmān stronghold; the Bhor or Khandāla pass, by which the Bombay-Poona road and the southern branch of the Great Indian Peninsula Railway enter the Deccan, and on or near which are the caves of Kondāne, Kārli, Bhāja, and Bedsa; the caves of Nādsur and Karsāmbla below the Vāgji pass: the forts of Sinhgarh and Purandhar in the spurs south

of Poona; the forts of Raigarh in the Konkan and of Pratāpgarh between the new Fitzgerald *ghāt* road and the old Pār pass: the hill station of MAHĀBALESHWAR (4,717 feet) at the source of the Kistna; the fort and town of Sātāra: the Kumbhārli pass leading to the old towns of Pātan and Karād; the Ambā pass, through which runs the road from Ratnāgiri to Kolhāpur; the forts of Vishalgarh and Panhāla: the Phonda pass, through which runs the road from Deogarh to Nipāni; the Amboli and the Rām passes, through which run two made roads from Vengurla to Belgaum; Castle Rock, below which passes the railway from Marmagao to Dhārwār: the Arbail pass on the road from Kārwār to Dhārwār; the Devīmane pass on the road from Kumta to Hubli; and the GERSOPPA FALLS on the river Sharāvatī.

On leaving the Bombay Presidency, the Western Ghāts bound the State of Mysore on the west, separating it from the Madras District of South Kanara, and run from Chandragutti (2,794 feet) in the north west to Pushpagiri or the Subrahmanya hill (5,626 feet) in the north of Coorg, and continue through Coorg into Madras. In the west of the Sāgar *tāluk*, from Govardhangiri to Devakonda, they approach within 10 miles of the coast. From there they trend south-eastwards, culminating in Kudremukh (6,215 feet) in the south-west of Kadūr District, which marks the watershed between the Kistna and Cauvery systems. They then bend east and south to Coorg, receding to 45 miles from the sea. Here, too, numerous chains and groups of lofty hills branch off from the Ghāts eastwards, forming the complex series of mountain heights south of Nagar in the west of Kadūr District. Gneiss and hornblende schists are the prevailing rocks in this section, capped in many places by laterite, with some bosses of granite. The summits of the hills are mostly bare, but the sides are clothed with magnificent evergreen forests. *Ghāt* roads to the coast have been made through the following passes: Gersoppa, Kollūr, Hosangadi, and Agumbi in Shimoga District; Būndh in Kadūr District: Manjarābād and Bisāle in Hassan District.

In the Madras Presidency the Western Ghāts continue in the same general direction, running southwards at a distance of from 50 to 100 miles from the sea until they terminate at Cape Comorin, the southernmost extremity of India. Soon after emerging from Coorg they are joined by the range of the EASTERN GHĀTS, which sweeps down from the other side of the Peninsula; and at the point of junction they rise up into the high plateau of the NĪLGIRIS, on which stand the hill stations of OOTACAMUND (7,000 feet), the summer capital of the Madras Government, COONOOR, WELLINGTON, and KOTAGIRI, and whose loftiest peaks are DODABETTA (8,760 feet) and MAKURTI (over 8,000).

Immediately south of this plateau the range, which now runs between

the Districts of Malabar and Coimbatore, is interrupted by the remarkable Pālghāt Gap, the only break in the whole of its length. This is about 16 miles wide, and is scarcely more than 1,000 feet above the level of the sea. The Madras Railway runs through it, and it thus forms the chief line of communication between the two sides of this part of the peninsula. South of this gap the Ghāts rise abruptly again to even more than their former height. At this point they are known by the local name of the ANAIMALAIS, or 'elephant hills,' and the minor ranges they here throw off to the west and east are called respectively the NELLIAMPATHIS and the PALNI HILLS. On the latter is situated the sanitarium of KODAIKĀNAL. Thereafter, as they run down to Cape Comorin between the Madras Presidency and the Native State of Travancore, they resume their former name.

North of the Nīlgiri plateau the eastern flank of the range merges somewhat gradually into the high plateau of Mysore, but its western slopes rise suddenly and boldly from the low coast. South of the Pālghāt Gap both the eastern and western slopes are steep and rugged. The range here consists throughout of gneisses of various kinds, flanked in Malabar by picturesque terraces of laterite which shelve gradually down towards the coast. In elevation it varies from 3,000 to 8,000 feet above the sea, and the ANAIMUDI PEAK (8,837 feet) in Travancore is the highest point in the range and in Southern India. The scenery of the Western Ghāts is always picturesque and frequently magnificent, the heavy evergreen forest with which the slopes are often covered adding greatly to their beauty. Large game of all sorts abounds, from elephants, bison, and tigers to the Nīlgiri ibex, which is found nowhere else in India.

Considerable areas on the Madras section of the range have been opened up by European capital in the last half-century for the cultivation of tea, coffee, cinchona, and cardamoms. Its forests are also of great commercial value, bamboos, black-wood (*Dalbergia latifolia*), and teak growing with special luxuriance. The heavy forest with which the range is clothed is the source of the most valuable of the rivers which traverse the drier country to the east, namely the Cauvery, Vaigai, and Tāmbraparni; and the waters of the Periyār, which until recently flowed uselessly down to the sea on the west, have now been turned back by a tunnel through the range and utilized for irrigation on its eastern side.

Before the days of roads and railways the Ghāts rendered communication between the west and east coasts of the Madras Presidency a matter of great difficulty; and the result has been that the people of the strip of land which lies between them and the sea differ widely in appearance, language, customs, and laws of inheritance from those in the eastern part of the Presidency. On the range itself, moreover,

are found several primitive tribes, among whom may be mentioned the well-known Todas of the Nīlgiris, the Kurumbas of the same plateau, and the Kādars of the Anaimalais. Communications across this part of the range have, however, been greatly improved of late years. Besides the Madras Railway already referred to, the line from Tinnevelly to Quilon now links up the two opposite shores of the Peninsula, and the range is also traversed by numerous *ghāt* roads. The most important of these latter are the Charmadi *ghāt* from Mangalore in South Kanara to Mudgiri in Mysore; the Sampājī *ghāt* between Mangalore and Mercāra, the capital of Coorg; the roads from Cannanore and Tellicherry, which lead to the Mysore plateau through the Perumbādi and Peria passes: and the two routes from Calicut to the Nīlgiri plateau up the Karkūr and Vayittiri-Gūdalūr *ghāts*.

Ghāziābād Tahsīl.—South-western *tahsīl* of Meerut District, United Provinces, comprising the *parganas* of Jalālābād, Loni, and Dāsnā, and lying between 28° 33′ and 28° 56′ N. and 77° 13′ and 77° 46′ E., with an area of 493 square miles. The Jumna forms the western boundary. The population rose from 247,141 in 1891 to 276,518 in 1901. The *tahsīl* contains 332 villages and 9 towns, of which the most important are GHĀZIĀBĀD (population, 11,275), the *tahsīl* head-quarters, PILKHUĀ (5,859), SHĀHDARA (5,540), and FARĪDNAGAR (5,620). In 1903–4 the demand for land revenue was Rs. 4,85,000, and for cesses Rs. 80,000. The *tahsīl* is one of the poorest in the District, the density of population being only 562 persons per square mile, while the District average is 654. The Hindan passes through the western portion and the Chhoiyā, a tributary of the East Kālī Nadī, through the eastern. The worst tract, a sandy area cut up by ravines, lies between the Hindan and the Jumna; but the north-east corner, which forms a badly-drained basin, is also very poor. On the other hand, communications by both railway and road are excellent. The *tahsīl* is well supplied by irrigation from the Upper Ganges and Eastern Jumna Canals. In 1903–4 the area under cultivation was 349 square miles, of which 180 were irrigated. Indigo is a more important crop here than elsewhere, while sugar-cane is less grown than in the rest of the District.

Ghāziābād Town.—Head-quarters of the *tahsīl* of the same name in Meerut District, United Provinces, situated in 28° 40′ N. and 77° 26′ E., on the grand trunk road from Calcutta to Peshāwar, and a junction for the East Indian, North-Western, and Oudh and Rohilkhand Railways. Population (1901), 11,275. It was founded in 1740 by the Wazīr Ghāzī-ud-dīn, son of Asaf Jāh, ruler of the Deccan, and was formerly called Ghāzī-ud-dīn-nagar. In 1763 Sūraj Mal, the Jāt Rājā of Bharatpur, met his death at the hands of the Rohillas near this place. In May, 1857, a small British force from Meerut encountered and

defeated the Delhi rebels, who had marched out to hold the passage of the Hindan. The main site contains two broad metalled bazars at right angles, with masonry drains and good brick-built shops. Extensions have recently been made, including two fine markets, called Wrightganj and Wyerganj, after the Collectors who founded them. The police station and town hall are located in the large *sarai* built by Ghāzī-ud-dīn. There is also a dispensary. Near the station the railway companies have built several barracks and houses. The Church Missionary Society and the American Methodists have branches here. Ghāziābād has been a municipality since 1868. During the ten years ending 1901 the income and expenditure averaged Rs. 13,000. In 1903–4 the income was Rs. 17,000, chiefly derived from octroi (Rs. 13,000); and the expenditure was Rs. 18,000. There is a considerable trade in grain, hides, and leather. The town contains an Anglo-vernacular school, supported by the Church Missionary Society, with 120 pupils in 1904, a *tahsīlī* school with 147, eight aided primary schools with 211, and a girls' school with 27 pupils.

Ghāzīpur District.—District in the Benares Division of the United Provinces, lying on both banks of the Ganges, between 25° 19′ and 25° 54′ N. and 83° 4′ and 83° 58′ E., with an area of 1,389 square miles. It is bounded on the north by Azamgarh and Ballia; on the east by Ballia and the Shāhābād District of Bengal; on the south by Shāhābād and Benares; and on the west by Jaunpur. No hill or natural eminence is to be found within the District; but both north and south of the Ganges the country may be divided into an upland and a low-lying tract. The higher land marks the banks of ancient streams which have now disappeared. Ghāzīpur is very thickly inhabited and closely cultivated; and its villages contain numbers of small collections of houses scattered in all parts, instead of being concentrated in a central site, as in the western Districts. The Ganges flows through the southern portion of the District in a series of bold curves. It is joined by the Gumtī after a short course in the west, and in the south-east by the Karamnāsā, which for 18 miles forms the boundary between Ghāzīpur and Shāhābād. Smaller streams flow across the northern part of the District from north-west to south-east. The Gāngi and Besu join the Ganges midway in its course, while the Mangai and Chhotī Sarjū unite beyond the limits of the District, and subsequently fall into the Ganges.

Physical aspects.

No rocks are exposed anywhere in Ghāzīpur, and the formation is purely Gangetic alluvium. *Kankar* or calcareous limestone and saline efflorescences are common.

The District is well wooded, but its flora presents no peculiarity. The trees are largely of cultivated varieties, such as the mango, bamboo,

and various fruit trees. There are a few patches of jungle, in which *dhak* (*Butea frondosa*) is the most conspicuous tree.

The country is too densely populated and too well cultivated to harbour many wild animals. The *nīlgai* and antelope are the only large game. The ordinary kinds of water-fowl are found on some of the tanks, and fish are plentiful in the Ganges and its tributaries.

As compared with other Districts in the United Provinces, Ghāzipur is hot and damp; but the temperature is not subject to the extremes recorded farther west.

The annual rainfall averages 40 inches, the amount received in different parts of the District varying very little. From year to year, however, fluctuations are considerable. In 1887 the fall was only 16 inches, while in 1894 it was as much as 59 inches.

History.

Tradition refers the foundation of the city of Ghāzīpur to a mythical hero, Gādh, who is said to have called his stronghold Gādhīpur. Nothing definite is known of the early history of the District, which was, however, certainly included in the kingdom of the Guptas of MAGADHA in the fourth and fifth centuries A.D. Hiuen Tsiang, the Chinese pilgrim, in the seventh century, found a kingdom called Chen-Chu in this neighbourhood, the site of the capital of which has not been satisfactorily identified. He noted that the soil was rich and regularly cultivated, and that the towns and villages were close together. A long blank follows, which can only be filled by speculation.

In 1194 Bihār and the middle Ganges valley were conquered by Kutb-ud-dīn, the general of Muhammad Ghorī, first Musalmān emperor of Delhi. He had defeated and slain the Hindu champion, Jai Chand, the Rāthor Rājā of Kanauj, in the Jumna ravines of Etāwah; and the whole country as far as Bengal lay at his mercy. During the succeeding century we hear little of the present District; but about the year 1330 the city of Ghāzīpur was founded (according to a probable tradition) by a Saiyid chief, named Masūd, who slew the local Hindu Rājā in battle. Sultān Muhammad Tughlak thereupon granted him the estates of his conquered enemy, with the title of *Ghāzī*, which gave the name to the newly-founded city. From 1394 to 1476 Ghāzīpur was incorporated in the dominions of the Sharkī dynasty of Jaunpur, who maintained their independence for nearly a century as rivals to the rulers of Delhi. After their fall, it was reunited to the dominions of the Delhi Sultāns, and was conquered like the surrounding country by the Mughal emperor, Bābar, after the battle of Pānīpat in 1526. In 1539, however, the southern border of the District, close to Buxar in Shāhābād, was the scene of a decisive engagement between the Afghān prince Sher Shāh and Humāyūn, the son of Bābar, in which the latter was utterly defeated and driven out of the country.

Sher Shāh's victory settled the fate of Ghāzīpur for the next twenty years. It remained in the undisturbed possession of the Afghāns, not only through the reigns of the three emperors belonging to the Sūri dynasty, but throughout the restored supremacy of Humāyūn. It was not till the third year of Akbar that Ghāzīpur was recovered for the Mughal throne by Khān Zamān, governor of Jaunpur, from whom the town of Zamānia derives its name. After his rebellion and death in 1566, the District was thoroughly united to the Delhi empire, and organized under the *Sūbah* of Allahābād. During the palmy days of Akbar's successors the annals of Ghāzīpur are purely formal and administrative, until the rising of the Nawābs of Oudh at the beginning of the eighteenth century. In 1722 Saādat Khān made himself practically independent as viceroy of Oudh. About 1748 he appointed Shaikh Abdullah, a native of the District, who had fled from the service of the governor at Patna, to the command of Ghāzīpur. Abdullah has left his mark in the city by his splendid buildings. His son, Fazl Alī, succeeded him, but after various vicissitudes was expelled by Rājā Balwant Singh of Benares. Balwant Singh died in 1770, and the Nawāb was compelled by the English to allow his illegitimate son, Chet Singh, to inherit his title and principality. In 1775 the suzerainty of the Benares province was ceded to the British by the Nawāb Wazīr, Asaf-ud-daula. The new government continued Chet Singh in his fief until the year 1781, when he rebelled and was deposed by Warren Hastings.

In 1857 order was preserved till the mutiny at Azamgarh became known on June 3. The fugitives from Azamgarh arrived on that day, and local outbreaks took place. The 65th Native Infantry, however, remained stanch, and 100 European troops on their way to Benares were detained, so that order was tolerably re-established by June 16. No further disturbance occurred till the news of the mutiny at Dinapore arrived on July 27. The 65th then stated their intention of joining Kuar Singh's force; but after the rebel defeat at Arrah they were quietly disarmed, and some European troops were stationed at Ghāzīpur. No difficulties arose till the siege of Azamgarh was raised in April, 1858, when the rebels came flying down the Gogra and across the Ganges to Arrah. The disorderly element again rose, and by the end of June the eastern half of the District was utterly disorganized. In July a force was sent to Ballia, which drove the rebels out of the Ganges-Gogra Doāb, while another column cleared the *parganas* north of the Ganges. The *parganas* south of the river remained in rebellion till the end of October, when troops were sent across, which expelled the rebels and completely restored order.

The whole District abounds in ancient sites, where antiquities have been discovered ranging from stone celts, through the Buddhist epoch, to the later Hindu period. In particular, a valuable pillar inscription

and an inscribed seal of the Gupta kings of Magadha have been found at BHITRĪ, and another inscribed pillar of the same period (now at Benares) at Pahlādpur. A few Muhammadan buildings of interest stand at Bhitrī, GHĀZĪPUR TOWN, and SAIDPUR

The District contains 7 towns and 2,489 villages. The population increased between 1872 and 1891; but a series of adverse seasons from 1893 to 1896 caused a serious decrease in the next decade, chiefly through deaths from fever and migration. The numbers at the four enumerations were as follows: (1872) 832,635, (1881) 963,189, (1891) 1,024,753, and (1901) 913,818. It is probable that the Census of 1872 understated the actual population. More emigrants are supplied to Eastern Bengal and Assam from this District than from any other in the United Provinces. There are four *tahsīls*—GHĀZĪPUR, MUHAMMADĀBĀD, ZAMĀNIA, and SAIDPUR—each named from its head-quarters. The only municipal town is GHĀZĪPUR, the District head-quarters. The chief statistics of population in 1901 are given below:—

Population.

Tahsīl.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Ghāzīpur . .	391	1	824	266,871	683	— 16·4	9,227
Muhammadābād	320	2	694	226,760	709	— 9·9	5,365
Zamānia . .	381	2	354	237,867	624	— 3·7	8,206
Saidpur . .	297	2	617	182,320	614	— 11·7	5,595
District total	1,389	7	2,489	913,818	658	— 10·8	28,393

About 90 per cent. of the population are Hindus and nearly 10 per cent. Musalmāns. The District is very thickly populated in all parts. Almost 97 per cent. of the total speak the Bhojpurī dialect of Bihārī[1], and the remainder Hindustāni.

The most numerous Hindu castes are the Ahīrs (graziers and cultivators), 145,000; Chamārs (leather-workers and labourers), 117,000; Rājputs or Chhattrīs, 78,000; Koirīs (cultivators), 66,000; Brāhmans, 63,000; Bhars (labourers), 45,000; Bhuinhārs (agriculturists), 38,000; and Binds (fishermen and cultivators), 28,000. The Bhuinhārs are a high caste, corresponding to the Bābhans of Bihār. The Koirīs, Bhars (an aboriginal race), and Binds (akin to the Kahārs) are found only in the east of the United Provinces and in Bihār. The District is essentially agricultural, 71 per cent. of the population being supported by agriculture, and 5½ per cent. by general labour. Brāhmans, Rājputs or Chhattrīs, and Bhuinhārs own nearly two-thirds of the land, and

[1] Specimens are given in *Journal, Asiatic Society of Bengal*, 1884, p. 232.

Musalmāns about one-fifth. The three high castes of Hindus named above cultivate about two-fifths of the area held by tenants, and lower castes about half.

Out of 329 native Christians in 1901, the Anglican communion claimed 111, the Lutherans 63, and Presbyterians 42. The Lutheran Mission has been established at Ghāzīpur town since 1855, and the Zanāna Mission since 1890.

Agriculture.

The usual soils are found in the upland areas, varying from light sandy to loam and clay. In some places, and especially in the east of the District, the soil is black, resembling the rich black soil of Bundelkhand in its physical qualities. In the wide valley of the Ganges large stretches of rich alluvial soil are found, which produce excellent spring crops without irrigation. The District is within the area in which blight attacks the spring crops.

The ordinary tenures found in the permanently settled Districts of the United Provinces exist in Ghāzīpur. Many *mahāls* are of the variety called 'complex,' and instead of including a single village (*mauza*) or part of a village extend to several villages. The weakness of joint responsibility, and the large number of co-sharers who desire to collect rent and pay revenue separately instead of through a representative, render the revenue administration very difficult. The main agricultural statistics for 1903–4 are shown below, in square miles:—

Tahsīl.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Ghāzīpur . .	391	236	143	90
Muhammadābād	320	234	82	38
Zamānia . .	381	302	53	16
Saidpur . .	297	186	87	41
Total	1,389	958	365	185

Rice and barley are the chief food-crops, covering 209 and 230 square miles, or 22 and 24 per cent. of the total cultivated area. Peas and *masūr* (161 square miles), gram (117), *kodon* (89), *arhar* (82), wheat (61), and *bājra* (60) are also largely cultivated. Barley is grown chiefly on the uplands, and pure wheat, pure gram, and mixed wheat and gram in the lowlands. Sugar-cane (35 square miles) and poppy (26) are important crops. Melons are grown in sandy alluvial deposits, and close to Ghāzīpur town 200 or 300 acres of roses supply material for the manufacture of scent.

The area under cultivation increased by about 11 per cent. between 1840 and 1880; but there has been no permanent increase since then, and within the last twenty years no improvements have been noted in agricultural practice. Poppy is more largely grown, and the area

under gram has increased; but, on the other hand, indigo cultivation, which was formerly important, is rapidly dying out, and a smaller area is planted with sugar-cane. The cultivation of tobacco for the English market was introduced at Ghāzīpur in 1876, but has been abandoned. Few advances are made under the Land Improvement and Agriculturists' Loans Acts. Out of a total of Rs. 60,000 advanced between 1890 and 1900, Rs. 49,000 was lent in the single year 1896–7. In four years since 1900 Rs. 10,000 was advanced.

There is no particular breed of cattle, and the best animals are imported. Two selected bulls are at present maintained by the Court of Wards for the improvement of the local stock. A stud farm was maintained at Ghāzīpur for many years, but was closed about 1873, and only inferior ponies are now bred. Sheep and goats are plentiful, but the breed is not peculiar.

Out of 365 square miles irrigated in 1903–4, 259 were irrigated from wells, 93 from tanks, and 13 from streams. The rivers are of little use, owing to their depth below the surrounding country. Swamps or *jhīls* are used as long as there is any water left in them; but they dry up by December, and then wells take their place. The wells are usually worked by bullocks, which raise water in leathern buckets. Many of the tanks are artificial, but all are of small size. In the rice tracts water is held up by small field embankments. Irrigation is required for the spring crops in all parts, except in the black soil and the alluvial tract.

Kankar is found throughout the District, except in the alluvial deposits of the Ganges, and is used for metalling roads and making lime. Saltpetre and carbonate of soda are extracted from saline efflorescences or *reh*.

Trade and communications.

There are few manufactures. Sugar is refined, and coarse cotton cloth is woven in small quantities for local use. Ghāzīpur Town, however, contains two important industries—the preparation of opium for export, and the distillation of otto of roses and other perfumes.

The District exports sugar, oilseeds, hides, perfumes, opium, and occasionally grain; and imports piece-goods, yarn, cotton, salt, spices, and metals. Ghāzīpur town was once the chief trading centre in the eastern portion of the Ganges-Gogra Doāb, and also traded with the Districts north of the Gogra and with Nepāl. The opening of the Bengal and North-Western Railway through Gorakhpur deprived it of the trans-Gogra trade, and the Doāb traffic has been largely diverted by other branches. River traffic has now decreased considerably, and only bulky goods, such as grain and Mirzāpur stone, are carried by boat. Saidpur, Zamānia, and Ghāzīpur are the chief trading centres; but the recent railway extensions are changing the direction of commerce.

Ghāzīpur is now well supplied with railways. For many years the main line of the East Indian Railway, which crosses the District south of the Ganges, was the only line; a branch was subsequently made from Dildārnagar to Tārī Ghāt on the Ganges opposite Ghāzīpur town, as a Provincial railway. Between 1898 and 1904 the tract lying north of the Ganges was opened up by the Bengal and North-Western Railway (metre gauge), one line running north and south from Benares to Gorakhpur, while another passes east and west from Jaunpur to Balliā, the junction being at Aunrīhār. Communications by road are also good. There are 587 miles of roads, of which 96 are metalled. The latter are in charge of the Public Works department, but the cost of maintenance of all but 21 miles is charged to Local funds. The main lines are those from Ghāzīpur town to Gorakhpur (with a branch to Azamgarh), to Benares, and to Buxar. Avenues of trees are maintained on 91 miles.

Famine.

The District has suffered from no serious famine since the commencement of British rule. In 1783 there was great scarcity in the province of Benares, and Warren Hastings described a scene of desolation from Buxar to Benares. Distress was felt in 1873–4 and more severely in 1877–8; but although relief works were opened, few people came to them. The District suffered from an excess of rain in 1894, and a deficiency in 1895 and 1896. Prices rose very high; but the spring crop of 1897 was abundant and the cultivators sold their crops at high prices, while the labouring classes are accustomed to seek employment in distant parts of India.

Administration.

The Collector is usually assisted by a member of the Indian Civil Service, and by five Deputy-Collectors recruited in India. An officer of the Opium department is responsible for operations in the District, in addition to the large staff of the factory. A *tahsīldār* is posted at the head-quarters of each *tahsīl*.

There are three District Munsifs, a Sub-Judge, and a District Judge for civil work. The District of Balliā is included in the Civil and also in the Sessions Judgeship of Ghāzīpur. The people of Ghāzīpur are exceedingly litigious and rather quarrelsome, while the excessive subdivision of land and the large area subject to alluvion and diluvion are the causes of many disputes. Offences against the peace are thus common, and even serious crimes, such as arson, occur frequently. On the other hand, professional dacoity is almost unknown.

The District was ceded to the British in 1775 as part of the province of Benares, and its revenue administration was included in that of BENARES DISTRICT up to 1818, when a separate District of Ghāzīpur was formed. This comprised the present District of Balliā, which was not separated till 1879. The land revenue was permanently settled between 1787 and 1795; and the changes made subsequently have been

due to the resumption of revenue-free land, to the assessment of land which had previously escaped, and to alluvion and diluvion. The permanent settlement was made without any survey, and did not include the preparation of a record-of-rights. The necessity for both of these operations was obvious, and between 1839 and 1841 a survey was made, on the basis of which a record-of-rights was drawn up. At the same time land which had escaped at the permanent settlement was assessed. As the papers prepared between 1840 and 1842 were not periodically corrected, they soon fell into confusion, and an attempt was made in 1863 to revise them. In 1879, however, a complete revenue resurvey was carried out, and a revised record was subsequently prepared which has had a very beneficial effect in settling disputes. Annual papers are now maintained by the *patwāris*, as in the rest of the Provinces. The revenue assessed in 1795 was 8·5 lakhs; and the demand for 1903–4 was 10·3 lakhs, falling at the rate of Rs. 1·4 per acre over the whole District, and varying from R. 1 to Rs. 2 in different *parganas*.

Collections on account of land revenue and revenue from all sources have been, in thousands of rupees:—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	10,51	10,48	10,37	10,14
Total revenue . .	14,00	16,49	16,01	16,41

There is only one municipality, GHĀZĪPUR TOWN, but five towns are administered under Act XX of 1856. Outside the limits of these, local affairs are managed by the District board, which had in 1903–4 a total income of Rs. 98,000, of which Rs. 42,000 was derived from local rates. The expenditure was a lakh, including Rs. 56,000 spent on roads and buildings.

The District Superintendent of police has a force of 3 inspectors, 77 subordinate officers, and 313 constables, distributed in 15 police stations, besides 130 municipal and town police, and 1,653 rural and road police. The District jail, which also accommodates prisoners from Ballia, had a daily average of 435 inmates in 1903.

The population of Ghāzīpur compares fairly well with other Districts as regards literacy, 3·2 per cent. (6·2 males and 0·2 females) being able to read and write in 1901. In the case of Musalmāns, the proportion rises to 4·3 per cent. The number of public schools increased from 123 with 5,133 pupils in 1880–1 to 182 with 8,712 pupils in 1900–1. In 1903–4 there were 202 such schools with 10,449 pupils, of whom 447 were girls, besides 50 private schools with 257 pupils. One of the public schools is managed by Government, and 102 by the District and municipal boards. Out of a total expenditure on education of Rs. 46,000, Local funds provided Rs. 40,000, and fees Rs. 3,100.

There are 8 hospitals and dispensaries, with accommodation for 72 in-patients. In 1903 the number of cases treated was 59,000, including 1,400 in-patients, and 3,500 operations were performed. The total expenditure was Rs. 11,000, from Local funds.

About 24,000 persons were successfully vaccinated in 1903–4, representing a proportion of 26 per 1,000 of population. Vaccination is compulsory only in the municipality of Ghāzīpur.

[W. Oldham, *Memoir on Ghazeepoor District* (1870 and 1876); *District Gazetteer* (1884, under revision); W. Irvine, *Report on Revision of Records* (Ghazipur, 1886).]

Ghāzīpur Tahsīl.—Head-quarters *tahsīl* of Ghāzīpur District, United Provinces, comprising the *parganas* of Ghāzīpur, Pachotar, and Shādīābād, and lying north of the Ganges, between 25° 23′ and 25° 53′ N. and 83° 16′ and 83° 43′ E., with an area of 391 square miles. Population fell from 319,385 in 1891 to 266,871 in 1901, the rate of decrease being nearly 20 per cent. There are 824 villages and only one town, GHĀZĪPUR (population, 39,429), the District and *tahsīl* head-quarters. The demand for land revenue in 1903–4 was Rs. 2,66,000, and for cesses Rs. 49,000. The density of population, 683 persons per square mile, is slightly above the District average. Besides the Ganges, the Gāngī, Besū, and Mangai drain the *tahsīl*, flowing across it from north-west to south-east. In the northern portions rice is largely grown, and there are considerable tracts of barren *ūsar* land from which carbonate of soda (*sajjī*) is collected. The area under cultivation in 1903–4 was 236 square miles, of which 143 were irrigated. Wells supply nine-tenths of the irrigated area, and tanks the remainder.

Ghāzīpur Town.—Head-quarters of the District and *tahsīl* of the same name, United Provinces, situated in 25° 35′ N. and 83° 36′ E., on the left bank of the Ganges, and on a branch of the Bengal and North-Western Railway, and also connected by a steam ferry with the terminus of a branch of the East Indian Railway on the opposite side of the river. Population (1901), 39,429. The town was founded, according to Hindu tradition, by Rājā Gādh, an eponymous hero, from whom it took the name of Gādhīpur; but it more probably derives its name from the Saiyid chief, Masūd, whose title was Malik-us-Sādāt Ghāzī. Masūd defeated the local Rājā and founded Ghāzīpur about 1330. For its history and Mutiny narrative see GHĀZĪPUR DISTRICT.

The town stretches along the bank of the Ganges for nearly 2 miles, with a breadth from north to south of about three-quarters of a mile. The massive walls of the old palace, called the Chahal Sitūn or 'forty pillars,' the numerous masonry *ghāts*, and a mud fort form striking features in the appearance of the river front. Masūd's tomb and that of his son are plain buildings; and the only other antiquities are the tank and tomb of Pahār Khān, governor in 1580, and the garden,

tank, and tomb of Abdullah, governor in the eighteenth century. Abdullah's palace, which was still intact at the time of Bishop Heber's visit, is now in ruins, though a gateway still remains. The tomb of Lord Cornwallis, who died here in 1805, consists of a domed quasi-Grecian building with a marble statue by Flaxman. Ghāzīpur is the head-quarters of the Opium Agent for the United Provinces, and the opium factory is situated here, to which are consigned the poppy products, opium leaf, and trash of all the Districts in the United Provinces. The factory occupies an area of about 45 acres, and its main function is to prepare opium for the Chinese market, where it is known as Benares opium. Opium for consumption in the United Provinces, the Punjab, Central Provinces, and part of the supply for Bengal, Assam, and Burma are also prepared here, besides morphia and its salts, and codeia for the Medical department in all parts of India. During the busy season, from April to June, about 3,500 hands are employed daily; while at other times the number varies from 500 to 2,000. Ghāzīpur was constituted a municipality in 1867. During the ten years ending 1901 the income and expenditure averaged Rs. 40,000 and Rs. 39,000 respectively. In 1903–4 the income was Rs. 45,000, chiefly from octroi (Rs. 31,000) and rents (Rs. 6,000). The expenditure in the same year was Rs. 46,000. The town is no longer an important trade centre, as the tract north of the Ganges, which it formerly served, is now traversed by railways. Besides the manufacture of opium, the chief industry is that of scent-distilling. Roses are grown close to the town, and rose-water and otto of roses are largely manufactured. There are about 14 schools, attended by 1,400 pupils. Ghāzīpur is the head-quarters of the Lutheran Mission in the District, and contains male and female dispensaries.

Ghāzīpur Tahsīl.—South-central *tahsīl* of Fatehpur District, United Provinces, comprising the *parganas* of Ghāzīpur, Ayā Sāh, and Mutaur, and lying between 25° 41′ and 25° 55′ N. and 80° 31′ and 81° 4′ E., with an area of 277 square miles. Population fell from 92,389 in 1891 to 91,222 in 1901. There are 151 villages, but no town. The demand for land revenue in 1903–4 was Rs. 1,95,000, and for cesses Rs. 31,000. The density of population, 329 persons per square mile, is the lowest in the District. The *tahsīl* lies along the Jumna, and the soil for some distance from that river resembles the poorer soils of Bundelkhand. In 1903–4 the area under cultivation was 158 square miles, of which 39 were irrigated. The Fatehpur branch of the Lower Ganges Canal supplies nearly half the total irrigation, but in the northern part tanks or *jhīls* are used. Irrigation from wells is insignificant.

Ghazni.—Chief town of the district of the same name in the Kābul province of Afghānistān, situated in 33° 44′ N. and 68° 18′ E., 92 miles from Kābul, and 221 from Kandahār; 7,279 feet above the sea.

Ghazni is celebrated in Indo-Afghān history as the seat of the Ghaznivid dynasty which furnished the first Muhammadan ruler of a united and aggressive Afghānistān. The dynasty dates from Alptagīn, a Turkish slave who had risen to high office under the Sāmānids; but its real founder was Sabuktagīn, a former slave of Alptagīn and the husband of his daughter. Under Sabuktagīn's son, the famous Mahmūd of Ghazni, who reigned from 998 to 1030, and made many expeditions into India, the dominion of the Ghaznivids stretched from Lahore to Samarkand and Ispahān, and Ghazni was adorned with splendid buildings and a university. After Mahmūd's death the usual process of decline set in; and Ghazni was destroyed in 1153 by Alā-ud-dīn Husain, of the Afghān house of Ghor (hence styled *Jahān soz*, the 'world incendiary'), who spared only the tombs of Sultān Mahmūd and two of his descendants. From this time Ghazni lost its pristine importance, and in the subsequent historic vicissitudes of Afghānistān it was generally connected with Kābul.

In the first Afghān War Ghazni was stormed by the British troops in July, 1839, and occupied till December, 1841, when, concomitantly with the disasters in Kābul, the garrison was forced to surrender. In 1842 it was again occupied by General Nott, who, after dismantling the fort, carried off the celebrated gates [1], which Mahmūd is said to have removed from the Somnāth temple in Gujarāt in 1024, and which still closed the entrance to his tomb. Ghazni was twice visited by a British force in 1880: namely, in April by Sir Donald Stewart, on his march from Kandahār to Kābul; and in August by Lord Roberts, on his march from Kābul to Kandahār. On the former occasion an Afghān force was defeated in the vicinity of the town. Ghaznī is now a decayed town of no military strength, and contains only about 1,000 inhabited houses. It is situated on the left bank of the Ghazni river, on the level ground between the river and the termination of a spur which here runs east and west from the Gul Koh range. It may be described as an irregular square, having a total circuit of about 1¼ miles. It is surrounded by a wall, about 30 feet high, built on the top of a mound in part natural and in part artificial, and flanked by towers at irregular intervals. The city is composed of dirty, irregular streets of houses several storeys high. The inhabitants are Afghāns, Hazāras, and a few Hindu traders. The chief trade is in corn, fruit, madder, and the sheep's wool and camel's-hair cloth brought from the adjoining Hazāra country. *Postins* are its sole manufacture. The climate of Ghazni is very cold, snow often lying on the ground from November to February. During the summer and autumn fevers of a typhoid type are very prevalent and fatal. Three miles to the north-east of

[1] These are now preserved in the fort at Agra. The wood, however, is *deodār*, not sandal; and it is certain that they cannot have come from Somnāth.

the present town are the ruins of the old city. The only remains of its former splendour are two minarets, 400 yards apart, each 100 feet high and 12 feet in diameter; they are said to mark the limits of the bazar.

Gheria.—Port in Ratnāgiri District, Bombay. *See* VIJAYADURG.

Ghod.—Village in the Khed *tāluka* of Poona District, Bombay, situated in 19° 2′ N. and 73° 53′ E., about 25 miles north of Khed town. Population (1901), 5,720. Ghod is the head-quarters of the Ambegaon *petha*, and contains an old mosque, with a Persian inscription recording that it was built about 1580 by one Mīr Muhammad. In 1839 a band of Kolīs threatened the petty divisional treasury at Ghod. Mr. Rose, Assistant Collector, gathered a force of peons and townspeople, and successfully resisted the repeated attacks of 150 insurgents who besieged them the whole night. The town contains two schools with 350 boys and 75 girls.

Ghodbandar.—Port in the Salsette *tāluka* of Thāna District, Bombay, situated in 19° 17′ N. and 72° 54′ E., on the left bank of Bassein creek, 10 miles north-west of Thāna, and supposed to be the *Hippokura* of Ptolemy. Population (1901), 646. The customs division called after Ghodbandar comprises five ports: namely, Rai Utan, Manori, Bāndra, Vesāva, and Ghodbandar. The total trade of these five ports in 1903–4 was $7\frac{2}{3}$ lakhs, of which $2\frac{1}{3}$ lakhs represents imports and $5\frac{1}{3}$ lakhs exports, the last consisting of rice, stone, lime, sand, coco-nuts, salt, fish, and firewood. The imports are hardware, cloth, groceries, rice, oil, molasses, butter, tobacco, gunny-bags, *san*-hemp, and timber. Under the Portuguese, Ghodbandar stood a siege by the Marāthā Sivajī, who appeared before it in 1672. In 1737 it was captured by the Marāthās, and the Portuguese garrison put to the sword. Fryer (1675) calls the town Grebondel. A resthouse on the shore has accommodation for 50 travellers. There are some Portuguese architectural remains. The traders in Ghodbandar are Agrīs, Kolis, Muhammadans, and Christians, and most of them trade on borrowed capital.

Ghodnā.—One of the Simla Hill States, Punjab. *See* BALSAN.

Ghodnadi.—Town in the Sirūr *tāluka* of Poona District, Bombay. *See* SIRŪR TOWN.

Gholghāt.—Ruined fort in Hooghly District, Bengal. *See* HOOGHLY TOWN.

Ghoosery.—Suburb of Howrah city in Howrah District, Bengal. *See* GHUSURĪ.

Ghor.—A ruined city in Afghānistān, situated in a valley never visited by any European, about 120 miles south-east of Herāt in the Taimani country, of which the Ghorāt forms a large part. The Ghorāt, which is so called from the two valleys of the Ghor-i-Taiwāra and the Ghor-i-Moshkan, has an area of about 7,000 square miles.

It is divided from the Northern Taimani country by the watershed of the Farrah Rūd. The general elevation is about 7,000 feet. It is inhabited by Taimanis, Moghals, and Tājiks, of whom the Taimanis are the most numerous. The total population has been roughly computed at 8,000, but this number is at least doubled during the summer months by the influx of Durrānis from the Pusht-i-Rūd and Sabzawar. The climate of the Ghorāt in winter is severe, but the summer and autumn are delightful. The inhabitants trade in wool, *ghī*, cheese, grain, hides, horses, sheep, cattle, woollen blankets, and *barak* or woollen cloth. There are no manufactures.

Ghor is celebrated as the seat of the Afghān family who, after a long and bitter feud with the Sultāns of Ghazni, eventually overthrew them (1153), and later extended their conquests over the whole of Northern India as far as the delta of the Ganges. The origin of this dynasty has been much discussed. The prevalent, and apparently the correct, opinion is that both they and their subjects were Afghāns. In the time of Sultān Mahmūd of Ghazni, Ghor was held by a prince whom Firishta calls Muhammad Sūri Afghān. The territory of Ghor was treacherously seized by Mahmūd and converted into a dependency. Later, Kutb-ud-dīn Sūr, the chief of Ghor, who had married a daughter of Sultān Bahrām of Ghazni, was put to death by the Sultān. His death was avenged by his brother Saif-ud-dīn, who captured Ghazni. Bahrām fled, but soon returned at the head of an army, and, having taken Saif-ud-dīn prisoner, put him to death by torture. The quarrel was then espoused by a third brother, Alā-ud-dīn, who defeated Bahrām and gave up Ghazni, at that time perhaps the noblest city in Asia, to flame, slaughter, and devastation. All the superb monuments of the Ghaznivid kings were demolished, except the tombs of Sultān Mahmūd and two of his descendants.

After Alā-ud-dīn had satiated his fury at Ghazni, he returned to Ghor, where he died in 1156, and was succeeded by his son Saif-ud-dīn, whose reign lasted for only one year. At his death the throne passed to the elder of his cousins, Ghiyās-ud-dīn, who associated his brother, Muhammad Shahāb-ud-dīn, better known as Muhammad Ghorī, in the government. Ghiyās-ud-dīn retained the sovereignty during his life, but he seems to have left the conduct of military operations almost entirely to Shahāb-ud-dīn. Under these two princes Ghor reached the zenith of its greatness, and on their death rapidly sank into insignificance. The conquests of Muhammad Ghorī far exceeded those of Mahmūd of Ghazni, but he had neither the culture nor the general talents of that great prince. Accordingly, while the name of Mahmūd is yet one of the most celebrated in Asia, that of Muhammad of Ghor is scarcely known beyond the countries over which he ruled. The whole of Northern India was brought under subjugation by

Muhammad Ghorī and his generals. The empire of Ghor during his lifetime extended from Khorāsān and Seistān on the west to the delta of the Ganges on the east; from Khwārizm, the Khānates of Turkistān, the Hindu Kush, and the Himālayas on the north to Baluchistān, the Gulf of Cutch, Gujarāt, and Mālwā, on the south. Ghiyās-ud-dīn died in 1202, and his more famous brother was murdered on the banks of the Indus in 1200 by a band of Ghakhars. Muhammad of Ghor was succeeded by his nephew, Mahmūd; but though the latter's sovereignty was acknowledged by all, the kingdom broke at once into practically separate states, which were scarcely held together even in name by his general supremacy. The most important and lasting of these was the kingdom of Delhi, which started into independent existence under the Slave dynasty. On Mahmūd's death five or six years later, there was a general civil war throughout all his dominions west of the Indus, and these countries were soon subdued by the kings of Khwārizm. Ghazni was taken in 1215, and Firoz Koh at an earlier period. The Ghorids appear, however, to have partially recovered from this temporary extinction, for there is evidence that in the fourteenth century Herāt was defended by Muhammad Sām Ghorī against a successor of Chingiz Khān. At a later period Timūr in his memoirs mentions a certain Ghiyās-ud-dīn as ruler of Khorāsān, Ghor, and Ghirjistān, and in many places calls him Ghorī. The famous Sher Shāh, who temporarily expelled Humāyūn from India and introduced many of the administrative reforms popularly ascribed to Akbar, was possibly connected with this house.

The most important ruins, of which the country is full, are those at Yakhān Pain, a short march south-west of Taiwāra. These have been described as the remains of an ancient city covering a large extent of ground, and comprising massive ruins of forts and tombs. This was probably the Ghor taken by Mahmūd of Ghazni, and the seat of the Ghorid princes. Ruins of less note are everywhere numerous; among these there would appear to be some of Buddhist origin in Yaman.

Ghora.—State in Central India. *See* JOBAT.

Ghorābāri.—*Tāluka* of Karāchi District, Sind, Bombay, lying between 23° 55′ and 24° 34′ N. and 67° 22′ and 68° 2′ E., with an area of 566 square miles. The population rose from 30,518 in 1891 to 34,736 in 1901. The *tāluka* contains one town, KETI (population, 2,127), and 93 villages. The land revenue and cesses in 1903–4 amounted to Rs. 78,000. It includes the Keti *mahāl*, the population of which is 8,499. The head-quarters are at Kotri Allahrakhio. The soil of the *tāluka*, which is narrow and straggling in shape, is alluvial; and in the south, below the town of Keti Bandar, there is a wide expanse of mud flats, liable to frequent flooding by the sea. Irrigation is provided by the Baghiar, Ghar, Marho, Nasir Wah, and Makri Wah

canals. The principal crop is rice; *bājra*, barley, and sugar-cane are also grown.

Ghora Dakka.—Small cantonment in Hazāra District, North-West Frontier Province, situated in 34° 2′ N. and 73° 25′ E., on the road between Dungā Gali and Murree, 3 miles from the former and 15 from the latter place. During the summer months it is occupied by a detachment of British infantry.

Ghorāghāt.—Ruined city in the head-quarters subdivision of Dinājpur District, Eastern Bengal and Assam, situated in 25° 15′ N. and 89° 18′ E., on the west bank of the Karatoyā river. Some ruins are connected by legend with Virāt Rājā of the Mahābhārata, in whose court Yudhishthira with his four brothers and wife found exile. There are also the remains of a strong military and administrative outpost established under Muhammadan rule at the end of the fifteenth century by Alā-ud-dīn Husain.

[Martin (Buchanan), *Eastern India*, vol. ii, pp. 678–81.]

Ghorāsar (*Ghodāsar*).—Petty State in MAHĪ KĀNTHA, Bombay.

Ghosī.—North-eastern *tahsīl* of Azamgarh District, United Provinces, lying between 25° 57′ and 26° 19′ N. and 83° 21′ and 83° 52′ E., with an area of 368 square miles. The *tahsīl* was formed in 1904 by transferring the *parganas* of Natthūpur and Ghosī from Sagrī *tahsīl*, and portions of the *pargana* of Muhammadābād from the *tahsīl* of that name. Population according to the Census of 1901 is 260,840, and the density is about the District average. There are 519 villages and two towns: DOHRĪGHĀT (population, 3,417) and KOPĀGANJ (7,039). The demand for land revenue is Rs. 2,72,000, and for cesses Rs. 46,000. The *tahsīl* lies between the Gogra and the Chhotī Sarjū and Tons, and thus includes a considerable area of low-lying *kachhār* land, which is subject to fluvial action.

Ghotki Tāluka.—*Tāluka* of Sukkur District, Sind, Bombay, lying between 27° 40′ and 28° 11′ N. and 69° 4′ and 69° 35′ E., with an area of 518 square miles, including the Pano Akil *mahāl* (168 square miles). The population rose from 67,743 in 1891 to 72,019 in 1901. The *tāluka* contains one town, GHOTKI (population, 3,821), the head-quarters; and 129 villages. The density, 139 persons per square mile, is much above the District average. The land revenue and cesses in 1903–4 amounted to 2·2 lakhs. The *tāluka* is liable to floods, and depends for the irrigation of its *jowār* and wheat upon small canals leading direct from the Indus. The *zamīndārs* are mostly small holders and impoverished. Much forest land fringes the banks of the river.

Ghotki Town.—Head-quarters of the *tāluka* of the same name in Sukkur District, Sind, Bombay, situated in 28° N. and 69° 21′ E., on the North-Western Railway. Population (1901), 3,821. The Muham-

madan residents are chiefly Pathāns, Malaks, Saiyids, Muchis, and Lohārs, and the Hindus principally Baniās. Ghotki was founded about 1747. The mosque of Pīr Musan Shāh, the founder of the place, 113 feet long by 65 feet broad, and decorated with coloured tiles, is the largest in Sind, and of great sanctity. Local trade is chiefly in cereals, indigo, wool, and sugar-cane. The Lohārs (blacksmiths) of Ghotki are famed for their metal-work; wood-carving and staining are also very creditably executed. The municipality, constituted in 1855, had an average income during the decade ending 1901 of Rs. 8,045. In 1903–4 the income was Rs. 7,500. The town contains a dispensary and two schools, attended by 172 boys and 6 girls.

Ghund.—A fief of the Keonthal State, Punjab, lying between 31° 2′ and 31° 6′ N. and 77° 27′ and 77° 33′ E., with an area of 28 square miles. The population in 1901 was 1,927, and the revenue is about Rs. 2,000. A tribute of Rs. 250 is paid to the Keonthal State. The present chief, Thākur Bishan Singh, exercises full powers, but sentences of death require the confirmation of the Superintendent, Simla Hill States.

Ghurām (*Kuhrām*, or Rāmgarh).—Ancient town in the Ghanaur *tahsīl*, Pinjaur *nizāmat*, Patiāla State, Punjab, situated in 30° 7′ N. and 76° 33′ E., 26 miles south of Rājpura. Population (1901), 798. Tradition avers that it was the abode of the maternal grandfather of Rāma Chandra, king of Ajodhya. In historical times Kuhrām is first mentioned as surrendering to Muhammad of Ghor in 1192. It remained a fief of Delhi during the early period of the Muhammadan empire, but fell into decay. Extensive ruins mark its former greatness.

Ghusurī.—Northern suburb of Howrah city in Howrah District, Bengal, containing jute and cotton-mills, jute-presses, and rope-works. The last, founded a century ago, forms the oldest factory industry in the town. Ghusurī is a permanent market, with a large trade in agricultural produce.

Gidar Dhor.—River in Baluchistān. *See* HINGOL.

Gidhaur.—Village in the Jamūī subdivision of Monghyr District, Bengal, situated in 24° 51′ N. and 86° 12′ E. Population (1901), 1,780. Gidhaur is the present seat of one of the oldest of the noble families of Bihār. Their original home was at the foot of the hills near the village of Khaira; and the ruins of an old stone fort and other buildings may still be traced in the scrub jungle there. Close by are the remains of a large masonry fort, known as Naulakhagarh, the erection of which is by local tradition ascribed to Sher Shāh, but which may once have been the seat of the family. The founder was Bīr Bikram Singh, a Rājput who emigrated from his home in Central India about the thirteenth century, and, after slaying a local Dosādh ruler who held sway over large estates in the neighbourhood, estab

lished the Gidhaur Rāj. Rājā Pūran Mal, eighth in descent from Bīr Bikram Singh, built the great temple of Baidyanāth. The present head of the family is Sir Rāvaneswar Prasād Singh, K.C.I.E.

Gigasāran.—Petty State in KĀTHIĀWĀR, Bombay.

Gilgit.—Head-quarters of a scattered district or *wazārat* of the Kashmīr State, situated in 35° 55′ N. and 74° 23′ E., at an elevation of 4,890 feet above sea-level. The *wazārat* stretches south to Astor and the northern slopes of the Burzil, follows the Astor river to its junction with the Indus, and then runs north along the Indus to Bunji. It was once a flourishing tract, but never recovered from the great flood of 1841, when the Indus was blocked by a landslip below the Hatu Pīr, and the valley was turned into a lake. Opposite Bunji is the valley of Sai, and 6 miles farther up the Gilgit river falls into the Indus. Gilgit is about 24 miles from the Indus, and has a considerable area of fertile irrigated land. The *wazārat* now includes the tract known as Haramush on the right bank of the Indus, and numerous valleys leading down to the Gilgit river. To the north the boundary reaches Guach Pari on the Hunza road, and up the Kargah nullah as far as the Bhaldi mountain to the south in the direction of Darel. From Gilgit itself mountain roads radiate into the surrounding valleys, and its geographical position now, as in ancient times, renders the fort on the right bank of the Gilgit river an important place. A suspension bridge connects Gilgit with the left bank, which is here as barren as the right bank is fertile. The ancient name of the site under its Hindu Rās was Sargin. Later it was known as Gilit, which the Sikhs and Dogrās corrupted into Gilgit, but to the country people it is familiar still as Gilit or Sargin Gilit. It lies in the most mountainous region of the Himālayas. Within a radius of 65 miles there are eleven peaks ranging from 18,000 to 20,000 feet; seven from 20,000 to 22,000 feet; six from 22,000 to 24,000 feet; and eight from 24,000 to 26,600 feet. At their bases the mountains are barren and repellent, but at 7,000 feet there are fine forests of juniper and fir. Above these are the silver birch, and above all vegetable growth lie sweep after sweep of glacier and eternal snow.

The pencil cedar is found from 14,400 feet down to 6,000 feet, and sometimes reaches a girth of 30 feet. *Pinus excelsa* grows between 9,500 and 12,000 feet. The edible pine is common in Astor, and ranges from 7,000 to 10,000 feet. The useful birch-tree is common, and grows as high as 12,500 feet. The tamarisk does well in the barren valleys up to 6,000 feet. Roughly speaking, the upper limit of vegetation around Gilgit is 16,200 feet; above this the rocks are stained with lichens.

Here are found the wild goats (*Capra sibirica* and *C. falconeri*), he ibex and *mārkhor* and their deadly foe, the beautiful snow ounce

(*Felis uncia*), and occasionally the wild dog (*Cyon rutilans*). The red bear (*Ursus isabellinus*), the snow-cock (*Tetraogallus himalayanus*), and the grey partridge are common; and many of the migratory birds of India—wild geese, duck, and quail—pass up and down in the autumn and spring. Below the forest on the lower and more barren hills, numerous flocks of wild sheep (*Ovis vignei* and *O. nahura*) are met with.

The climate is healthy and dry. At Gilgit itself it is never very cold and snow seldom lies for more than a few hours. In the summer it is hot owing to the radiation from the rocky mountains, but it is cool compared with the climate of Northern India. The rainfall is very light.

The remains of ancient stone buildings and Buddhist carvings suggest that Gilgit was once the seat of a Hindu kingdom, or a Buddhist dynasty, while traces of abandoned cultivation point to the fact that the population in early times was far larger than it is at present. For many centuries the inhabitants of Gilgit have been Muhammadans, and nothing definite is now known of their Hindu predecessors. Tradition relates that the last of the Hindu Rās, Sri Badat, known as Adam-Khor, the 'man-eater,' was killed by a Muhammadan adventurer, who founded a new dynasty known as Trakhane. Sri Badat's rule is said to have extended to Chitrāl, and the introduction of Islām seems to have split up the kingdom into a number of small states carrying on a fratricidal warfare and incessant slave-raiding. The Trakhane dynasty is now extinct, though it is claimed that the present titular Rā of Gilgit has a slight stain of Trakhane blood. In the early part of the nineteenth century we find Yāsīn giving a Rā to Gilgit. He was killed by the ruler of Puniāl, who in turn was killed by Tair Shāh, chief of Nagar. Tair Shāh was succeeded by his son, who was killed by Gauhar Aman, ruler of Yāsīn. For the subsequent history of Gilgit see KASHMĪR. The history of Astor, or, as the Dogrās call it, Hasora, is intimately connected with that of Skārdu. More than 300 years ago Ghāzī Mukhpun, a Persian adventurer, is said to have married a princess of the Skārdu reigning family. The four sons born of this union became Rās of Skārdu, Astor, Rondu, and Kharmang respectively, and from them are descended the families of the present chiefs of those places. The independence of Astor ceased at the Dogrā conquest. The present titular Rā of Astor is the lineal descendant of Ghāzī Mukhpun. The Dogrā rule has secured peace to the country, but it will be long before the country recovers entirely from the desolating slave-raids of Chilās.

The *wazārat* contains 264 villages, with a population, according to the Census of 1901, of 60,885. The pressure on the cultivated area is great, the density being 1,295 per square mile. The people of Astor and Gilgit would be surprised if they were told that they were Dards

living in Dardistān, and their neighbours of Hunza-Nagar and Yāsīn would be equally astonished. If consulted, they would probably describe their country as Shīnāka, or the land of the Shīns, where Shīnā is the spoken language. They are an Aryan people, stoutly built, cheery, honest, frugal, and sober. They are devoted to polo, and are fond of dancing. The inhabitants of Astor wear a peculiar head-dress, a bag of woollen cloth, half a yard long, which is rolled up outwards at the edges until it gets to the size to fit comfortably to the head, round which the roll makes a protection from cold or from sun nearly as good as a turban. Their houses are small, with very small doors, and are usually built out from the mountain-side. Warmth is the one consideration. The Astoris have some very peculiar customs. Drew notices that they hold the cow in abhorrence. They will not drink cow's milk, nor will they burn cow-dung, the universal fuel of the East, and in a pure Shīn village no one will eat fowls or touch them. They practise inoculation for small-pox, their one epidemic. The people of Astor are Musalmāns, two-thirds being of the Sunni persuasion, and the rest being either Shiahs or Maulais. There is no religious intolerance among them.

Drew mentions the following caste divisions: Ronu, Shīns, Yashkun, Kremins, and Dums. As regards the Ronu caste, he says that there are a small number of families in Gilgit. Biddulph, in his *Tribes of the Hindu Koosh*, says that it forms 6 per cent. of the Gilgit population, and that it is the most honoured caste of all, ranking next to Mukhpuns or the Rājā caste of Dardistān.

The majority of the Astoris belong to the Yashkun caste, and the Shīns are few in number, under 3,000. They are more numerous in Gilgit, the total number of Shīns being, according to the last Census, 7,733. The Shīns are regarded with great respect by the Yashkuns and the other castes. The Yashkuns claim the Shīns as their forefathers. The Shīns give their daughters to Ronus and to Saiyids, but take wives from the Yashkuns.

Far away in Central Ladākh in the Hanu valley live other Dards of the Buddhist religion. They have retained the Aryan type of the country whence they came, and its Shīnā dialect, but they wear the pigtail and the Ladākhi cap. It is said that, though Buddhist by name, they really worship local spirits and demons. They practise polyandry, but they will not eat with Tibetan Buddhists, and, like the Shīns in Dardistān, they hold the cow in abhorrence.

In Gilgit, as in Astor, there are few social subdivisions, for the people are forced to depend on themselves for most wants of life. The language spoken is Shīnā, though only a small percentage of the population is Shīn. The religion is Muhammadan, Shiahs preponderating. There is an entire absence of fanaticism. The national

character is mild, and the men are unwarlike. The Gilgiti is attached to his home and his family, and is an industrious cultivator. Both men and women are strongly built, of a fairer complexion than the people of India. The women paint their faces with a kind of thin paste, to keep the skin soft and to prevent sun-burn. They are fond of flowers, and decorate their caps with irises and roses.

The cultivation is of a high character. The fields are carefully tilled, heavily manured, and amply irrigated. In Gilgit itself good rice is grown, and crops of wheat, barley, maize, millet, buckwheat, pulses, rape-seed, and cotton are raised, while fruit is plentiful. There is very little grazing land, and cattle are scarce. Lucerne grass is largely cultivated for fodder.

In the cold dry climate of Astor cultivation is carried on up to an elevation of 9,000 feet. It depends entirely on irrigation by little channels known as *kul*. The chief crops are wheat, barley, peas, maize, millet, and buckwheat. The people pay great attention to fodder and cultivate lucerne grass. Cultivation is precarious in Astor, as the crops frequently do not ripen owing to the cold, and there are several vegetable pests in the shape of worms.

Many of the streams are rich in gold, especially those which flow from Hunza and Nagar and from the Indus above Chilās. Gold-washing is carried on in the winter chiefly by the poorer members of the population, though the work is often remunerative. At Chilās entire families live by the work. The gold is of fair quality, the best being twenty carats. The Bagrot valley is celebrated for gold-washing, and contains many signs of mineral wealth.

The only manufacture is the weaving of woollen cloth (*pattu*), but this is for home use, and not for sale. Trade does not flourish. The local wants are few, and the only chance of Gilgit becoming an important commercial centre lies in the opening of a trade route to Yārkand. The chief staple of trade is salt. Russian chintz is brought down from Yārkand, and is said to be more durable than the English article.

The most important roads are those leading to India. The ten-foot road over the Burzil and Rāj Diāngan passes is described in the article on KASHMĪR. By that route Gilgit lies at a distance of 390 miles from the present railway base at Rāwalpindi. An alternative line has been opened over the Babusar pass, which brings Gilgit within 250 miles of the railway at Hasan Abdāl. This line, besides being shorter, has the advantage of only crossing one snow pass, instead of two, or practically three, if the winter snow at Murree is taken into consideration. The routes to the north are mere tracks when the military roads connecting Gilgit with the outposts at Gupis and Hunza have been passed.

There is a daily postal service with India by the Burzil pass and

Kashmīr, and the telegraph line follows the same route. Both services work well in spite of heavy snow and destructive avalanches, and are maintained by the Government of India. There is a weekly postal service from Gilgit to Chilās and Gupis, and a fortnightly post between Gilgit and Kāshghār, via the Kilik pass in the summer, and the Mintaka in the winter.

The Gilgit *wazārat* is in charge of a Wazīr Wazārat. Crime is slight; there is no jail and no police organization. Police duties are carried out by the levies and a few soldiers of the Kashmīr regular troops. There is little litigation, and the chief preoccupation of the Wazīr is the question of supplies to the garrison at Gilgit, provided by an excellent system of transport from Kashmīr. In 1891–2, at the time of the Hunza-Nagar expedition, the garrison had a force of 2,451; in 1895, when the Chitrāl disturbances broke out, it consisted of 3,373 troops; and the present garrison numbers 1,887, including a mountain battery and two infantry regiments, and sappers and miners. A school is maintained at Gilgit.

A land revenue settlement of Astor and Gilgit has been made. It was impossible to introduce a purely cash assessment owing to the State's requirements in grain, but many inequalities and abuses were removed, and, on the whole, the condition of the villagers is satisfactory.

A British Political Agent resides at Gilgit. He exercises some degree of supervision over the Wazīr of the Kashmīr State, and is directly responsible to the Government of India for the administration of the outlying districts or petty States of Hunza, Nagar, Ashkuman, Yāsīn, and Ghizar, the little republic of Chilās, and also for relations with Tangir and Darel, over which valleys the Puniāl Rās and the Mehtarjaos of Yāsīn have partially acknowledged claims. These States acknowledge the suzerainty of Kashmīr, but form no part of its territory. They pay an annual tribute to the Darbār: Hunza and Nagar in gold; Chilās in cash (Rs. 2,628); Askuman, Yāsīn, and Ghizar in grain, goats, and *ghī*. The relations of the Political Agent with the outlying States are eminently satisfactory. No undue interference takes place in the administrations, and the people are encouraged to maintain their customs and traditions intact. Besides the military garrison, furnished by the Kashmīr State, there is a small but extremely efficient force of local levies armed with Snider carbines. They are drawn from Hunza, Nagar, Puniāl, Sai, and Chilās.

Gingee (*Gingi*). – A famous rock-fortress in the Tindivanam *tāluk* of South Arcot District, Madras, situated in 12° 15′ N. and 79° 25′ E., on the road from Tindivanam to Tiruvannāmalai. The interest of the place is chiefly historical. The existing village is a mere hamlet, with a population (1901) of only 524. The fortress consists of three strongly

defended hills—Rājagiri, Kistnagiri, and Chandrāya Drug—connected by long walls of circumvallation. The most notable is Rājagiri, on which stands the citadel. It is about 500 or 600 feet high, and consists of a ridge terminating in a great overhanging bluff facing the south, and falling with a precipitous sweep to the plain on the north. The citadel is on the summit of this bluff. At the point where the ridge meets the base of the bluff, a narrow and steep ravine gives a difficult means of access to the top. On every other side it is quite inaccessible, the sides of the rock rising sheer from the base to a great height. Across this ravine the Hindu engineers built three walls, each about 20 or 25 feet high, and rising one behind the other at some little distance, which rendered an attack by escalade in that direction almost impracticable. The way to the summit leads through the three walls by several gateways; but at the very top this portion of the rock is divided by a narrow chasm 24 feet wide and 60 feet deep from the main mass of the hill, and the only way into the citadel is across this chasm. The fortifiers of the rock artificially prolonged and heightened it, threw a wooden bridge across, and made the only means of ingress into the citadel through a narrow stone gateway facing the bridge and about 30 yards from it, which was fortified on the side of the citadel with flanking walls, fitted with embrasures for guns and loopholed for musketry. It has been said with truth that in the conditions of warfare then existing this gateway could have been held by ten men against ten thousand.

It is not known with certainty who constructed the fort, but historical accounts and the nature of the buildings point to the conclusion that the credit of building it belongs mainly, if not entirely, to the ancient Vijayanagar dynasty. The round towers and cavaliers show traces of European supervision, and some of the more modern embrasures were the work of the French. The great lines of fortifications which cross the valley between the three hills, enclosing an area of 7 square miles, were evidently built at different periods. In their original form, each consisted of a wall about 5 feet thick, built up of blocks of granite and filled in with rubble; but subsequently a huge earthen rampart, about 25 or 30 feet thick, has been thrown up behind these walls, and revetted roughly on the inside with stone, while at intervals in this rampart are barracks or guard-rooms.

Several ruins of fine buildings are situated within the fort. Of these the most remarkable are the two temples, the Kalyāna Mahal, the gymnasium, the granaries, and the *īdgāh*. There are various picturesque *mantapams*, or buildings supported on stone pillars, on each of the hills, and a large granary on the top of Kistnagiri. The most attractive ruin of all, perhaps, is the Kalyāna Mahal, which consists of a square court surrounded by rooms for the ladies of the governor's household. In the

middle of this court is a square tower of eight storeys, about 80 feet high, with a pyramidal roof. The first six storeys are all of the same size and pattern: namely, an arcaded veranda running round a small room about 8 feet square, and communicating with the storey above by means of small steps. The room on the seventh storey has now no veranda, but there are indications that one formerly existed. The topmost room is of smaller size than the others.

The principal objects of interest in the fort are the great gun on the top of Rājagiri; the Rājā's bathing-stone, a large smooth slab of granite, 15 square feet and about a foot thick, which lies near the spot where the palace is said to have stood; and the prisoners' well. This last is a singular boulder about 15 or 20 feet high, poised on a rock near the Chakrakulam reservoir, and surrounded by a low circular brick wall. It has a natural hollow passing through it like a well; and the bottom having been blocked up with masonry, and the upper edges smoothed with a little masonry work plastered with lime, a natural dry well was formed. Into this prisoners are said to have been thrown and allowed to die of starvation. The top of the boulder can be reached only by means of a ladder, and the hollow in it has now been filled in with rubbish. The metal of which the gun is made shows little or no rust. It has the figures 7560 stamped on the breech. A little to the south of Rājagiri is a fourth hill called Chakkili Drug. The summit is strongly fortified, but these defences are not connected with those of the other hills.

Gingee is familiar to the Tamil population throughout Southern India by means of a popular ballad still sung by wandering minstrels, which has for its object the story of the fate of the *genius loci*, Desing Rājā. According to the ballad, this Desing was an independent ruler of Gingee who paid no tribute to any power. The emperor Aurangzeb had remitted all payment, as a reward for his skill in managing a horse that no one else could ride. The Nawāb of the Carnatic was jealous of the Rājā's independence, and on his refusing to pay tribute invaded his territory. In the fight that followed Desing Rājā, though at first apparently successful owing to supernatural interference, was eventually defeated and killed. His wife the Rānī committed *sati*, and the Nawāb, out of respect for her memory, built and named after her the town of RĀNIPET in North Arcot District. As mentioned above, Gingee was a stronghold of the Vijayanagar dynasty, which was at the height of its prosperity at the beginning of the sixteenth century, and was finally overthrown by the allied Muhammadan Sultāns of the Deccan in 1565 at the battle of Tālikotā. It was not till 1638, however, that Bandaullah Khān, the Bijāpur general, with the assistance of the troops of Golconda, captured the fort. The division of the Bijāpur army which effected this capture was commanded by Shāhjī, father of the famous

Sivajī. In 1677 the fort fell to Sivajī by stratagem, and remained in Marāthā hands for twenty-two years. In 1690 the armies of the Delhi emperor under Zulfikār Khān were dispatched against Gingee, the emperor being bent upon the extirpation of the Marāthā power. The siege was prolonged for eight years, but the fort fell in 1698, and afterwards became the head-quarters of the Musalmān standing army in the province of Arcot. In 1750 the French under M. Bussy captured it by a skilful and daringly executed night surprise, and held it with an efficient garrison for eleven years. Captain Stephen Smith took the place after a five weeks' siege in 1761. In 1780 it was surrendered to Haidar Alī, and it played no part of importance in the subsequent campaigns.

Gingee long enjoyed the reputation of being one of the most unhealthy localities in the Carnatic. The French are said by Orme to have lost 1,200 European soldiers during their eleven years' tenancy of it. There is no trace, however, of any burial-ground where these men were interred. The spread of cultivation and attention to sanitary improvements seem to have made the locality more salubrious, for its character for malaria is not now considered remarkable. The fortress is entirely deserted. The Government has made an annual grant for the preservation of the ruins, and has recently issued orders for the preparation of estimates for the complete repair and restoration of some of the main buildings in the fort.

Gīr.—Range of hills in Kāthiāwār, Bombay, extending over 40 miles in length, commencing from a point about 20 miles north-east of Diu island. Captain Grant of the Indian Navy was captured in 1813 by an outlaw named Bāwā-Vāla, who kept him a prisoner on these hills for two and a half months. The region consists of a succession of rugged ridges and isolated hills covered with forest. It has long been famous as the haunt of a particular variety of lion which some few years ago was in danger of extermination. Latterly, however, they have been protected to such an extent that their numbers have risen to about seventy, and they have on many occasions killed cattle and even attacked solitary villagers.

Giriā.—Site of battle-field in the Jangipur subdivision of Murshidābād District, Bengal, situated in 24° 30′ N. and 88° 6′ E., to the south of Sutī. It is famous as the scene of two important battles: the first in 1740, when Alī Vardi Khān defeated Nawāb Sarfarāz Khān, and won for himself the government of Bengal; the second in 1763, when Nawāb Mīr Kāsim, after declaring war on the East India Company, was finally defeated and the governorship was conferred for the second time on Mīr Jafar.

Giriak.—Village in the Bihār subdivision of Patna District, Bengal, situated in 25° 2′ N. and 85° 32′ E., on the Panchāna river, and connected with Bihār town by a metalled road. Population (1901), 243.

South-west of the village, and on the opposite side of the river, stands the peak at the end of the double range of hills commencing near Gayā, which General Cunningham identifies with Fa Hian's solitary mountain, suggesting at the same time that its name is derived from Ekigri, or 'one hill'; but his views have not met with universal acceptance. Dr. Buchanan-Hamilton has described the ruins of Giriak, which are full of archaeological interest. They were originally ascended from the north-east, and remains still exist of a road about 12 feet wide, paved with large blocks, and winding so as to procure a moderate gradient. At the west end of the ridge, a steep brick slope leads up to a platform, on which are some granite pillars, probably part of an ancient temple. East of the ridge is an area 45 feet square, called the *chabutra* of Jarāsandha, the centre of which is occupied by a low square pedestal, supporting a solid brick column 68 feet in circumference and 55 feet in height. It is popularly believed that Krishna crossed the river at this point on his way to challenge Jarāsandha to combat, and a bathing festival is held at the spot annually in the month of Kārtik to commemorate the event.

[M. Martin, *Eastern India*, vol. i, pp. 78–80; and *Archaeological Survey of India Reports*, vol. i, pp. 16–34, and vol. viii.]

Gīrīdīh Subdivision.—Eastern subdivision of Hazāribāgh District, Bengal, lying between 23° 44′ and 24° 49′ N. and 85° 39′ and 86° 34′ E., with an area of 2,002 square miles. The northern portion of the subdivision consists of hilly country and undulating uplands, which merge in the valley of the Barākar on the south and of the Sakri river on the north. To the south there is a second hilly tract, in which PARASNĀTH Hill is situated, and along the southern boundary is the valley of the Dāmodar. The population in 1901 was 417,797, compared with 401,811 in 1891, the density being 209 persons per square mile. It contains one town, GĪRĪDĪH (population, 9,433), the head-quarters; and 3,408 villages. Important coal-fields belonging to the East Indian Railway are situated in the neighbourhood of Gīrīdīh town. Parasnāth Hill is a well-known place of pilgrimage for the Jains.

Gīrīdīh Town.—Head-quarters of the subdivision of the same name in Hazāribāgh District, Bengal, situated in 24° 10′ N. and 86° 22′ E. Population (1901), 9,433. Gīrīdīh is connected by a branch with the main line of the East Indian Railway at Madhupur, and is the centre of the Karharbāri coal-field (*see* HAZĀRIBĀGH DISTRICT). Gīrīdīh was constituted a municipality in 1902. The average income since its constitution has been Rs. 3,000, and the expenditure Rs. 2,900. In 1903–4 the income was Rs. 5,600, mainly derived from a tax on persons (or property tax); and the expenditure was Rs. 5,200. The town contains the usual subdivisional offices, and a sub-jail with accommodation for 21 prisoners.

Giri Rāj ('The royal hill'; called Annakūt in early Sanskrit literature).—A sandstone hill, about 4 or 5 miles long, near the town of GOBARDHAN, in Muttra District, United Provinces, between 27° 28′ and 27° 31′ N. and 77° 26′ and 77° 29′ E. The rock rises abruptly from the alluvial plain, and runs north-east and south-west with an average elevation of 100 feet. On the north, it ends in the Mānasī Gangā tank at Gobardhan. According to Hindu fable, Indra, enraged at being deprived of his usual sacrifices, caused violent storms to pour down on the people of Braj, who were protected by Krishna by means of this hill, which he held aloft on the tip of his finger for seven days and nights. Pious pilgrims may still be seen measuring their length in the dust the whole way round it, while the hill is reckoned so holy that the main road, which crosses it at its lowest point, is carried over by a paved causeway.

Girishk.—An old fort in the Kandahār province of Afghānistān, situated in 31° 45′ N. and 64° 37′ E., on the right bank of the Helmand river, 78 miles from Kandahār and 329 from Herāt (via Farrah); 3,641 feet above the sea. The town is insignificant, and owes all its importance to being the head-quarters of the Hākim of the Pusht-i-Rūd district. A small Afghān garrison lives outside the fort. Girishk was occupied by the British from 1839 till 1842, and for the last nine months of that period amid great difficulties, by a native force of 200 Sindīs, Punjābis, and Hindustānis, under a fine Indian soldier named Balwant Singh. This small garrison held their own against from 10,000 to 15,000 Durrānis, and the defence was one of the most brilliant exploits of the campaign. Girishk was again occupied for a short period by a British force in the beginning of 1879.

Girnār.—Sacred hill, with ruined temples, in Kāthiāwār, Bombay, situated in 21° 30′ N. and 70° 42′ E., about 10 miles east of Junāgarh town. The hill rises to about 3,500 feet above sea-level and has five principal peaks: Ambā Māta, which is crowned by the temple of that goddess; Gorakhnāth, the highest of all, which is 3,666 feet above the sea; Oghad Shikhar; Guru Dattatraya; and Kālka's peak, which till quite recently was the resort of Aghoris or Mardikhors, a degraded order of ascetics who profess to recognize no distinctions in the purity of food and have been known to eat human flesh. The fortress and part of the old palace of the Chudāsamās is still standing. There are three famous *kunds* or reservoirs, the Gau Mukhi, Hanumān Dhāra, and Kamandal Kund. The great rock Bhairav Jap forms a most picturesque feature of the hill. A little distance from the foot of the hill lies Vāmansthali, the ancient capital, while Balisthān, the modern Bilkha, lies immediately at its base. The ancient name of the hill was Ujjayanta or Girvar. It forms one of the sacred seats of the Jains, only second in importance to Pālitāna. A rock at the foot of the hill

is covered with a set of Asoka's inscriptions, 250 B.C. Another inscription (A.D. 150) relates how the local monarch Rudra Dāman defeated the king of the Deccan; while a third (A.D. 455) records the bursting of the embankment of the Sudarsana tank and the rebuilding of a bridge which was destroyed by the flood. There are, however, no remains of any ancient city, temples, or ruins of a corresponding age to these inscriptions, and but for their dates the place would have seemed to be unknown before the tenth century.

There are six *parabs* or resthouses on the ascent to the temple of Neminath. The temple of Ambā Māta, which crowns the first peak of the hill, is much resorted to by newly-married couples of the different subdivisions of the Brāhman caste. The bride and bridegroom have their clothes tied together, and, attended by their male and female relatives, present coco-nuts and other offerings to the goddess, whose favour is sought to secure a continuance of wedded felicity. The Junāgarh State has recently erected a fine flight of steps to the top of the hill. Mr. James Fergusson, in his *History of Indian and Eastern Architecture* (1876, pp. 230–232), thus described the architectural features of Girnār:—

'The principal group of temples at Girnār, some sixteen in number, is situated on a ledge about 600 feet from the summit and nearly 3,000 feet above the level of the sea. The largest and possibly the oldest of these is that of Neminath. An inscription upon it records that it was repaired in A.D. 1278, and unfortunately a subsequent restorer has laid his heavy hand upon it, so that it is difficult now to realize what its original appearance may have been. The temple stands in a courtyard measuring 195 feet by 130 feet over all. Around the courtyard are arranged 70 cells with a covered and enclosed passage in front of them, each of which contains a cross-legged seated figure of the Tīrthankar to whom the temple is dedicated (Neminath), and generally with a bas-relief or picture representing some act in his life. Immediately behind the temple of Neminath is a triple one, erected by the brothers Tejpāla and Vastupāla, who also erected one of the principal temples in Abu.'

Girwā.—A branch of the KAURIĀLA river in Nepāl and Oudh. The Kauriāla bursts through a gorge in the Himālayas called Shīshā Pānī, or 'glass water,' and a little below this point divides into two, the western branch retaining the name Kauriāla, while the eastern is called Girwā. The latter is now the more considerable, though it was formerly the smaller of the two. In its upper course the Girwā is a rapid stream with a pebbly bed; but it becomes navigable at Dhanaura before entering British territory, and grain, timber, ginger, pepper, and *ghī* are carried down it from Nepāl. It reunites with the Kauriāla a few miles below Bharthāpur in Bahraich District.

Girwān.—*Tahsīl* of Bāndā District, United Provinces, conterminous

with *pargana* Sihonda, lying between 24° 59′ and 25° 28′ N. and 80° 17′ and 80° 34′ E., with an area of 334 square miles. Population fell from 85,528 in 1891 to 77,706 in 1901. There are 179 villages and one town, KĀLINJAR (population, 3,015). The demand for land revenue in 1903–4 was Rs. 1,19,000, and for cesses Rs. 19,000. The density of population, 233 persons per square mile, is the highest in the District. In the west flows the Ken, which is fringed with ravines; but the *tahsīl* is on the whole fertile. In 1903–4 only 2 square miles were irrigated, out of 168 square miles under cultivation. The Ken Canal, when completed, will serve a large area in this *tahsīl*.

Goa Settlement.—Portuguese Settlement on the western coast of India, within the limits of the Bombay Presidency, lying between 14° 53′ and 15° 48′ N. and 73° 45′ and 74° 24′ E., with an area of 3,370 square kilometres or 1,301 square miles. It is bounded on the north by the river Terekhol or Araundem, separating it from the Sāvantvādi State; on the east by the range of the Western Ghāts, separating it from the Districts of Belgaum and North Kanara; on the south by North Kanara; and on the west by the Arabian Sea. Extreme length from north to south, 62 miles; greatest breadth from east to west, 40 miles. Goa forms a compact block of foreign territory on the coast of the Bombay Presidency surrounded by British Districts. It comprises the island of Goa or Ilhas, acquired in 1510, and the provinces of Salsette and Bārdez, acquired in 1543. These three form the Velhas Conquistas or 'old conquests.' The districts of Pernem, Bicholim or Batagram, Satāri, Ponda or Antruz, Zambaulim or Panchmal, Canacona or Advota, are called the Novas Conquistas or 'new conquests,' and were acquired in the latter half of the eighteenth century. The island of ANJIDIV, situated opposite the port of Kārwār in the British District of North Kanara, forms administratively a portion of the province of Goa. It was acquired by the Portuguese in 1505.

Physical aspects.

Goa is a hilly country, especially that portion which was most recently acquired, known as the Novas Conquistas. Its distinguishing feature is the WESTERN GHĀTS, or Sahyādri mountains, which, after skirting a considerable portion of the north-eastern and south-eastern boundaries, branch off westwards across the territory into numerous spurs and ridges. Of the isolated peaks with which these ranges of mountains are studded, the most conspicuous are: on the north, Sonsāgar, 3,827 feet above sea-level; Catlanchimauli, 3,633 feet; Vaguerim, 3,500 feet; Morlemchogor, 3,400 feet, all in the Satāri *mahāl* or district; on the east and west, Sidnato at Ponda, Chandarnate at Chandrowadi, Consid at Astagrār, and Dudsāgar at Embarbācem.

The territory is intersected by numerous rivers, which are generally

navigable. The eight principal rivers are as follows. The Terekhol or Araundem, so called from the fortress of that name guarding its estuary, has its source in the Western Ghāts in the Sāvantvādi State, flows south-west for 14½ miles, and, after forming the northern boundary of the district of Pernem, and also of the territory of Goa, discharges its waters into the Arabian Sea. The Chāporā or Colvalle, 18 miles long, rises at the Rām *ghāt*, and, after separating the districts of Bārdez, Bicholim, and Sanquelim from Pernem, takes a zigzag direction to the south-west through the villages of Salem, Revora, and Colvalle, and empties itself into the sea close to the village of Chāpora. The Bāga, only 1 mile long, rises in Bārdez, and passes a redoubt of the same name. The Sinquerim, 3½ miles long, also rises in Bārdez close to the village of Pilerne, and, after describing almost a right angle, westwards and southwards, and forming the peninsula of Aguada, falls into the bay of the same name. The Mandāvi, 38½ miles in length, is the most important stream in the territory, both the ancient and modern metropolis being situated on its banks. It rises at the Parvar *ghāt* in the district of Satāri, runs first north-west of Ponda, and then south-west of Bicholim and Bārdez, and, after forming several islands and passing Panjim or New Goa, discharges its waters into the Bay of Aguada; its principal offshoots pass the villages of Mapuça, Tivim, and Assonora, watering the districts of Bicholim, Sanquelim, and Zambaulim, and are locally known by those names. The Juāri, 39 miles in length, rises at the foot of the Dighy *ghāt* in the district of Embarbācem, runs northwards, separating Salsette from Ponda, and falls into the Bay of Marmagao; like the Mandāvi, it has numerous offshoots, one of which joins the former river between Marcaim and São Lourenço, after forming the island of Tissuadi. The Sāl, 15 miles long, runs close to the town of Margao, and discharges itself into the sea near the fort of Betul. The Talpona, 7 miles long, rises at the Amba *ghāt* in the district of Astragār, and, running westwards through the district of Canacona, falls into the sea near the small fort of Talpona. The boats by which these rivers are navigated are called *tonas*, and the ferries across them are designated *passagens*.

The territory of Goa possesses a fine harbour, formed by the promontories of Bārdez and Salsette. Half-way between these extremities projects the *cabo* ('cape') from the island of Goa, dividing the harbour into two anchorages, known as Aguada and Marmagao. Both are capable of accommodating safely the largest shipping from September to May. Aguada is virtually closed to navigation during the south-west monsoon, owing to the high winds and sea, and the formation of sand-banks in the estuary of the Mandāvi at that period; but Marmagao is accessible at all times. A consequence of the intersection of numerous rivers is the formation of many islands, of which the larger number 18.

Laterite is the stone most abundant throughout the territory. The geological resources of Goa have not yet been scientifically explored.

The climate is hot, and the rainfall for the ten years ending 1902, as registered by the Meteorological department, averaged 90 inches. The prevailing diseases are intermittent and remittent fevers, diarrhoea, and dysentery.

History.

Certain inscriptions corroborate the evidence of the Purānas that Goa was in ancient times known under the various names of Gomanchala, Gomant, Goapuri, Gopakapur, and Gopakapatanua. The accounts handed down from antiquity teem with legendary tales, on which little reliance can be placed. In the Sahyādri Khanda of the *Skanda Purāna* it is recorded that at an early period the Aryans settled in Goa, having been brought by Parasu Rāma from Trihotrapur or Mithila, the modern Tirhūt. Some of the inscriptions referred to above show that Goa afterwards passed under the sway of the Kadambas of Banavāsi, whose first king, Trilochana Kadamba, is supposed to have flourished in about A.D. 119–20. This dynasty continued to rule until 1312, when Goa fell for the first time into the hands of the Muhammadans, under Malik Kāfūr. They were, however, compelled to evacuate it in 1370, having been defeated by Vidyāranya Mādhav, the prime minister of Harihara of Vijayanagar, under whose successors Goa remained for about a hundred years. In 1470 it was conquered by Mahmūd Gawan, the general of Muhammad II, the thirteenth Bahmani Sultān of the Deccan, and incorporated into the dominions of that sovereign. Goa became subject to the Adil Shāhi dynasty reigning at Bijāpur about the time that Vasco da Gama landed at Calicut in 1498. This dynasty retained possession until February 17, 1510, when Goa was captured by Affonso de Albuquerque.

The Portuguese fleet, consisting of 20 sail of the line, with a few small vessels and 1,200 fighting men, hove in sight of the harbour. A holy mendicant or *jogi* had lately foretold its conquest by a foreign people from a distant land, and the disheartened citizens rendered up the town to the strangers. Eight leading men presented the keys of the gates to Albuquerque on their knees, together with a large banner which was unfurled only on state occasions. Mounted on a richly caparisoned steed, Albuquerque entered the city in a triumphal procession, drums beating, trumpets sounding, with the Portuguese banners carried by the flower of the Lisbon nobility and clergy at the head, amid the acclamations of an immense multitude, who showered upon the conqueror filigree flowers of silver and gold. Albuquerque behaved well to the inhabitants, but was shortly afterwards expelled by the Bijāpur ruler. Yūsuf Adil Shāh, Sultān of Bijāpur, marched against the place with a considerable force, and after several sanguinary

contests, retook it from the Portuguese on August 15 of the same year. Reinforced, however, by the large armament which opportunely arrived from Portugal about this time, Albuquerque hastened back to Goa with his fleet, and conquered it a second time on November 25. With 28 ships, carrying 1,700 men, he forced his way into the town after a bloody assault, in which 2,000 Musalmāns fell. For three days the miserable citizens were given over as a prey to every atrocity. The fifth part of the plunder, reserved for the Portuguese crown, amounted to two lakhs of rupees. Albuquerque promptly occupied himself in fortifying the place, embellishing the city, and establishing the Portuguese rule on a firm basis.

From this time Goa rapidly rose in importance, and eventually became the metropolis of the Portuguese Empire in the East, which is said to have comprehended an area of about 4,000 square leagues. In 1543, during the governorship of Martim Affonso, who came to India together with the celebrated St. Francis Xavier, the two important districts or *mahāls* of Bārdez and Salsette were ceded to the Portuguese by Ibrāhīm Adil Shāh, who, however, not long afterwards, attempted to regain them, but was foiled in his endeavours by the intrepidity of Dom João de Castro. To provide against any future invasion on the part of the Muhammadans, the eastern part of the island of Goa was protected by means of a long wall. In 1570 Alī Adil Shāh besieged the city with an army of 100,000 men; but it was so bravely defended by the little garrison under the Viceroy, Dom Luiz de Athaide, that the Muhammadan army, greatly thinned in numbers, retreated precipitately after a tedious siege of ten months' duration. About this period the Portuguese were alarmed by the appearance on the coast of India of a new enemy. The Dutch, having shaken off the Spanish yoke, assumed a warlike attitude towards the Portuguese, owing to the intimate connexion between Portugal and Spain.

The subsequent history of the town has been one of luxury, ostentation, and decay. After enduring a siege by the Sultān of Bijāpur, and suffering from a terrible epidemic, Goa reached the summit of its prosperity at the end of the sixteenth century. In the early years of the English Company, Goa Dourada, or 'golden Goa,' seemed a place of fabulous wealth to the plain merchants who were destined to be the founders of British India. 'Whoever hath seen Goa, need not see Lisbon,' said a proverb of that day. Indeed, if the accounts of travellers are to be trusted, Goa presented a scene of military, ecclesiastical, and commercial magnificence which has had no parallel in the British capitals of India. The descriptions that have been recorded of Calcutta in the eighteenth and during the first quarter of the nineteenth century, leave behind them a feeling of insignificance compared with the accounts of Goa, written nearly three hundred years

ago. To find a parallel, we must go to the travellers' tales regarding Agra and Delhi during the zenith of the Mughal prosperity. The brilliant pomp and picturesque display of Goa was due to the fact that it was not only a flourishing harbour, but also the centre of a great military and ecclesiastical power. The Portuguese based their dominion in India on conquest by the sword. They laboured to consolidate it by a proselytizing organization, which throws the missionary efforts of every other European power in India into the shade. The result has proved how rotten was this basis, and how feebly cemented was the superstructure reared upon it. But during the greatness of Goa it had all the splendours which the Church and a powerful military court could cast around it.

After the genius of Albuquerque and the energies of the early viceroys had spent themselves, their armaments constituted a vast idle population in the capital. The work of conquest was over, and it left behind it a gay and wealthy society of conquerors who had nothing to do. Every Portuguese in India, says a traveller, set up as a 'Fidalgo' (*sic*). These gentlemen had to be amused. There were no hotels or inns in the city, but many boarding-houses and gambling saloons. The latter, writes a voyager in the seventeenth century, were sumptuously furnished, and paid a heavy tax to the Government. People of all classes frequented them, and entertainments were provided for the lookers-on by jugglers, dancing-girls, musicians, wrestlers, and native actors or buffoons. 'Those who were inordinately fond of gambling stayed there sometimes for days together, and were provided with board and lodging.' Such gambling-houses were not places for respectable women, and while the male society thronged their saloons, the Portuguese ladies were rigorously shut up at home. The family income was derived from the labour of slaves; and as no 'Fidalgo' (*sic*) could follow a trade or calling without disgrace, so neither could his wife busy herself in domestic affairs without losing her social importance. The society of Goa, therefore, divided itself into two idle populations—an idle population of men in the streets and gambling-houses, and an idle population of women in the seclusion of their own homes. This was one of the first results of the intensely military spirit, with its contempt for peaceful forms of industry, on which rested the Portuguese power in India. The ladies of Goa soon obtained an unenviable notoriety in books of travel. Excluded from male society, they spent their time in indolence, quarrelling, and frivolous pursuits. A European *zanāna* life grew up, and brought with it some very ugly consequences. A lady valued herself in her female coterie upon the number and the daring of her intrigues. Almost every traveller who visited Goa during its prime tells the same curious story regarding the rashness with which the Portuguese matrons pursued their amours. Both Pyrard and Linschoten relate, in

nearly the same words, how the ladies of Goa were wont to stupefy their husbands with *dhatura*, and then admit their lovers. The perils of such interviews became almost necessary to give a zest to their profligacy, and the Goanese became a byword as the type of an idle, a haughty, and a corrupt society. Strangers are inclined to laugh at Englishmen for adhering in India to the British costumes devised for a more temperate zone. There can be no doubt that the Dutch in Java have adapted their clothing much better to the climate than the English in Calcutta. But the very rigidity with which English society in India insists upon matters of dress is not without its value. It forms a perpetual check upon the tendency to fall into the slipshod habits of Oriental domestic life. In Goa these habits were carried to an extreme length. At home, both ladies and gentlemen dressed very much like the natives, except for the large rosaries which they wore round their necks. While untidy and careless in their dress at home, they made an ostentatious display when they stirred abroad. When a gentleman rode out, he was attended by a throng of slaves in gay and fanciful liveries, some holding large umbrellas, others bearing richly inlaid arms; while the horse itself was loaded with gold and silver trappings, the reins studded with precious stones, with jingling silver bells attached, and the stirrups wrought into artistic shapes in gilt silver. The poor followed the example of the rich, and resorted to amusing makeshifts to maintain an air of dignity and grandeur. The gentlemen who lived together in a boarding-house had a few suits of silk clothes between them in common. These they used by turns when they went out and hired a man to hold an umbrella over them as they strutted through the streets.

Holland, having thrown off the Spanish yoke, began to assert herself in the East. While the British East India Company was struggling into existence during the last years of Elizabeth, the Dutch was preparing to dispute with the Portuguese for the supremacy in the Indian Ocean. In 1603 they blockaded Goa. The attempt proved abortive; but it left behind it a struggle between the two nations which, during the next seventy years, shattered and dismembered the Portuguese power in India. One by one the Portuguese possessions fell into the hands of the Dutch; their fleets were captured, or driven within the shelter of their forts, and their commerce was swept from the seas. Goa suffered not only from these disasters, but also from a return of the fever which had afflicted the city in the preceding century. It broke out again in 1635 and raged for several years. Towards the end of this visitation the Dutch once more blockaded Goa in 1639, but were again compelled to withdraw.

A period of pride and poverty followed, during which the splendour of the previous century was replaced by shabby devices to conceal the decay that had blighted the Portuguese power. In 1648 Tavernier

admired the architectural grandeur of Goa, but was struck with the indigence of several Portuguese families whom he had seen in affluence and prosperity during his first visit. He says that many who had six years previously enjoyed an ample income, were now reduced to the necessity of secretly begging alms.

'Yet they did not put aside their vanity. The ladies were particularly observed going in palanquins to seek charitable relief, attended by servants who conveyed their messages to the persons whose assistance they implored.'

'The city,' says Thevenot in 1666, 'is great and full of beautiful churches and convents, and well adorned with palaces. There were few nations in the world so rich as the Portuguese in India; but their vanity is the cause of their ruin.'

In 1675 Dr. Fryer described Goa as 'Rome in India':—

'looks well at a distance—stands upon seven hills; everywhere colleges, churches, and glorious structures: but many houses disgracing it with their ruins.'

The Portuguese, indeed, were becoming unable to hold their capital even against the native banditti. In 1683 it narrowly escaped falling into the hands of Sambhājī at the head of his roving Marāthās, who plundered up to the very gates of the city. All hopes of resistance were abandoned, when a powerful Mughal force suddenly made its appearance from the Ghāts, and compelled the Marāthās to come to terms. This unexpected deliverance was ascribed to the miraculous interposition of St. Francis Xavier. Subsequently the Bhonslas from the State of Sāvantvādi invaded Goa territory; but though at the outset they obtained partial successes, they were eventually defeated by the Portuguese, who conquered from them the islands of Corjuem and Ponelem, and destroyed their fortress at Bicholim. To defend the place against future inroads, the Viceroy, Vasco Fernandes Cesar de Menezes (1712–7), built a fortress on the frontiers of Bārdez, and another at Chāpora. During the administration of the Count of Sandomil (1732–41), the Portuguese became once more involved in a war with the Marāthās and lost some of their most important possessions towards the north of Goa. In 1741 the Marāthās invaded the peninsulas of Bārdez and Salsette, and threatened the city of Goa itself. At the same time the Bhonslas of Sāvantvādi availed themselves of the opportunity to overrun the settlement. At that critical period a new Viceroy arrived at Goa, the Marquis of Louriçal, bringing with him from Europe a reinforcement of 12,000 men. With this army he encountered and defeated the Marāthās at Bārdez with great slaughter, captured the celebrated fortress of Ponda and other minor forts, and compelled them to retire from Goa. He then marched against the Bhonslas, and forced them to sue for peace, making their chief, Khem Sāvant, a

tributary of the Portuguese. Shortly afterwards, however, the Bhonslas renewed hostilities, but were defeated by the Marquis of Castello Novo, who conquered Alorna (whence his later title), Tiracol, Neutim, Rarim, and Sanquelim or Satāri.

In 1750 the Marāthās attacked the fortress of Neutim, which they closely invested both by sea and land. The Viceroy, the Marquis of Tavora, hastened to the relief of the place with all his available forces, and compelled the enemy to raise the siege, after which he turned his arms against the king of Sonda, and captured the fortress of Piro (Sadāsivgarh). His successor, the Count of Alva, prosecuted successfully for a time the war against the Marāthās, but eventually lost Rarim and Neutim, and was killed at the siege of one of the fortresses which had fallen into the hands of the enemy. About this period the Court of Lisbon sent peremptory orders to the Viceroy, the Count of Ega, to restore the fortresses of Piro and Ximpem to the king of Sonda, and Bicholim, Sanquelim, and Alorna to Khem Sāvant III. Subsequently, however, the former allowed the Portuguese to possess themselves of Ponda, with the adjacent territory of Zambaulim, Cabo de Rāma, and Canacona, during the time that his dominions were invaded by Haidar Alī. After some years of repose, Khem Sāvant again attempted to disturb the Portuguese; but being defeated, he had to surrender to them Bicholim, Sanquelim or Satāri, Alorna, and Pernem.

The decay of the capital had become so notorious that the Portuguese Government in Europe determined to rebuild it at a great cost. After a century of fruitless efforts and foolish expenditure, Old Goa still lay in ruins, and the remnants of the population drew themselves together at Panjim or New Goa, at the mouth of the river. The changes in the river itself had contributed to render Old Goa still more unhealthy than before, and to make the navigation of its channels dangerous even for the comparatively small class of ships which the Portuguese employed. During the eighteenth century the decayed settlement, instead of being a centre of military pomp and courtly display, had become a burden on the Home Government, and cost Portugal a considerable sum of money annually. It required a force of 2,000 European soldiers to protect it from the Marāthās, the privates receiving a miserable subsistence of rice and fish, and the captains drawing a salary of Rs. 6 a month. Such commerce as survived was in the hands of the Jesuits. This fraternity still preserved the traditions, and something of the energy, of the proselytizing era. Alexander Hamilton, early in the eighteenth century, declared that he counted from a neighbouring hill nearly eighty churches and convents. He gives the number of Roman Catholic priests at 30,000 for the city and settlement. The native merchants had been driven away by oppressions and insults; and during the first half of the last century

the Jesuits monopolized the remnants of the trade which still clung to the capital. In 1739, when the territory was overrun by the Marāthās, the nuns and monks had streamed forth in panic to the refuge of Marmagao. Nevertheless, high offices and military commands were still lavished among the poverty-stricken remnants of the Portuguese in India. All the talk at Goa was about fine titles. 'A post which would be filled by a small tradesman everywhere else needed a general.'

From 1794 to 1815 the Government of Goa and other Portuguese settlements in India received little attention from the Court of Lisbon, owing to various causes, the chief of which was the invasion of the Iberian Peninsula by the French. To protect Goa against any contingency, an English auxiliary force garrisoned the two fortresses commanding the port, until the general peace in Europe after the battle of Waterloo. In 1817 the Viceroy, the Count of Rio Pardo, repelled the inroads of the predatory forces from the Sāvantvādi State, capturing the fortresses of Uspa and Rarim. This Governor was, however, deposed in consequence of a revolution which took place in Goa in 1821. In 1835 a native of the place, named Bernardo Peres da Silva, was appointed Governor and Prefect of the Portuguese State of India by Dona Maria II, in reward for his adherence to the House of Braganza during the usurpation of Dom Miguel. But his reforms in Goa during the seventeen days of his government ended in an *émeute* and his flight to Bombay.

For about sixteen years after this event Goa was undisturbed by either external foes or internal dissensions, except for a brief military revolt, which resulted in the deposition of the Governor, Lopez de Lima. During the administration of Pestana, in 1844, the disturbances at Sāvantvādi, and the shelter afforded at Goa to the rioters who had fled thither, threatened for a time to bring about a rupture with the British Government of Bombay. In 1852 the Rānis of Satāri, headed by Dipājī, revolted. In 1871 a rebellion broke out among the native army at Goa, in consequence of the Portuguese authorities making a stand against its exorbitant demands. To suppress this insurrection the Court of Lisbon dispatched a reinforcement, accompanied by the king's own brother, Dom Augusto. On the restoration of peace the native regiments that had revolted were disbanded. The former army has not been reorganized, as native regiments could only be dangerous to the handful of European troops, and the peace maintained throughout India by the British supremacy renders them unnecessary for any practical purposes. In 1895, in consequence of the Government failing to comply with the demands of some Goa troops, who were being dispatched to Mozambique to quell the revolted Kaffirs, a mutiny broke out among the infantry.

The Rānīs of Satāri joined the mutineers, and peace was not restored until the arrival of an expedition from Lisbon under the command of His Highness the Infante, Dom Affonso Henriques. A general amnesty was finally granted in 1897. In 1901 the Rānīs again broke out, the revolt commencing with the murder of an officer at Valpoy in Satāri on November 6. The murderers and many of the leading Rānīs were secured and punished, the Rānīs being transported to Timor with any members of their families who were willing to share their exile.

Population.

The population of Goa proper in 1800, i.e. the Velhas without the Novas Conquistas, was 178,478. The whole population of the Velhas and Novas Conquistas, according to the Census of 1851, was 363,788, giving a density of 343 persons per square mile. The population of the territory of Goa in 1881 was 445,449, which had increased to 475,513, or by 6 per cent., in the twenty years ending 1900. The number of towns and villages, and population of the districts, in 1900, are given in the following tables:—

Districts.	Towns.	Villages.	Population.		
			Males.	Females.	Total.
Old Conquests:					
Ilhas	1	35	27,522	27,018	54,540
Salsette	1	60	52,756	60,305	113,061
Bārdez	1	39	45,247	60,090	105,337
New Conquests:					
Pernem	..	27	18,559	19,455	38,014
Sanquelim	..	30	15,513	15,597	31,110
Satāri	..	85	10,285	9,336	19,621
Ponda	..	28	22,788	22,664	45,452
Sanguem	..	51	13,203	12,915	26,118
Quepem	..	44	10,848	10,538	21,386
Canacona	..	7	10,648	10,177	20,825
Island of Anjidiv	..	1	24	25	49
Total	3	407	227,393	248,120	475,513

The towns in the territory of Goa are Nova Goa or Panjim (*see* GOA CITY) with a population of 9,325; MARGAO, population 12,126; and MAPUÇA, population 10,733.

The distribution by religion is: Christians, 262,648; Hindus, 200,144: Musalmāns, 8,431. In the Velhas Conquistas, Christians form 91 per cent. of the population; in the Novas Conquistas, the Hindus are about equally numerous. The Christians of Goa still very largely adhere to caste distinctions, claiming to be Brāhmans, Charados, and low castes, which do not intermarry. The Hindus are largely Marāthā, and do not differ from those of the adjacent Konkan Districts of Bombay.

All classes of the people, except Europeans, use the Konkanī dialect

of Marāthī, with some admixture of Portuguese words. But the official language is Portuguese, which is commonly spoken in the capital and the principal towns, as well as by all educated persons.

Details of population (so far as available).

Districts.	Europeans and Americans.	Africans and others.	Natives of India.	Age.		Civil condition.		
				Under 12 years.	Above 12 years.	Unmarried.	Married.	Widowers and widows.
Old Conquests:								
Ilhas . .	182	74	54,264	14,751	39,788	26,986	21,478	6,046
Salsette . .	14	26	113,019	32,693	80,352	59,867	40,026	13,089
Bārdez . .	16	65	105,230	29,765	75,569	50,113	39,917	15,278
New Conquests:								
Pernem . .	1	..	38,013	12,480	25,534	16,040	17,449	4,515
Sanquelim .	4	7	31,099	9,840	21,269	13,388	13,702	3,978
Satāri . .	3	4	19,618	6,342	13,277	8,016	8,875	2,709
Ponda . .	8	4	45,440	14,044	31,403	20,237	19,572	5,635
Sanguem . .	4	2	26,110	7,762	18,336	11,355	10,858	3,693
Quepem . .	3	1	21,382	6,666	14,719	10,040	8,576	2,770
Canacona . .	..	..	20,825	6,214	14,599	9,637	8,362	2,824
Island of Anjidiv .	1	..	48	15	34	26	14	9
Total	236	183	475,048	140,572	334,880	225,705	188,829	60,746

Nearly all the Christians profess the Roman Catholic religion and are subject in spiritual matters to an Archbishop, who has the titles of Primate of the East and Patriarch of the East Indies, and exercises ecclesiastical jurisdiction also over a great portion of British India. His nomination rests with the King of Portugal, subject to confirmation by the Pope. The Christians of Damān and Diu are subject to a bishop, who bears the titles of Bishop of Damān and Archbishop of Cranganore. There are numerous Christian churches in Goa, mostly built by the Jesuits and the Franciscans prior to the extinction of the religious orders in Portuguese territory. The chief of these is the cathedral or metropolitan church, called the Sé Primacial e Patriarchal de Goa. The religious orders have been abolished in Portuguese India, and the churches are under the charge of secular priests, all of whom are natives of Goa. The Catholics of Goa are very regular in the fulfilment of religious duties, and celebrate the chief festivals sanctioned by the Catholic Church with much devotion and pomp. Hindus and Muhammadans now enjoy perfect liberty in religious matters, and have their own places of worship. The chief Hindu temples are those of Mangesh, Mālshā, Sāntādurga, Kapleshwar, Nāgesh, and Ramnāth, all of which are situated in the Novas Conquistas. In the early days of Portuguese rule the observance of Hindu usages and the worship of Hindu gods in public were rigorously suppressed.

At the conquest of Goa by Affonso de Albuquerque in 1510 the

village communities, among which the inhabitants were distributed, were found to be in the enjoyment of certain immunities from taxation and other privileges. Albuquerque carefully maintained the constitution of the villages, and avoided all appearance of fresh taxation. The same policy was followed by his successors; and in 1526 a register was compiled, called *foral dos usos e costumes*, containing the peculiar usage and customs of the communities, and the privileges enjoyed by them from time immemorial. This register served as a guide-book to subsequent administrators. But in time the communities were burdened with additional imposts, and placed under certain restrictions. At present they are under the supervision of the Government, which appoints in each district (*concelho*) of the Velhas Conquistas an officer called Administrador das Communidades, to watch rigidly over their proceedings. They are precluded from spending even the smallest sum without Government sanction, and have to pay certain contributions to the parish churches. Each village community has a tax-collector (*sacador*) and a clerk (*escrivão*). There is, however, no village headman. On questions affecting the interests of a whole village, a sort of *panchāyat* or council is held, composed of one or more members of each clan (*vangor*), and the decisions are determined by the majority of votes. In the Velhas Conquistas a great portion of the land is held by the village communities, which, after paying the rent and other Government taxes, divide the annual produce among themselves; while in the Novas Conquistas the lands are distributed among the *vangors*, who cultivate them and enjoy their net produce. The total number of village communities is 222.

Of the entire territory of Goa one-third is said to be under cultivation. A regular land survey is at present in progress, pending the completion of which statistical details of cultivation and crops are not available. The soil is chiefly argillaceous, but also contains light sand and more or less decayed vegetable matter. In many parts it is full of stone and gravel. Its fertility varies according to quality and situation in reference to the supply of water. Manure, consisting of ashes, fish, and dung, is largely employed. As a rule, the Velhas Conquistas are better cultivated than the Novas Conquistas. In both these divisions of the Goa territory a holding of fifteen or sixteen acres would be considered a good-sized farm, though the majority of holdings are of smaller extent.

Agriculture.

The staple produce of the country is rice, of which there are two harvests: the winter crop, called *sorodio*; and the summer crop or *vangana*, raised by means of artificial irrigation from the rain-water accumulated in reservoirs, ponds, and wells. For the *sorodio* crop the field is ploughed before the commencement of the monsoon, the seed scattered in May or June, and the crop harvested in September; while

as regards the *vangana*, the ploughing operations begin in October, the sowing in November, and the harvesting in February. Rice is cultivated in low lands (*cazana* or *cantor*) situated near the banks of rivers, slopes of hills (*mollor*), stiff grounds (*dulpan* or *dulip*), and sandy soils (*guero*). The quantity of rice produced is barely sufficient to meet the local demand for two-thirds of the year. Next to rice, the culture of coco-nut palms is deemed most important, from the variety of uses to which the products are applied. They grow in luxuriant groves on all lands not hilly or serviceable for the production of rice, and along the sea-coast. Areca palms are chiefly cultivated in the Novas Conquistas on lands irrigated from rivulets. Hilly places and inferior soils are set apart for the cultivation of such cereals as *nachinim* (*Dolichos biflorus*), *urd* (*Phaseolus radiatus*), *kulita* (*Dolichos uniflorus*), *orio* (*Panicum italicum*), *mūng* (*Phaseolus Mungo*), *tori* (*Cytisus Cajan*). Of fruit trees, the most important are mango, jack, and cashew. Among the various kinds of vegetables are potato, radishes, yams, melons, cucumber, *bendes* (*Abelmoschus esculentus*), &c. Besides these, chillies, ginger, turmeric, onion, and certain vegetables of daily consumption are extensively cultivated in some villages.

The condition of the agricultural classes in the Velhas Conquistas has improved during the last thirty years, owing partly to the general rise in price of all kinds of agricultural produce, and partly to the current of emigration to British territories. In the Novas Conquistas, however, the cultivators are said to have been reduced to great want and misery through the oppression of the landowners.

There is a branch of the Banco Nacional Ultramarino of Lisbon at Panjim. Money can be borrowed from wealthy proprietors or religious confraternities at five per cent. In districts inhabited by Hindus, however, the current rate of interest is about ten per cent. Landowners not unfrequently advance petty sums, or their equivalent in kind, without interest, to such of the cultivators or labourers as are their dependents or live in their 'oarts' (*palmares*), deducting the debt by monthly instalments from the wages due. In the Novas Conquistas the rate of interest charged for an advance of grain is generally half as much as the value of the advance.

Forests, &c.

Stately forests are found in the Novas Conquistas. The 'reserved' and other forests scattered over an area of 30,000 hectares or 116 square miles have an aggregate value of 70 lakhs, according to the Report of the Forest Committee. The wasteful practice of *kumri* or shifting cultivation has denuded them of valuable trees, but this form of tillage is now kept under strict control by the state. In 1903-4 the total revenue derived from the forests, excluding timber supplied to Government for state works, was Rs. 24,000, while the expenditure amounted to Rs. 10,500.

Iron is found at Satāri, Pernem, and especially in the province of Zambaulim. Two claims to work mines in the Sanghem district have been registered, but have not yet been definitely allowed.

Trade and communications.

In the days of its glory Goa was the chief entrepôt of commerce between the East and West, and was especially famous as the centre of the trade in horses with the Persian Gulf. But with the downfall of the Portuguese empire it lost its commercial importance, which began to decline after the fall of Vijayanagar, and its trade has now dwindled into insignificance. Few manufacturing industries of any importance exist; but the country is not devoid of skilful artisans, such as goldsmiths, carpenters, blacksmiths, shoemakers, &c. Some of the articles produced are disposed of privately, while others are exposed for sale at the annual and weekly fairs held in various places. The principal exports are coconuts, betel-nuts, mangoes, water-melons, jack and other fruits, cinnamon, pepper, salted fish, gum, coir-work, firewood, fowls, and salt. Of these, the last forms one of the principal sources of profit, the numerous salt-pans that exist yielding a large quantity of salt over and above the local demand. The chief articles imported are: rice, cloth, refined sugar, wines, tobacco, glass-ware, hardware, and other miscellaneous goods. The total imports by land and sea into Goa in 1903–4 were valued at 50 lakhs, and the exports at 14 lakhs. The value of the imports largely exceeds that of the exports, thus causing a drain of money which would certainly have materially affected the financial condition of Goa, had not a stream of coin flowed constantly into the country from the savings of those of its inhabitants who reside temporarily in British territory. In 1903–4 the customs revenue amounted to 5 lakhs. The total number of vessels of every kind that entered the port of Goa in the same year was 2,874, while the number of those that left was 2,814.

A line of railway now connects Marmagao with the Southern Mahratta Railway, the length of line to Castle Rock being 51 miles, of which 49 miles lie in Goa territory. Several new roads have recently been made, and others are in course of construction. There are 19 roads, complete and incomplete. Of these, the chief runs northwards from Verem, opposite Panjim, through the villages of Pilerne, Saligao, Parra, Mapuça, and Assonora, meeting at Sankarwalle the road constructed in British territory. There are also several municipal roads.

There is one telegraph office in Goa, at Panjim, maintained jointly by the British and Portuguese Governments. The head-quarters of the post office are also at Panjim, with branches at Margao, Mapuça, Ponda, Bicholim, Chinchinim, and Pernem.

Goa is seldom subject to great floods, though some of its districts

occasionally suffer from partial inundation during heavy rainfall. In times of drought the agricultural classes sustain heavy loss, but the people at large are supplied, though at great cost, with rice from British territory. It is only when a general famine occurs beyond the frontier that signs of extreme distress are visible among the inhabitants of Goa. Formerly the country was frequently subject to famine. The years 1553, 1570, and 1682 are said to have been seasons of great scarcity. In subsequent years the constant incursions of the Marāthās occasioned much distress.

Famine.

Goa is regarded as an integral portion of the Portuguese empire, and, with Damān and Diu, forms, for administrative purposes, one province subject to a Governor-General, who is appointed directly by the King of Portugal, and holds his office for five years. Besides his civil functions, he is invested with the supreme military authority in the province. His personal staff consists of two aides-de-camp, and a secretary styled the Chief Secretary of the Governor-General of Portuguese India, and likewise appointed by the King. Although he is the chief executive functionary, the Governor-General cannot, except in cases of emergency, impose new taxes, or abolish the existing ones, contract loans, create new appointments, or reduce the old ones, retrench the salaries attached to them, or generally incur any expenses not sanctioned by law; nor can he, under any circumstances, leave the province without the special permission of the Home Government.

Administration.

In his administration the Governor-General is aided by a Council composed of the Chief Secretary, the Archbishop of Goa (or, in his absence, the chief ecclesiastical authority exercising his functions), the Judges of the High Court, the two highest military officers in Goa, the Attorney-General, the Inspector da Fazenda, the Health Officer, and the President of the municipal chamber or corporation of the capital (Camara Municipal das Ilhas). As a rule, all the members give their opinions, and vote in every matter on which they are consulted by the Governor-General. There are also five other Juntas or councils, called the Junta Geral da Provincia (general council of the province), the Conselho da Provincia (the council of the province), the Conselho Technico das Obras publicas, the Conselho-inspector de Instrucção publica, and the Conselho da Agricultura. The first of these is composed of the Chief Secretary, the Archbishop or his substitute, the Attorney-General, the Inspector da Fazenda, the Director of Public Works, the Health Officer, a Professor of the Medico-Surgical College, a Professor of the Lyceum, a Professor of the Normal School, and a representative from each of the municipal corporations of the province. This Junta discusses and decides all questions relating to public works, and the expenses necessary for their execution, the

preservation of public health, the establishment of schools, the alteration of customs duties, &c. The Governor-General is empowered to suspend the operation of any resolution passed by this Junta, pending a reference to the Home Government. The other councils are of inferior importance.

In addition to this machinery of administration, there are subordinate agencies for the local government of the different districts. In connexion with these agencies, the entire territory of Goa is divided into two tracts, known as the Velhas and Novas Conquistas (old and new conquests). The former tract is subdivided into three districts (*concelhos*), namely, the Ilhas, Bārdez, and Salsette; and each of these again into parishes, of which there are 85 in all. Every district has a municipal corporation, and is placed under the charge of a functionary called Administrador de Concelho. This officer is appointed by the Governor-General, and is entrusted with duties of an administrative character, besides those connected with the public safety and health. Every parish has likewise a minor council, called Junta da Parochia, presided over by a magistrate, called *regedor*, whose duties are to inspect and direct the police establishments of the parish, keep a strict surveillance over liquor-shops, gaming-houses, &c., open wills and testaments, and report generally every important occurrence to the Administrador. Similarly in each of the seven divisions into which the Novas Conquistas are subdivided there is an officer called Administrador de Concelho. Of the above-named seven divisions, the first is Pernem: the second, Sanquelim; the third, Ponda; the fourth, Sanguem, or Astagrār and Embarbācem; the fifth, Quepem, or Bally, Chandrowadi, and Cacora; the sixth, Canacona with Cabo de Rāma; and the seventh Satāri, which forms a military command and is administered by the military commandant in the same way as other divisions by the Administrador. Each of the subdivisions of the Velhas and Novas Conquistas is also known by the name of 'province.' The offices of Governor, Chief Secretary, Attorney-General, and some other important ones are almost invariably filled by Europeans. As stated above, there are three municipalities in the Velhas Conquistas, the chief being that of the Ilhas. The municipal receipts in 1903–4 amounted to 1½ lakhs.

Goa and its dependencies in India, namely, Damān and Diu, together with Maçao and Timor, constitute for judicial purposes but one judicial district. This district is divided into *Comarcas*, which are subdivided into *Julgados municipaes* and *Juizes populares*. In each of the five *Julgados* of Portuguese India there is a judge, with an establishment consisting of a sub-delegate of the Attorney-General, one clerk, two or more bailiffs, and a translator or interpreter. All these officials are paid by Government, and are besides entitled to fees, except the clerks,

who receive fees only. The judge holds his sitting twice a week for the purpose of deciding civil and criminal cases within his jurisdiction.

There are 111 *Juizes populares*, and 6 *Juizes de direito de comarca*. The *Juizes de direito* have a staff composed of a delegate of the Attorney-General, three clerks, one interpreter and translator, an accountant, four or five bailiffs, all of whom, except the clerks and accountant, receive, in addition to certain fees, fixed salaries. A judge of this class exercises ordinary and extraordinary jurisdiction in matters both civil and criminal. He is required to go on circuit annually to the *Julgados*, where he hears complaints against subordinate functionaries, examines their proceedings and registers, and sometimes tries those suits within his jurisdiction which may not have been submitted to his tribunal by the ordinary judges. The jurisdiction and duties of the *Juizes de direito* and *Juizes municipaes e populares* are regulated by special laws.

The supervision of all judges is entrusted to a High Court (Tribunal da Relação), whose seat is in Nova Goa (New Goa), in consequence of which it is sometimes called Relação de Nova Goa. This court consists of a chief justice (Presidente) and four puisne judges. The High Court has jurisdiction, both ordinary and extraordinary, in all cases, whether civil or criminal, and is invested with appellate powers. Its decisions are final in all suits except those relating to property exceeding in value Rs. 1,500, in which an appeal lies to the Supreme Tribunal of Portugal.

The total revenue in 1903-4 was over 20 lakhs and the expenditure nearly 20 lakhs. The sources of revenue are: land tax, customs and postal dues, seal and stamp duties, tobacco licences, taxes on liquor-shops, &c. Goa contains no mint; and the only revenue from salt is very trifling, derived from eight pans at Diu.

Previous to 1871 Goa possessed a comparatively large native army; but owing to the rebellion which broke out in that year it was disbanded, and a battalion composed wholly of Europeans was obtained from Portugal. The force consisted in 1904 of 2,730 men of all ranks. The strength of the police is 390 men. The total expenditure on the military and police forces is about one lakh.

Of late years education has made considerable progress in Goa. In 1900 10 per cent. of the total population were literate. In 1903-4 there were 121 primary schools, of which 98 were public and 23 private, with 4,945 pupils, of whom 1,255 were girls. The number of pupils in the National Lyceum or college at New Goa and several other schools of secondary education was 305. The Medico-Surgical College was attended by 88 pupils. Besides these, several other schools are under ecclesiastical jurisdiction. In addition to the Government Gazette, called *Boletim Official*, there are twelve periodicals: namely, *O Heraldo*, *A India Portugueza*, *O Ultramar*, *O Crente*, *Noticias*, *Voz do Povo*,

O Indio, *O Bardezano*, *O Nacionalista*, *O Diario de Goa*, *Echo de la India*, and *Oriente*, all edited in the Portuguese language by natives. There is also an archaeological review, *O Oriente Portuguez*.

There are 3 hospitals, where 2,631 in-patients were treated in 1904. There are also 3 military hospitals, at Goa, Damān, and Diu. The most important charitable institutions are: the Santa Casa de Misericordia (Holy House of Mercy) at Panjim; Hospicio do Sagrado Coração de Maria (Asylum of the Sacred Heart of Mary) at Margao; and Asylo de Nossa Senhora dos Milagres (Asylum of our Lady of Miracles) at Mapuça. The first dates from the conquest of Goa by the Portuguese, and maintains the hospital at Ribandar and two establishments for the reformation and education of females at Chimbel.

[D. L. Cottineau de Kloguen, *An Historical Sketch of Goa* (Madras, 1831); J. N. Fonseca, *Historical and Archaeological Sketch of Goa* (Bombay, 1878); A. L. Mendes, *A India Portugueza* (Lisbon, 1886).]

Goa City.—Capital of the Portuguese territory of the same name, situated in 15° 30′ N. and 73° 57′ E., near the mouth of the river Mandāvi. Population of Old Goa (1900), 2,302, dwelling in 500 houses; of Panjim or New Goa, 9,325, dwelling in 1,735 houses. Goa is properly the name of three cities, which represent successive stages in the history of Western India. The earliest of the three was an ancient Hindu city, before the invasion of the Muhammadans; the second, known as Old Goa, was the first capital of the Portuguese, and is still the ecclesiastical metropolis of Roman Catholic India; the third, commonly called Panjim, is the present seat of Portuguese administration. The original city of Goa (Goa Velha), built by the Kadambas, was situated on the banks of the river Juāri. No traces of buildings exist at this day. The next town of Goa (Velha Cidade de Goa), generally known to foreigners as Old Goa, situated about 5 miles to the north of the Hindu capital, was built by the Muhammadans in 1479, nineteen years before the arrival of Vasco da Gama in India. This famous city, conquered by Albuquerque in 1510, became the capital of the Portuguese empire in Asia: as such, it was once the chief emporium of commerce between the East and the West, and enjoyed the same privileges as Lisbon. It reached the climax of its splendour during the sixteenth century; but with the decline of the Portuguese power in the following century, it gradually began to lose its significance in every respect, save as an ecclesiastical metropolis.

The frequent plagues by which the population was repeatedly thinned, together with the removal of the seat of Government to Panjim, and the suppression of the religious orders, contributed finally to effect its complete downfall. Instead of the 200,000 inhabitants which once formed its population, hardly 2,000 poverty-stricken creatures remain to haunt the few ecclesiastical edifices still standing. Foremost among

the surviving edifices is the cathedral dedicated to St. Catherine by Albuquerque, in commemoration of his entry into Goa on the day of her festival. Built as a parochial church in 1512, it was reconstructed in 1623 in its present majestic proportions, having been about a century before elevated to the rank of a primatial see, which it has ever since retained. Service is regularly held every day by the canons attached to the cathedral. The Convent of St. Francis, originally a Muhammadan mosque, converted into a church by the Portuguese, was the first structure consecrated to Christian worship in Goa. Its chief portal, curious as being the earliest of its kind in Portuguese India, has been preserved intact to this day, though the convent itself was rebuilt in 1661. The Chapel of St. Catherine was erected in 1551 on the site of the gate of the Muhammadan city through which Albuquerque entered. The Church of Bom Jesus, commenced in 1594, and consecrated in 1603, is a splendid edifice, enjoying a wide renown for the magnificent tomb holding the remains of the apostle of the Indies, St. Francis Xavier, the events of whose life are represented around the shrine. The Convent of St. Monica, commenced in 1606 and completed in 1627, was constructed for a community of nuns, the last of whom died in 1885. The Convent of St. Cajetan, erected in the middle of the seventeenth century by the Order of the Theatines, is noted for its resemblance to St. Peter's at Rome, and is in excellent preservation.

Of the other historical edifices with which Old Goa was formerly embellished, few traces remain to give a conception of their pristine beauty and magnificence. The once renowned palace of the viceroys, the spacious custom-house, and many other public buildings, have been completely destroyed. The College of St. Roque, belonging to the Order of Jesus, the Senate-house, the once famous Palace of the Inquisition, the Church of the Miraculous Cross, the College of St. Paul, the Hospital of St. Lazarus, the Church and Convent of St. Augustine, as well as the college of the same name close by, the arsenal, the chapel of the Cinco Chagas (the 'five wounds'), and the ecclesiastical jail, are all in ruins. The sites of the vanished buildings have been converted into coco nut plantations, the ruins are covered with shrubs and moss, and the streets are overrun with grass. But though Old Goa has long since lost its civil importance, forming at present only a suburb of Panjim, its ecclesiastical influence as the see of the Primate of the East still remains; and, as long as it can boast of its noble monuments of Christian piety, and retains the shrine of the great Eastern evangelist, it will not cease to attract pilgrims from the most distant parts of the Catholic world.

The history of Goa city has been given in the article on GOA SETTLEMENT. As far back as 1759, the ruin of the old city was complete. The Governor changed his residence to Panjim, near the mouth of the

river, and in the same year the Jesuits were expelled. With them went the last sparks of commercial enterprise. In 1775 the population, which at the beginning of the century had numbered nearly 30,000, was reduced to 1,600, of whom 1,198 were Christians. Goa remains in ruins to this day. Every effort to repeople it has failed, and Old Goa is now a city of fallen houses and of streets overgrown with jungle. Almost the only buildings which survive are the convents and churches, with miserable huts attached. In 1827 the Superior of the Augustinian Convent thus wrote: 'Il ne reste plus de cette ville que le sacré: le profane en est entièrement banni.' The stately mansions and magnificent public buildings of Old Goa are now heaps of bricks covered with rank grass, and buried in groves of coco-nut palms.

'The river,' wrote Dr. Russell in 1877, 'washes the remains of a great city—an arsenal in ruins: palaces in ruins; quay walls in ruins; churches in ruins; all in ruins. We looked and saw the site of the Inquisition, the bishop's prison, a grand cathedral, great churches, chapels, convents, religious houses, on knolls surrounded by jungle. We saw the crumbling masonry which once marked the lines of streets and enclosures of palaces, dockyards filled with weeds and obsolete cranes.'

New Goa, the present capital of Portuguese India, comprehends Panjim and Ribandar, as well as the old city of Goa, and is 6 square miles in extent. It is situated on the left bank of the river Mandāvi, at a distance of about 3 miles from its mouth. The suburb of Ribandar is connected with the central quarter of Panjim by a causeway about 300 yards long, through which lies the main road leading to Old Goa. Panjim occupies a narrow strip, enclosed by the causeway on the east, the village of St. Ignez on the west, the river on the north, and a hill which walls it on the south. In the last century it was a miserable village, inhabited by a few fishermen dwelling in *cadjān* huts, and remarkable only for the fortress built by Yūsuf Adil Shāh, which is now transformed into a viceregal palace. As in the case of Bombay City, the surface has been gradually formed by filling up hollows and reclaiming large tracts of marshy land.

Panjim was selected as the residence of the Portuguese Viceroy in 1759, and in 1843 it was formally raised by royal decree to rank as the capital of Portuguese India. From the river the appearance of the city, with its row of public buildings and elegant private residences, is very picturesque; and this first impression is not belied by a closer inspection of its neat and spacious roads bordered by decent houses. Of public structures, the most imposing are the barracks, an immense quadrangular edifice, the eastern wing of which accommodates the Lyceum, the Public Library, and the Government Press. The square facing this wing is adorned with a life-size statue of Albuquerque

standing under a canopy. The other buildings include the cathedral, the viceregal palace, the high court, the custom-house, the municipal chamber, the military hospital, the jail, the accountant-general's office, and the post office. For trade, &c., *see* GOA SETTLEMENT.

Goālanda. Subdivision and village in Farīdpur District, Eastern Bengal and Assam. *See* GOALUNDO.

Goālpāra District. – District of Eastern Bengal and Assam, forming the entrance to the upper valley of the Brahmaputra. It lies on both sides of the great river, extending from 25° 28′ to 26° 54′ N. and from 89° 42′ to 91° 6′ E., with an area of 3,961 square miles. It is bounded on the north by the mountains of Bhutān; on the south by the Gāro Hills: on the east by Kāmrūp; and on the west by the Districts of Rangpur and Jalpaigurī and the State of Cooch Behār. The permanently settled portion of the District (as distinguished from the Eastern Duārs, which lie under the Bhutān hills) occupies the valley of the Brahmaputra, at the corner where the river leaves Assam proper and turns due south to enter the wide plain of Bengal. It is very irregularly shaped, extending for 65 miles along the northern bank of the Brahmaputra, and for 120 miles along its southern bank. The level land on the south bank forms but a narrow strip, in some parts not more than 8 miles across, being shut in by the ridges of the Gāro Hills. On the north, the country is much broken up by low ranges of hills running north and south, and exhibits a pleasing diversity of forest, lake, and marsh, interspersed with rice-fields and villages surrounded by groves of fruit trees and bamboos. The largest sheets of water are the Tāmrānga and Dhalni *bils*, two picturesque lakes lying at the foot of the Bhairab hills in the east of the District, and the Dhir and Diple *bils* a little to the west of that range. The Eastern Duārs consist of a flat strip of country lying beneath the Bhutān mountains. The only elevated tract in these Duārs is the Bhumeswar hill, which rises abruptly out of the plains to the height of nearly 400 feet; but to the north they are shut in by the ranges of the Bhutān hills. The total area of the Duārs is 1,570 square miles, nearly the whole being covered with *sāl* forest and high grass jungle, among which are scattered the patches of cultivation that surround the villages of the Meehs, who inhabit this tract.

Physical aspects.

The principal rivers on the north bank of the Brahmaputra are the MANĀS, with its tributary the AI, the CHĀMPĀMATI, the SARALBHĀNGA or Gaurāng, the Gangia, and the SANKOSH. All these rise in the Bhutān hills and are navigable by country boats for a portion of their course throughout the year. Several other minor streams become navigable during the rainy season. A peculiar tract of pebbles, gravel, and sand, resembling the BHĀBAR tract in the Western Himālayas,

borders the hills. The water of all the minor streams sinks into this during the greater part of the year, and does not again appear above ground till it reaches the alluvial clay. On the south bank the largest rivers are the JINJIRĀM and Krishnai, which rise in the Gāro Hills.

Geologically, the District consists of an alluvial plain composed of a mixture of clay and sand, with numerous outliers of gneissic rock.

As in the rest of Assam, enormous stretches of country are covered with high grass and reeds. The principal varieties are *ikra* (*Saccharum arundinaceum*), *nal* (*Phragmites Roxburghii*), and *khagari* (*Saccharum spontaneum*). *Sāl* (*Shorea robusta*) is common, and *khair* (*Acacia Catechu*) and *sissu* (*Dalbergia Sissoo*) are found in the west of the District, while evergreen forest clothes the foot of the hills.

The larger fauna include elephants, rhinoceros, bison (*Bos gaurus*), buffaloes, tigers, leopards, and bears, and various kinds of deer. Wild animals still do much damage; in 1904 they were responsible for the deaths of 685 animals and 12 human beings, though rewards were paid for the destruction of 257 tigers and leopards. Small game consists of partridges, jungle-fowl, florican, wild duck, quail, and peafowl.

Fogs are not common, and the winter is milder and the spring hotter than in Upper Assam. In January, the coldest month of the year, the mean temperature is 63°. The rainy season, on the other hand, is comparatively cool, and in no month does the mean temperature exceed 83°. The Eastern Duārs and the *tarai* at the foot of the Gāro Hills are excessively malarious, but the centre of the District is fairly healthy.

Near the Brahmaputra the average annual rainfall is from 80 to 90 inches; but in the Eastern Duārs, which are near the hills and covered with dense forest, it is 60 or 70 inches higher. Goālpāra, like the rest of Assam, is subject to earthquakes. At the beginning of the nineteenth century a village near Goālpāra town is said to have been swallowed up in one of these convulsions of nature, and the great earthquake of 1897 did much damage. The town of Goālpāra was wrecked and the masonry buildings at Dhubri were injured. The houses in the interior are, however, usually made of reeds and bamboos; and the majority of the people, especially on the south bank of the Brahmaputra, suffered more from the floods which followed than from the earthquake itself. The causes of these floods are somewhat obscure; but it is believed that in places the level of the country sank, and that the silting up of the river-beds obstructed the natural drainage of the country. In 1900 a cyclone of extraordinary violence swept over a portion of the south bank. The path of the storm was only about 10 miles long and a quarter of a mile wide, but within this area everything was levelled with the earth, and 118 persons were killed or injured.

Little is known of the history of the earlier Hindu dynasties that reigned in the Assam Valley, and none of them was closely connected with Goālpāra. At the beginning of the sixteenth century the Koch race rose to power under Biswa Singh, whose son Nar Nārāyan waged war successfully against the Ahoms, and the Rājās of Cāchār, Jaintiā, Sylhet, and Tippera. Before his death the kingdom was divided: and Goālpāra, with Kāmrūp and Darrang, was made over to his nephew, Raghu Rai, who is claimed as the ancestor of the present Bijni family. Raghu Rai's son, Parikshit, was defeated by the Muhammadans in 1614, and the District was then incorporated in the Mughal empire, though the struggle between the Muhammadans and the Ahoms went on for some years longer. After the English obtained the *dīwāni* of Bengal in 1765, Goālpāra town continued to be a frontier outpost, and a considerable trade was carried on from there, and from JOGIGHOPĀ on the opposite bank of the Brahmaputra, between European merchants and the Assamese.

History.

On both the north and south the District has been exposed to trouble from the tribes inhabiting the hills that form its boundaries. The country south of the river was continuously raided by the Gāros, and hundreds of lives were taken, till the tribe was pacified by the posting of a European officer in the centre of the hills in 1866. The Eastern Duārs originally formed part of the territories of the Hindu Rājās; but during the conflicts between the Ahoms and the Muhammadans the Bhotiās succeeded in establishing their sovereignty over this territory, and it was only ceded to the British after the Bhutān War of 1865. The permanently settled portions of Goālpāra originally formed part of the District of Rangpur, but were transferred to Assam after the annexation of the valley in 1826. In 1867 the whole of what is now Goālpāra District was included in the Commissionership of Cooch Behār, but in the following year it was placed for judicial purposes under the Judicial Commissioner of Assam. Finally, it was transferred to that Province when it became a separate Administration in 1874. There are hardly any objects of archaeological interest in the District.

The population of Goālpāra at each of the last four enumerations was: (1872) 387,341, (1881) 446,700, (1891) 452,773, and (1901) 462,052. The large apparent increase in 1881 was chiefly due to the inaccuracy of the first Census, and since that date the population has advanced but slowly. This has been chiefly due to the ravages of a peculiarly malignant form of malarial fever known as *kalā āzār*. The District is divided into two subdivisions, DHUBRI and GOĀLPĀRA: and in the last named, the greater part of which lies south of the Brahmaputra, the population in 1901 was only about four-fifths of that recorded twenty years before. There are two towns in the District, DHUBRI and GOĀLPĀRA; and 1,461 villages. The

Population.

following table gives particulars of area, towns and villages, and population according to the Census of 1901 :

Subdivision.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Dhubri . .	2,959	1	1,076	329,102	111	+ 3·4	7,474
Goālpāra . .	1,002	1	385	132,950	133	— 1·1	4,869
District total	3,961	2	1,461	462,052	117	+ 2·0	12,343

At the Census of 1901, 44 per cent. of the population returned themselves as Hindus, 28 per cent. as Muhammadans, and 27 per cent. professed various forms of Animism. Goālpāra is not a part of Assam proper : and 69 per cent. of the population speak Bengali, while 18 per cent. speak Bodo or plains Kāchārī, the people in the Eastern Duārs being exceptionally faithful to their tribal tongue.

More than half the Hindu population are Rājbansis (115,800), but this is only a high-sounding name for the Hinduized section of the Koch or Bodo tribe. Brāhmans and other respectable castes are not strongly represented. The principal unconverted tribes are the Mech (73,800), the Rabhās (27,100), and the Kāchāris and Gāros. All of these are descended from the Bodo stock, and resemble one another closely in appearance, manners, and customs. Agriculture is the staple occupation, supporting 84 per cent. of the population in 1901.

A branch of the American Baptist Mission is located at Goālpāra, and two-thirds of the native Christians in 1901 (3,429) were members of this sect. A colony of Christian Santāls has also been planted by missionary enterprise near Dingdingā Hāt, about 18 miles north of Dhubri.

The soil consists of clay mixed in varying proportions with sand. In the submontane tract it assumes an ochreous shade, due to the presence of iron. There is a considerable difference between the conditions prevailing in the north and the south of the District. In the Eastern Duārs the rice-fields are invariably irrigated from the hill streams, and, though the soil is sandy, the crop is generally a bumper one and is beyond all risk of flood. The permanently settled estates near the Brahmaputra are exposed to much injury from flood, and the harvest is far less certain ; but famine and scarcity are unknown over the whole District. The area under different crops in the permanently settled estates is not known : but in 1903–4 it was estimated that the District contained 541 square miles under rice, 81 square miles under mustard, 41 square miles under jute, 33 square miles under pulse, and 16 square miles under wheat. Rice is of three

Agriculture.

varieties—*sāli*, which is transplanted and yields a large out-turn of good grain; *āsu*, which is usually sown broadcast and reaped before the floods rise; and *boa*, which is grown in marshy tracts, and sometimes has a stem nearly 20 feet in length. Wheat is raised in the east of Goālpāra, but is only grown by foreigners in small patches in the other Districts of Assam. Garden crops include tobacco, vegetables, the *pān* or betel-vine, and the areca palm.

In 1903–4 the total area of the District was distributed as follows: Settled, 2,634 square miles; unsettled, 1,327 square miles; cultivated, 670 square miles; forests, 787 square miles.

Goālpāra has never been exploited in the interests of the tea industry. The Eastern Duārs have an abundant rainfall, but the soil is rather sandy and the climate is said to be fatal to foreigners, while a large proportion of the land is covered with 'reserved' forest. In 1904 there were only four tea gardens in the District, with 700 acres under cultivation, which yielded 213,000 lb. of tea and gave employment to 2 Europeans and 508 natives.

It is impossible to trace the progress or decline of agriculture with any degree of accuracy; but it is believed that the area under jute, tobacco, and wheat has considerably extended in recent years, whereas mustard has suffered from the floods, which leave the soil too wet and cold to allow the seed to germinate properly.

The buffaloes are of a fairly powerful stock, but the farm bullocks are undersized and generally in poor condition. The villagers disregard all the laws of breeding and pay little attention to their animals; and, though there is plenty of grazing ground on every side, the grass in the rainy season is very rank.

Almost the whole of the rice crop in the Eastern Duārs is artificially irrigated. The cultivators combine to dig channels, sometimes several miles in length, through which they bring the water to their fields. No irrigation works have, however, been constructed by Government, and for assessment purposes no distinction is drawn between irrigated and unirrigated land.

Forests.

The Goālpāra forests are of considerable commercial importance. The Government Reserves in 1903–4 covered an area of 787 square miles, about 163 square miles of which are stocked with pure *sāl* (*Shorea robusta*). The principal forests, those of Ripu, Chirang, Bengtol, and Bijni, are situated at the foot of the Bhutān hills, about 36 miles from Dhubri. The Reserves are worked departmentally, as well as by private purchasers. The latter are usually local men, who take out permits for one or two hundred trees, which are logged in the forests, and towards the end of the rains brought down the various rivers to the Government dépôt at Bagribāri and to other places on the Brahmaputra. The difficulties of transport

are considerable, but they have been to some extent overcome by the purchase of 6 miles of portable tramway. The experiment has proved a success, and the length of line will probably be increased. Most of the timber is purchased by traders from Bengal, where it is largely used for boat-building. Much difficulty is experienced in obtaining the labour required for departmental working and for the clearance of fire lines, though forest villages have been established and trees are granted free in return for work done. In addition to the regular Reserves, there were in 1903–4 558 square miles of 'unclassed' state forest, managed by the Revenue officials. Few good trees are left in this area, owing to the wasteful practice, formerly in vogue, of levying revenue on the axe and not on the amount of timber extracted. A big trade in timber is also carried on by the *zamīndārs*, as their forests, though containing fewer large trees, are more accessible than the Government Reserves. Other trees found in the District are *khair* (*Acacia Catechu*) and *sissu* (*Dalbergia Sissoo*); but they are, as a rule, only of sporadic growth, and are thus of little value from a commercial point of view.

No minerals have been found in the District, except a little coal of inferior quality on the border of the Gāro Hills.

The manufactures of Goālpāra are not of much importance, and consist of brass and bell-metal vessels, rough pottery, and basket-work. Cotton and silk cloths are also woven by the women of the family, but not to the extent usual in Assam proper. The silk cloths are sometimes sold, but the products of the loom are often insufficient for home requirements, and have to be supplemented by European goods. Gold and silver ornaments are also made, but only to order.

Trade and communications.

The bulk of the trade of the District is carried on direct with Calcutta. The principal exports are mustard seed, jute, timber, hides, fish, unhusked rice, silk cloth, betel-nuts, and cotton and lac obtained from the Gāro Hills. The articles received in exchange are European piece-goods, salt, hardware, oil, tobacco, pulse, and mats. The chief centres of trade are GOĀLPĀRA, GAURIPUR, DHUBRI, and MANIKARCHAR. Bilāsipāra, on the north bank of the Brahmaputra, about 27 miles east of Dhubri, is a large timber dépôt; and a good deal of jute is exported from Pātāmāri, a village nine miles south of that town. The principal markets to which the Gāros come down to exchange their goods are Jirā, Nibāri, and DAMRĀ. The natives of the District have little aptitude for commerce, and most of the business is in the hands of merchants from Rājputāna or Bengal. The railway is not largely used for commercial purposes, owing to the necessity for transhipment at Sarā Ghāt; and the bulk of the traffic is by steamer or in country boats, which come up in large numbers to Goālpāra. Internal trade is carried on at weekly markets, of which there are a large number, and at fairs

held on the occasion of religious festivals. The Bhotiās bring down a few ponies and a little rubber, but the total value of this trans-frontier trade is very small.

The main artery of trade is the Brahmaputra, which flows through the District and receives numerous tributaries on either bank. At four stations on the river—namely, Dhubri, Bilāsipāra, Goālpāra, and Dalgomā—passenger steamers call daily, and these are periodically visited by large cargo boats. The vessels are owned and managed by the India General Steam Navigation Company and the Rivers Steam Navigation Company, Limited. Country boats are largely used during the rains to bring produce from the interior. The Eastern Bengal State Railway opened a line to Dhubri in 1902, and the railway is being continued through the north of the District to a point opposite Gauhāti, the terminus of the Assam-Bengal Railway. Both the north and south trunk road run through the District, but the bulk of the land traffic goes by the local board road from Gauripur to Rahā in Barpetā. Speaking generally, Goālpāra is well supplied with means of communication. Altogether 464 miles of unmetalled roads were maintained in 1903-4, of which 225 miles were in the charge of the Public Works department. The larger rivers flowing from the Bhutān hills are still unbridged, and are crossed by ferries; and steam ferries ply across the Brahmaputra between Dhubri and Fakīrganj, and Jogighopā and Goālpāra.

Administration.

The District is divided into two subdivisions: Dhubri, which is under the immediate charge of the Deputy-Commissioner; and Goālpāra, which is usually entrusted to a native magistrate. In addition to the Deputy-Commissioner, the District staff includes three Assistant Magistrates, a Forest officer, and an Executive Engineer, who is also in charge of the Gāro Hills District.

The Deputy-Commissioner exercises the powers of a Sub-Judge, and the subordinate magistrates act as Munsifs. Appeals lie to the Judge of the Assam Valley, and from him to the High Court at Calcutta. Special arrangements have been made for the administration of civil justice in the Eastern Duārs, suited to the simple and uncivilized character of the inhabitants. Whenever possible, disputes are decided by *panchāyat*, and the chief appellate authority is the Commissioner. The people of the District are of a peaceful and law-abiding character, and there is little serious crime.

For revenue purposes, Goālpāra consists of two distinct tracts: the area covered by the jurisdiction of the three *thānas* of Goālpāra, Dhubri, and Karaibāri as that jurisdiction stood in 1822; and the Eastern Duārs. After the failure of Mīr Jumla's expedition in 1663, Goālpāra was the frontier District held by the Mughal government, and only a nominal tribute was taken from the border chieftains. This tribute was origin-

ally paid in kind: but shortly before the Decennial Settlement of 1793 it had been commuted to a cash payment, which was accepted, when the settlement was made permanent, as the land revenue demand of the estates from which it was drawn. The result is that an area of more than 2,373 square miles pays a revenue of only Rs. 11,411, which is less than half a farthing per acre, and probably does not exceed one-sixtieth part of the *zamindārs'* receipts. The Eastern Duārs, which lie at the foot of the Bhutān hills, and cover an area of 1,570 square miles, were acquired from Bhutān in 1865, and are settled direct by Government with the ryots. Owing to the unhealthiness of the climate and the sparseness of the population, there is little demand for land in the Duārs. The rates assessed are lower than those in force in Assam proper, and over the greater part of this area the revenue demand is Rs. 1–8 per acre for homestead and winter rice land and 12 annas for high land. The Rājās of BIJNI and Sidli are entitled to settlement of estates covering 130,000 and 170,000 acres respectively, in the Duārs that bear their names, as they were held to have acquired rights over this land when under the Bhutān government.

The land revenue and total revenue of the District, in thousands of rupees, is shown in the following table:—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	94	94	1,12	1,10
Total revenue . .	3,63*	4,79	5·52	4,82

* Exclusive of Forest receipts.

Outside the municipalities of Dhubri and Goālpāra, the local affairs of each subdivision are managed by boards under the chairmanship of the Deputy-Commissioner and Subdivisional officer. The expenditure of these boards in 1903–4 was a little over one lakh, rather more than one-half of which was devoted to public works and one-fourth to education. The chief sources of income were the local rate and a substantial grant from Provincial revenues.

For the purposes of the prevention and detection of crime the District is divided into nine investigating centres, the force in 1904 consisting of 41 officers and 210 men, with 896 *chaukīdārs*, or village watchmen. There is a jail at Dhubri which can accommodate 28 males and 6 females, and a magistrate's lock-up at Goālpāra.

Education is still very backward in Goālpāra. The number of pupils under instruction in 1880–1, 1890–1, 1900–1, and 1903–4 was 2,922, 4,931, 7,241, and 6,801 respectively. During the past twenty-nine years the cause of education has, however, made some progress, and the number of pupils in 1903–4 was nearly three times that in 1874–5. At the Census of 1901, 2·7 per cent. of the population (4·9 males and

0·2 females) were returned as literate. There were 215 primary and 18 secondary schools in the District in 1903–4. The number of female scholars was 345. The enormous majority of the pupils under instruction were only in primary classes, and the number of girls who have advanced beyond that stage is insignificant. Of the male population of school-going age 14 per cent. are in the primary stage of instruction, and of the female population of the same age less than one per cent. The total expenditure on education in 1903–4 was Rs. 69,000, of which Rs. 11,000 was derived from fees.

The District possesses 3 hospitals and 11 dispensaries, with accommodation for 59 in-patients. In 1904 the number of cases treated was 93,000, of whom 600 were in-patients, and 1,400 operations were performed. The expenditure was Rs. 19,000, the greater part of which was met from Local and municipal funds.

About 34 per 1,000 of the population were successfully vaccinated in 1903–4, but this figure was much below the average for previous years. Vaccination is compulsory only in the towns of Dhubri and Goālpāra.

[Sir W. W. Hunter, *A Statistical Account of Assam*, vol. ii (1879); E. A. Gait, 'The Koch Kings of Kāmarūpa,' *Journal of the Asiatic Society of Bengal*, vol. lxii, part i; A. Mackenzie, *History of the Relations of the Government with the Hill Tribes of the North-East Frontier* (Calcutta, 1884); B. C. Allen, *District Gazetteer of Goālpāra* (1906).]

Goālpāra Subdivision.—Subdivision of Goālpāra District, Assam, lying between 25° 52′ and 26° 30′ N. and 90° 9′ and 91° 6′ E., with an area of 1,002 square miles. The subdivision consists of a narrow strip of land between the Gāro Hills and the Brahmaputra, with the south-eastern portion of that part of the District which lies on the north bank of the great river. Low hills project into the plains from the Gāro range, and even appear on the other side of the Brahmaputra in the Sālmāra *thāna*, where they reach a height of nearly 1,700 feet. Much of the country lies low, and there are numerous swamps and marshes, and some sheets of water, like the Kumārakāta and Tāmrānga *bils*, which even in the dry season are of considerable size. The annual rainfall at Goālpāra town averages 91 inches, but it is heavier towards the north. The subdivision was one of the first places in the Assam Valley to be attacked by *kalā azār*, and between 1881 and 1891 the population decreased by 18 per cent. The population in the latter year was 134,523, and by 1901 it had fallen to 132,950, a further decrease of one per cent. The density of population is 133 persons per square mile, as compared with 117 in the District as a whole. Mustard and long-stemmed rice are grown on the marshes near the river, but much injury is done by floods, which have been particularly severe since the earthquake of 1897. GOĀLPĀRA (population, 6,287) is the principal town and head-quarters of the subdivision, the magistrate

in charge being usually a native of India. For administrative purposes the subdivision is divided into the *thānas* of Goālpāra, Dudhnai, Lakhipur, and North Sālmāra, and contains 385 villages. The whole of the subdivision is permanently settled.

Goālpāra Town.—Town in the District of the same name, Assam, situated in 26° 10′ N. and 90° 38′ E., on the south bank of the Brahmaputra. Population (1901), 6,287. Prior to the annexation of Assam, Goālpāra was a frontier station of the Company's territories, and a colony of Europeans who settled there forcibly acquired a monopoly of the Bengal trade, and then engaged in lucrative transactions with the natives, who enjoyed a similar monopoly of the trade of Assam. The first attempt by the British to interfere in the internal affairs of the Assam kingdom was made by a salt-farmer named Raush, who in 1788 dispatched 700 sepoys from Goālpāra to aid the Rājā against his revolted subjects, but not one of these soldiers is said to have returned. A pile of masonry, the size of a small cottage, which covers the remains of Raush's two infant children, stands on the side of a low hill overlooking the river. A magnificent view is obtained from this spot over the valley of the Brahmaputra, which is here much broken by low forest-clad hills and is bounded on the north by the snow-capped Himālayas. Most of the public offices stand on the hill, and have been rebuilt since the earthquake of 1897, which destroyed all masonry buildings and caused the native town, which stands on the plain at the west, to sink below flood-level. Embankments fitted with sluice-gates have recently been constructed to protect the town from the floods of the Brahmaputra; but the lower parts are waterlogged by accumulations of rain-water, which cannot be drained off till the river falls, and the shops and houses present a very dilapidated appearance. In 1879 the head-quarters of the District were removed from Goālpāra to Dhubri, and since that date it has been a subdivisional station.

Goālpāra was constituted a municipality in 1878. The receipts and expenditure during the ten years ending 1902–3 averaged Rs. 6,000, the chief source of income being house tax, and the main items of outlay conservancy and public works. In 1903–4 the income and expenditure were Rs. 7,200 and Rs. 6,300 respectively. In addition to the magistrate's court and lock-up, the public buildings include a high school with an average attendance of 106 boys, and a dispensary with 18 beds. A branch of the American Baptist Mission is located in the town. Goālpāra is connected by road with Gauhāti and Dhubri, and is a port of call for steamers plying on the Brahmaputra. There is a considerable export trade in jute, mustard, cotton, lac, and *sāl* timber. The chief imports are salt, grain, oil, and cotton goods and twist. The wholesale trade is in the hands of Mārwāri merchants, but the majority of the retail shopkeepers are Muhammadans from Dacca.

Goalundo Subdivision.—Western subdivision of Faridpur District, Eastern Bengal and Assam, lying between 23° 32′ and 23° 55′ N. and 89° 19′ and 89° 49′ E., with an area of 428 square miles. The population in 1901 was 319,285, compared with 351,620 in 1891; the number of villages is 1,178, including RĀJBĀRI, the head-quarters. The subdivision, which is bounded on the north and east by the Padmā, is a fertile alluvial tract possessing a rich, light loamy soil. The surface is high compared with that of the other subdivisions, but the climate is very unhealthy, malarial fever being prevalent, and the density of population (746 persons per square mile) is consequently less than elsewhere in the District. The subdivision is served by the eastern section of the Eastern Bengal State Railway, and by steamers. GOALUNDO VILLAGE is an important railway and steamer station and the focus of several trade routes: other trade centres are Pāngsa and Belgāchi.

Goalundo Village.—Village in the subdivision of the same name in Faridpur District, Eastern Bengal and Assam, situated in 23° 51′ N. and 89° 46′ E., near the junction of the main streams of the Padmā, as the Ganges is here called, and the Brahmaputra. Population (1901), 5,036. Goalundo is the terminus of the Eastern Bengal State Railway and of several important steamer routes, and is a mart through which an enormous volume of trade passes. Daily services of steamers connect it with the railway systems at Nārāyanganj and Chāndpur, and with the steamer services to Mādāripur, Barisāl, Sylhet, and Cāchār. There are also daily services of steamers up the Padmā to Dīgha Ghāt in the dry season, and Buxar in the rains, and up the Brahmaputra to Dibrugarh. Formerly Goalundo was situated exactly at the junction of the Padmā and Brahmaputra, and an enormous sum was expended in protecting the site from erosion. But in 1875 the spur was washed away; and since that date the terminus, though still called Goalundo, has shifted twice annually, the present site being 7 miles south of the former one. The subdivisional and railway head-quarters, which were formerly at Goalundo, have been removed inland to Rājbāri. Goalundo contains a very large bazar and the railway and steamer officers' quarters, which follow the terminus in its wanderings. The trade is one of transhipment, the principal commodities dealt with being jute, oilseeds, and food-grains. An enormous quantity of *hilsa* fish is exported to Calcutta. The trade is mainly in the hands of Mārwāri and Bengali merchants. Coolies travelling to the Assam tea gardens pass through Goalundo, and an Emigration officer is stationed here.

Gobardānga.—Town in the Bārāsat subdivision of the District of the Twenty-four Parganas, Bengal, situated in 22° 53′ N. and 88° 45′ E., on the east bank of the Jamunā river, with a station on the Eastern Bengal State Railway. Population (1901), 5,865. Tradition points to this place as the spot where Krishna tended his flocks; and the name of

the adjoining village, Gaipur, is said to be abbreviated from Gopīpur, and to denote the city of *gopinīs* or milkmaids, mistresses of Krishna. Sugar factories are numerous, and raw jute and molasses are exported. Gobardānga was constituted a municipality in 1870. The income during the decade ending 1901–2 averaged Rs. 3,600, and the expenditure Rs. 3,100. In 1903–4 the income was Rs. 3,500, mainly from a tax on persons (or property tax); and the expenditure was Rs. 3,400.

Gobardhan.—Town in the District and *tahsīl* of Muttra, United Provinces, situated in 27° 30′ N. and 77° 28′ E., on the road from Muttra city to Dīg (Bharatpur State). Population (1901), 6,738. It lies in a recess in the sacred hill called GIRI RĀJ, and is built round a fine tank lined with masonry steps, called the Mānasī Gangā. At the Dewāli festival in autumn the steps and façade of the surrounding buildings are outlined with rows of small lamps, producing a beautiful effect. Gobardhan is famous in tradition as one of the favourite residences of Krishna, and is also remarkable for its architectural remains. The oldest is the temple of Harī Deva, originally built about 1560 and restored by a Baniā in 1872. Two stately cenotaphs of richly carved stone commemorate Randhīr Singh and Baldeo Singh, Rājās of Bharatpur; they are crowned by domes, the interiors of which are adorned with curious paintings. A third cenotaph is being constructed in memory of Rājā Jaswant Singh. North of the town, on the bank of the beautiful artificial lake called Kusum Sarovar, stands a group of buildings built in memory of Sūraj Mal by his son, Jawāhir Singh, soon after Sūraj Mal's death near Ghāziābād in 1763. Gobardhan is administered under Act XX of 1856, with an income of about Rs. 2,200. There is little or no trade. The primary school has about 140 pupils.

Gobardhangiri.—Hill in Shimoga District, Mysore. *See* GOVARDHANGIRI.

Gobindpur Subdivision.—Northern subdivision of Mānbhūm District, Bengal, lying between 23° 38′ and 24° 4′ N. and 86° 7′ and 86° 50′ E., with an area of 803 square miles. The subdivision consists of a triangular strip of country between the Dāmodar and Barākar rivers; to the west the land rises to the Chotā Nāgpur plateau, but to the north and east the country is open and consists of a series of rolling downs, with a few isolated hills. The population in 1901 was 277,122, compared with 221,434 in 1891, the density being 345 persons per square mile. It contains 1,248 villages, of which GOBINDPUR is the head-quarters; but no town. The Jherriā coal-field lies within the subdivision, and the great growth of the population during the last decade is due to the rapid development of the mining industry.

Gobindpur Village.—Head-quarters of the subdivision of the same name, Mānbhūm District, Bengal, situated in 23° 50′ N. and 86° 32′ E. Population (1901), 1,293. Gobindpur contains the usual subdivisional offices, and a sub-jail with accommodation for 32 prisoners.

Godāgāri.—Village in the head-quarters subdivision of Rājshāhi District, Eastern Bengal and Assam, situated in 24° 28′ N. and 88° 19′ E., in the extreme west of the District, near the junction of the Mahānandā with the Padmā. Population (1901), 235. It possesses an important river trade extending as far as the United Provinces, and is a station on the steamer route from Dāmukdiā to Mālda. A scheme is under consideration to connect Godāgāri by railway with KATIHĀR.

Godāvari District. District on the north-east coast of the Madras Presidency, lying between 16° 19′ and 18° 4′ N. and 80° 52′ and 82° 36′ E.[1], with an area of 7,972 square miles. It is bounded on the north-east by Vizagapatam District; on the north by the same District and the Central Provinces; on the west by the Nizām's Dominions; and on the south-west by Kistna District. It consists of three very dissimilar natural divisions: namely, the Agency tract in the north-west, the delta of the Godāvari river along the coast, and the upland *tāluks* which lie midway between these two areas.

Physical aspects.

The north-western angle of the District, known as the Agency tract from the administrative system there in force[2], is almost entirely occupied by a portion of the range of the EASTERN GHĀTS, which here consists of a series of broken and scattered hills and spurs rising from the lower uplands. The highest peak is Peddakonda, 'big hill' (4,476 feet).

The great river GODĀVARI, which gives its name to the District and forms its most distinctive feature, enters the Bhadrāchalam *tāluk* west of the Ghāts, and, until it begins to wind its way through the Pāpikonda range, forms the boundary between British territory on the left bank and Hyderābād on the right. Emerging from the Ghāts into a gently undulating plain broken here and there by a few small hill ranges, it runs right through the centre of the District proper. Forty miles from the sea, opposite Dowlaishweram, it divides into two branches, enclosing between them the Amalāpuram *tāluk*, and flows through a wide delta which its own silt has formed. At the head of this, at Dowlaishweram, is the famous anicut, or dam, which has been constructed to render its

[1] While this work was passing through the Press the limits of the old Godāvari District were altered, the *tāluks* of Yernagūdem, Ellore, Tanuku, Bhīmavaram, and Narasapur (less Nagaram Island) being transferred to Kistna District. The transfer of the Nugar, Albaka, and Cherla *tahsīls* (about 600 square miles) from the Central Provinces to Godāvari District is under consideration. The present account deals with the District as it was before these alterations occurred.

[2] See the article on GANJĀM DISTRICT.

waters available for irrigation; and from this point to the sea the country is a vast expanse of rice-fields dotted with gardens and villages. During the rains the greater part of this tract becomes one sheet of water, only village sites, canal banks, roads, and field boundaries appearing above it. Later in the year, as the rice grows higher, the dividing boundaries are hidden; and the whole country looks like a single rice-field, only the palm-trees along the edges of the fields, the groves round the villages, the road avenues, and the white sails of the boats gliding along the main canals breaking the uniform sea of waving green crops. By common usage the alluvial tracts along the left and right banks of the river are designated the Eastern and Western Deltas, while to the delta proper, the Amalāpuram *tāluk*, is given the name of Central Delta. The Eastern Delta extends east from Dowlaishweram as far as Sāmalkot, including the greater part of the Rāmachandrapuram and Cocanāda *tāluks*. The Western Delta extends westward from the river to Ellore and thence southward along the Colair Lake, and its outlet the Upputeru stream, to Narasapur. It includes the *tāluks* of Tanuku, Narasapur, and Bhīmavaram.

The upland *tāluks* form the third natural division of the District. Vernagūdem and Ellore are an undulating plain broken by low ranges. East of the Godāvari river, Tuni consists of stony soil with small hills, covered, despite their steepness, with forest; Pithāpuram teems with fruit trees and is watered by many channels and tanks; and in Rājahmundry and Peddāpuram 'wet' land alternates with long stretches of stony waste.

The District has a seaboard of about 172 miles. The coast is low and sandy, interspersed with tidal swamps and creeks. Its general trend is in a north-easterly direction; but the greater part is within the influence of the Godāvari river and is continually changing its contour. The only port with any trade is COCANADA, and even there, owing to shoal-water, vessels are obliged to anchor in the roadstead $4\frac{3}{4}$ miles from the shore. There are lighthouses at Vakalapūdi, 4 miles north of Cocanāda, and on the SACRAMENTO SHOAL: while the abandoned light at Cocanāda port, that on Hope Island, and the obelisk 45 feet high on Narasapur Point form conspicuous sea-marks.

Besides the Godāvari and its tributary the Sābari, there are no rivers of any size in the District. But several minor streams drain the upland *tāluks* and are more or less used for irrigation. Of these, the Yeleru, running through the Peddāpuram *tāluk* and the Pithāpuram *tahsīl*, and the Yerrakālva, which under the name of Wayyeru becomes merged in the Western Delta canal system, are the most important.

The Archaean gneissic rocks of the District are confined to its north-west portion, on each side of the Lower Gondwānas which are found there. The Lower Gondwāna basin of Permo-carboniferous to Triassic

fresh-water arenaceous deposits lies at gentle angles on the gneissic floor, comprising a basal boulder-bed of glacial origin, a lower (Barākar) coal-bearing stage, and an upper (Kamptee) stage of barren sandstones. From this basin upwards the Lower Gondwānas and Archaeans are levelled away towards the 3,000 feet plateaux, as if by a series of planes of marine denudation. On one of these lie the Upper Gondwānas, which run in a low escarpment south-west and north-east from Rājahmundry. Finally above this and the other rock groups lie the slightly older Cuddalore sandstones, on which in turn rest the deposits of the plains and of the Godāvari Valley.

The physical conformation of the District permits the existence of several distinct floras; and the native plants have been more carefully studied here than elsewhere, owing to the residence of the botanist Roxburgh for some time at Sāmalkot. The delta teems with weeds of cultivation, the uplands yield the plants of the dry scrub forest, while the hill tracts present an entirely different series. The deep ravines near Bison Hill afford the nearest approach to a moist evergreen forest to be met with in this part of India. Among the interesting plants of the Godāvari gorge may be noted *Barleria strigosa*, *Oldenlandia nudicaulis*, and *Sauropus quadrangularis*. Bordering the stream and in the rapids *Euphorbia Lawii* flourishes, while on the banks such exotic ferns as *Luffa echinata* and *Melilotus parviflora* are found[1].

The Agency tract possesses the larger fauna usual to such wild and remote regions. Bison (*gaur*) frequent the table-lands of the Pāpikonda range, and wild buffalo are occasionally met with on the banks of the Sābari. *Nilgai* have been shot in the Bhadrāchalam *tāluk*. In the plains antelope, spotted deer, and wild hog are to be found in several localities. The District is rich in bird life, and among the rarer birds may be mentioned the imperial pigeon, pied myna, and *bhīmarāj*. The large sable-fish is caught in considerable quantities at the anicut across the Godāvari.

The District is on the whole a healthy one, but fever is very prevalent, especially during the cold season. The Agency tracts in particular are notorious in this respect, and the malaria peculiar to the Guditeru valley is of a virulent type. The natives consume considerable quantities of opium as a prophylactic against the disease. Beri-beri is common along the coast. The mean temperature at Rājahmundry, in the centre of the District, averages 82°, with a mean range of 18°: but the humidity of the atmosphere renders the heat oppressive. In Bhadrāchalam and the hill tracts generally the temperature has a much wider range.

The first four months of the year are practically rainless. The south-west monsoon, which sets in about the middle of June, brings

[1] Roxburgh's *Coromandel Plants*.

nearly two-thirds of the annual fall. It naturally breaks more heavily in the Bhadrāchalam *tāluk* beyond the Ghāts than in the rest of the District. Conversely the north-east monsoon is hardly felt in that *tāluk*. The annual fall for the whole District averages 31 inches. The coast is much exposed to north-easterly cyclones, and in 1787, 1832, and 1839 immense loss was caused by them. In the first two of these more than 20,000 persons are said to have perished, and the last was even more destructive of property. Floods in the Godāvari have also been a frequent source of damage. Although embankments were very early raised for the protection of the country, six villages in the Yernagūdem *tāluk* were swept away in 1886, and there were extensive inundations in 1891 and 1900.

History.

In early times the District was included within the two ancient kingdoms of KALINGA and VENGI. The frontier between these two was a varying one, but it was never farther south than the Godāvari river, and generally lay far to the north of the District, in Vizagapatam or even Ganjām. The southern border of Vengi seems never to have been farther north than the Kistna, and that kingdom often extended many miles to the south and west. The earliest rulers of the country of whom we have any knowledge were the Andhras. These were conquered by Asoka in 260 B.C., but subsequently ruled for about 400 years independently over a wide empire extending nearly to Bombay and Mysore. They were followed in the early part of the third century A.D. by Pallava chieftains, two of whom had their capitals at Vengi near Ellore and PITHĀPURAM. In the seventh century the country passed under the Eastern Chālukyas, who extended their rule far into Vizagapatam and made RĀJAHMUNDRY their capital. Asoka, the Andhras, and the Pallavas had been Buddhists; the Chālukyas were Vaishnavites. The last became the feudatories (in A.D. 999) of the great CHOLA empire; and the kingdoms were united till the middle of the twelfth century, when the Chola power began to decline and Vengi came first under a number of petty chiefs, and (at the end of the thirteenth century) under the Ganpati dynasty of WARANGAL. This fell before the Muhammadans, who obtained a brief foothold in the country in 1324; but the invaders were soon driven back, and the Vengi country passed to the Reddi kings of Kondavīd and Rājahmundry. About the middle of the fifteenth century the Vengi and Kalinga countries were united under the rule of the Gajapatis of Orissa. The Muhammadans now reappear on the scene. In 1470 Rājahmundry and Kondapalli were ceded to the Sultān of Gulbarga in return for his assistance, and a few years later he subdued the whole of the Gajapati dominions; but the dismemberment of the Gulbarga kingdom a few years later restored the power of the Gajapatis before the end of the century. At this point

Krishna Deva, the greatest of the Vijayanagar kings, overran the country (1515) and made it for a short time feudatory to himself; but this had no lasting effect, and before 1543 the first Sultān of Golconda had quarrelled with the Gajapati princes and had extorted a cession of all the country between the Kistna and the Godāvari. Revolts in these provinces and assistance offered by the Gajapati prince of Rājahmundry to the rebels provoked the Muhammadans to cross the Godāvari and extend their rule farther to the north-east. Rājahmundry fell in 1572, and a few years later the whole of the country north of the Godāvari came under the Sultāns of Golconda, and was held by them till their overthrow by Aurangzeb in 1687. The power of Delhi was little felt so far from the centre of the empire, and the great *zamīndārs* now made themselves practically independent. Then came the disintegration of that empire, and Asaf Jāh, Sūbahdār of the Deccan, restored order with a firm hand.

Europeans had by this time been long established in the District. PĀLAKOLLU, near Narasapur, was the first settlement, founded by the Dutch in 1652. They next formed a station at Jagannāthapuram, now part of Cocanāda. The English followed with settlements at MADAPOLLAM, now included in the Narasapur Union, and at VĪRAVĀSARAM (Virasheroon), a few miles north-west of the former. In 1708 a third factory was founded at INJARAM, and later a fourth at BANDAMŪRLANKA. About the same time the French possessed themselves of YANAM, which they still hold. In 1750 the Sūbahdār of the Deccan granted Narasapur, and in 1753 the rest of the NORTHERN CIRCARS, to the French, who in 1757 seized the English factories within this District. The following year an expedition under Colonel Forde from Bengal defeated the French at Condore[1] (Chandurti) near Pithāpuram. By the subsequent operations English supremacy in the Circārs was secured; and when these were ceded in 1765 the Godāvari District, which was included in the *Sarkārs* of Rājahmundry and Ellore, passed to the English. At first it was leased to the Faujdār Husain Alī Khān, but in 1769 it was placed under the direct administration of the Chief and Council at MASULIPATAM. The latter proved incapable of coping with the turbulence of the *zamīndārs*, and in 1794 Collectorates were established at Cocanāda, Rājahmundry, and Mogalturru. Several changes were made in this arrangement until, in 1859, the Districts of Rājahmundry, Masulipatam, and Guntūr were re-formed into the Godāvari and Kistna Districts. The factories which were the original cause of the acquisition of the *Sarkārs* were abolished in 1830. The sudden cessation of a large industry, concurring with a period of scarcity, caused a great deterioration in the District. It was partly in consequence of this that the plan for building an anicut across the

[1] Orme describes in detail this decisive engagement.

river finally took shape. The effect of this project (completed in 1850) on the prosperity of the District has been enormous. In 1874 the *tāluks* of Bhadrāchalam and Rekapalli (since amalgamated) were transferred from the Central Provinces. In 1879 these *tāluks* and the Rampa hill country were constituted an Agency under the Scheduled Districts Act of 1874. By this enactment the Collector, as Agent to the Governor, has extended powers within such areas. The limits of the Agency have since been changed considerably from time to time. In 1879 the serious disturbances known as the Rampa rebellion broke out in the hill country. They were not finally quelled till 1881, and were the last disturbance of the kind in the Presidency in which the help of troops has been required.

The mounds at Pedda Vegi and Dendulūru near Ellore are supposed to mark the site of the capital of the Buddhist dynasty of Vengi. At Guntupalli, 24 miles north of Ellore, is a remarkable series of Buddhist remains; and at Arugollu in the Yernagūdem *tāluk* excavations in laterite have disclosed the foundations of similar buildings. Near Kāmavarapukota (in the Ellore *tāluk*) and at Korukonda are rock-cut figures of Hindu origin. Some inscriptions of value are to be found in the numerous temples of the District, notably at Drākshārāma; while the mosque at Rājahmundry possesses a Muhammadan record, dated A.D. 1324, one of the earliest of that religion in Southern India. In the Bhadrāchalam *tāluk* there are rude stone monuments, under which remains indicating a primitive civilization have been found. At Pālakollu, Narasapur, and Jagannāthapuram are interesting relics of the early European settlements.

Population.

The population of Godāvari District in 1871 was 1,592,939; in 1881, 1,791,512; in 1891, 2,078,782; and in 1901, 2,301,759. It has increased at the abnormally high rate of 45 per cent. during the last thirty years. The District contains 2,678 towns and villages; but of these 1,141 are in the Agency tract, where there are no towns and the villages are exceptionally small. It is divided into twelve *tāluks* and *tahsīls* in the plains and four in the Agency tract, for which statistical particulars, based on the Census of 1901, are given on the next page.

The head-quarters of these *tāluks* and *tahsīls* (except of Yernagūdem and Yellavaram, which are at Kovvūru and Addatigala respectively) are situated at the places from which each takes its name. The chief towns are the three municipalities of COCANĀDA, RĀJAHMUNDRY, and ELLORE; and the Unions of SĀMALKOT, PITHĀPURAM, PEDDĀPURAM, and PĀLAKOLLU. Of the total population, Hindus number 2,236,283, or 97 per cent.; Muhammadans, 43,481; Christians, 16,795; Animists, 4,139; and 'others,' 1,061. Immigration (chiefly from Vizagapatam) is a marked feature of the District, and sets mainly towards the delta. This forms

the most densely populated area north of Madras, in strong contrast to the Agency tract, which, with 51 persons to the square mile, is the most sparsely peopled area in the Presidency. Telugu is the language of 96 per cent. of the people. In the Bhadrāchalam *taluk*, however, about one-half, and in Polavaram about one-fourth, of the people speak Koyī, the language of the Koyi hill tribe.

Tāluk or *Tahsil*.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Agency Tract.							
Polavaram	564	....	292	58,274	103	} + 14·6	1,183
Yellavaram	950	...	297	29,681	31		174
Chodavaram	715	....	232	23,229	32		211
Bhadrāchalam	911	...	320	48,058	53	+ 15·0	1,185
Cocanāda	294	2	99	213,758	727	+ 16·5	12,213
Tuni	216	1	48	58,762	272	+ 2·3	1,938
Pithāpuram	191	1	48	84,089	440	+ 0·3	3,125
Peddāpuram	504	1	200	167,020	331	+ 3·2	4,500
Rāmachandrapuram	296	1	117	220,356	744	+ 11·0	8,839
Rājahmundry	350	2	85	161,070	460	+ 14·1	9,642
Amalāpuram	506	1	169	277,445	548	+ 8·3	12,568
Ellore	778	1	206	181,035	233	+ 5·5	9,866
Yernagūdem	568	..	115	140,048	247	+ 8·6	4,308
Narasapur	433	3	129	254,961	589	+ 11·2	12,764
Tanuku	371	...	174	238,758	644	+ 17·0	11,471
Bhīmavaram	325	...	134	144,615	445	+ 17·5	8,027
District total *	7,972	13	2,665	2,301,759	289	+ 10·7	102,012

* The area of the remodelled Godavari District is 5,634 square miles, and its population 1,445,961.

The Koyis make up about a third of the whole population of the Agency, where they number more than 50,000. In the adjoining Malkangiri *tahsīl* of Vizagapatam District there are also some 11,000 of them. They are a simple, unsophisticated race, who subsist by a shifting cultivation called *podu*, and are a prey to the malaria endemic in these regions. In the plains almost the whole population consists of Telugu castes. Of these, the most numerous are the Kāpus (457,000) and Mālas (391,000). Next come the Idigas (toddy-drawers), numbering 167,000, or seven-tenths of the total strength of the caste in the Presidency; the Mādigas (114,000); and the Kamma cultivators (110,000). Brāhmans, who are more numerous than usual, form nearly 5 per cent. of the Hindu population.

The Agency tract forms the most exclusively agricultural area in the Presidency. The low country differs little from the normal. As usual, the great majority of the people are dependent on the land, though the

proportion subsisting by transport is increased by the large number of boatmen working on the canals.

The number of Christians in the District increased from 9,064 in 1891 to 16,795 in 1901: the advance during the past twenty years has exceeded 300 per cent. Of the total, 15,836 are natives of India. Lutherans (6,510) and Baptists (5,129) are the two most numerous sects. Four Protestant missions are at work: the Canadian Baptist, the American Evangelical Lutheran, the Anglican, and the Plymouth Brethren (Delta Mission). The work of these is chiefly confined to the plains; but the Anglican Mission has a branch at Dummagūdem in the Bhadrāchalam *tāluk*, where work is carried on among the Koyis. These missions combine educational with evangelical aims. The native Roman Catholics number 688, mainly in the large towns.

Agriculture.

The upland and delta *tāluks* differ widely in their agricultural conditions. Of the 1,173 square miles of occupied land in Government villages in the delta, 73 per cent. was classed as silt at the resettlement. The sandy tracts along the sea-coast and the black cotton soil which occurs mainly in the tract round the Colair Lake account for the remainder. And, although the delta contains a certain amount of 'dry' land, almost the whole of this is commanded by the Godāvari irrigation system. The *lankas*, as the islands formed by the river deposits are termed, deserve special mention on account of their great fertility. They consist of loam covered in places with deep layers of sand; and, being submerged in times of flood, they fluctuate in position and area. Their total extent is about 15,000 acres. *Lanka* tobacco is famous.

In the upland *tāluks* red soils predominate, the sandy red variety being the most prevalent. The fertile Yeleru valley in the Yellavaram and Peddāpuram *tāluks* and the cotton-soil tracts of Rājahmundry are noticeable exceptions. In the Agency tract, where the country is covered with hills and forests, *podu* or nomadic cultivation is practised. A clearing is made in the jungle, the trees are burned, and the crop sown in the ashes. The following year a fresh site is chosen.

Of the total area of Godāvari District only 3,897 square miles are Government land, the remaining 4,075 square miles being held on *zamīndāri* or *inām* tenure. The area in 1903–4 for which particulars are available is given on the next page, in square miles.

About a fifth of the total area is forest, and another fourth is otherwise not available for cultivation. The margin of cultivable waste is unusually small. Of the cultivated area, 464 square miles, mainly in the delta *tāluks*, are cropped more than once within the year. Rice is grown on 1,156 square miles, or 52 per cent. of the gross area cropped, and is pre-eminently the staple food-grain of the District. Next come *cholam* (*Sorghum vulgare*), with 144 square miles: and pulses, chiefly

horse-gram and green gram, with 270 square miles. Rice is the principal crop in all the plains *tāluks* except Yernagūdem, while *cholam* and *rāgi* (*Eleusine coracana*) are grown in the upland *tāluks* and the Agency. Of industrial crops, oilseeds (among which gingelly takes the first place) are the most important. Tobacco is raised throughout the District, except in the Bhīmavaram *tāluk*, and mainly on the *lankas* in Rāmachandrapuram, Amalāpuram, and Rājahmundry. Sugar-cane is of importance in Rāmachandrapuram, Cocanāda, and Narasapur, but a disease which has attacked the canes during the past few years has caused a great contraction in its cultivation. A large area is under orchard and garden crops, chiefly in Amalāpuram and Narasapur, where more than 32,000 acres are devoted to coco-nut plantations. Indigo, formerly cultivated on an extensive scale, is now practically confined to Amalāpuram. Narasapur, with the gardens of Pālakollu, stands unique in the cultivation of the Batavian orange and pummelo, introduced by the Dutch settlers.

Tāluk or *Tahsil.*	Area shown in accounts.	Forest.	Cultivable waste.	Cultivated.	Irrigated.
Agency Tract.					
Polavaram . .	413	112	32	65	1
Yellavaram . .	501	165	11	60	3
Chodavaram . .	3	...	...	2	...
Bhadrāchalam .	751	460	29	26	...
Cocanāda . .	186	86	1	87	70
Tuni . . .	2	...	...	2	...
Pithāpuram . .	...	...	...	...	...
Peddāpuram . .	467	72	9	252	55
Rāmachandrapuram	231	...	...	203	144
Rājahmundry . .	364	34	25	236	49
Amalāpuram . .	342	13	10	232	96
Ellore . . .	508	44	103	296	100
Yernagūdem . .	310	13	12	238	24
Narasapur . .	389	16	26	283	198
Tanuku . . .	274	6	3	235	198
Bhīmavaram . .	238	7	23	183	148
Total	4,979	1,028	284	2,400	1,086

During the last thirty years the cropped area has increased by more than 50 per cent. and now exceeds a million acres. In the District proper it is only in the northern part of Ellore and in the swamps bordering the Upputeru in the Western Delta that any considerable extent of arable land remains unoccupied. In the uplands, however, much is yearly left fallow for the sake of pasturage. Various attempts have been made from time to time to improve the industrial crops, but little perceptible influence has so far been exercised. The area under valuable orchard and garden crops is, however, rapidly increasing. A

Government experimental farm has been started at Sāmalkot, and a nursery garden at Kadiam in the Eastern Delta. Practically no advantage is taken of the Loans Acts in this District.

There are no distinctive breeds of cattle. Mortality among stock is high in the delta, where the conditions prevent a large number being maintained, and in the cultivation season they are sent to the upland *tāluks* to graze. In these latter large flocks of sheep and goats are kept; but the Kurumba sheep, bred for the sake of its wool in the villages round Ellore, is the only variety calling for remark.

Of the total area of *ryotwāri* and *inām* lands under cultivation in 1903–4, 1,086 square miles, or 62 per cent., were irrigated. The greater part of this (938 square miles) was supplied from Government canals, and almost all the remainder from tanks or artificial reservoirs. The canals are mainly those fed by the Godāvari anicut, a great masonry dam thrown across the Godāvari river opposite Dowlaishweram. A canal takes off from either flank, and a third, supplying the Central Delta, from the centre. The area commanded by the system is 1,980 square miles, of which 1,207 square miles are cultivable. The area actually irrigated at present is about 1,034 square miles; but including both first and second-crop cultivation, water was supplied to 1,254 square miles in 1903–4. As the Godāvari is independent of the local rainfall, the irrigated area fluctuates little from year to year. In the Ellore *tāluk* there is a considerable area (about 20,000 acres) under the Kistna anicut system. The number of tanks in repair in the District is 1,188. Of these, the most important are the chain in the Peddāpuram *tāluk* and the Lingamparti tank, which latter irrigates 5,000 acres. The little Yeleru river waters a large area, principally in the PITHĀPURAM ESTATE and the adjoining *zamīndāris*. The Yerrakālva in Yernagūdem and the Tammileru and Ramileru in Ellore are also utilized. Only 1,392 wells are used for irrigation.

The forests of Godāvari, owing to their diversity and the facility with which they can be exploited, are of great value. The District possesses 952 square miles of actual 'reserved' forest and 76 square miles of 'reserved' land, the latter lying entirely within the Cocanāda *tāluk*. The forests proper are situated chiefly within the Agency limits. Here the destructive practice of shifting cultivation (*podu*) formerly caused great damage, and its results are very apparent in some localities. It has now been prohibited within 'reserved' forests; but it is still permitted without check in the Rampa country, to which, for political reasons, the Forest Act has not been extended.

Forests.

The principal 'reserved' forests are those of Bhadrāchalam, Yellavaram, and Polavaram. The first named contains three ranges: Rekapalli, Marrigūdem, and Bhadrāchalam. Of these, Rekapalli con-

tains, as its dominant species, large quantities of *Xylia dolabriformis*: and as the timber can be sawn into sleepers and floated down the river direct to the railway, this growth is of great value. With *Xylia* are associated *Terminalia*, *Pterocarpus Marsupium*, *Dalbergia latifolia*, and bamboos. The principal tree in the Marrigūdem range is teak, and in Bhadrāchalam *Hardwickia binata*. The Yellavaram and Polavaram forests resemble generally those in the Rekapalli range. In the western part of the Agency, *Diospyros melanoxylon* also flourishes. Myrabolams and tamarind are the principal items of minor produce. Along the coast are large tracts of mangrove swamp, and there are three casuarina plantations. The total revenue from forests in 1903–4 was about $1\frac{3}{4}$ lakhs, and the expenditure about 1 lakh. A second District Forest officer has recently been appointed, with head-quarters at Kunavaram.

Minerals.

Prospecting for coal has been carried on for some years in the Upper Gondwāna belt, running from Bhadrāchalam through Polavaram and Vernagūdem to Ellore. Two outcrops of the Barākar stage occur, one at Ratsagampalle in Bhadrāchalam and the other at BEDADANŪRU in Polavaram. At the former place mining was begun, but was stopped by an upthrow fault; and the shaft, which was in the river bed, was found to lie beyond the limits of the Presidency. At the latter the outcrop extends over $5\frac{1}{2}$ square miles, and forms the only coal-field lying entirely within Madras. No paying seam has, however, as yet been discovered. Graphite of a good quality is worked by the Godavari Coal Company at Perakonda in the Bhadrāchalam *tāluk*, and the same mineral occurs in small quantities in several places in Chodavaram. Traces of old iron workings are to be found scattered throughout the Agency tract, and there are two small deposits of sulphur in the delta.

Trade and communications.

Ellore is noted for its woollen carpets. The dyes and wool for these are prepared locally, and well-woven carpets of old design can still be obtained, though several of the weavers now work on European patterns for the big firms in London. Coarse woollen blankets are made in several villages round Ellore, and at Undi in the Bhīmavaram *tāluk*. The fine cotton cloths for which the District was once famous are now made only at a few villages round Cocanāda and Pālakollu. Coarse cotton cloths are, however, still woven at many places.

The largest factory in the District is the sugar refinery and distillery at Sāmalkot, where the Deccan Sugar and Abkāri Company employs 520 persons daily. This factory has created a demand for jaggery (coarse sugar) made from the unfermented juice of the palmyra palm, and more than 400,000 trees in the District are tapped for toddy to be converted into this substance. There are rice-husking factories at Nīlapālli, Nidadavolu, and Cocanāda. Several small castor-oil factories

are at work at Cocanāda, and two tanneries at Ellore. Cocanāda also possesses a small iron foundry, and the Public Works department workshops at Dowlaishweram employ a large number of hands. In the Amalāpuram *tāluk* are several indigo factories, the principal being at Ainavilli. Of the three salt factories in the District, one (at Cocanāda) belongs to a private firm, while those at Penugudūru and Mogalturru are worked by Government. Three fish-curing yards also exist. A small cheroot factory has been opened at Cocanāda.

The exports from the District consist almost entirely of agricultural produce. The chief items are rice, other grain, tobacco, oilseeds, *ghī*, coco-nuts, hides, and fruit. The natural outlet for this trade is the port of Cocanāda, though the railways and canals have diverted an increasing proportion to other ports. In addition to these commodities, cotton, brought from the Deccan, figures largely in the exports from Cocanāda. It is shipped principally to the United Kingdom, Belgium, and France. Rice goes chiefly to Ceylon and Mauritius, oilseeds to France, Burma, and the United Kingdom, and tobacco to Burma, where it is made up into cheroots. The total value of the export trade from Cocanāda in 1903–4 was about 167 lakhs, of which 84 lakhs was sent to foreign countries. The imports in the same year were valued at 39 lakhs. The principal are cotton twist and yarn, piece-goods, grain and pulses, kerosene oil, gunny-bags, and sugar. Cotton goods are imported coastwise or by canal and rail from Bombay and Madras, gunny-bags from Bengal, and kerosene oil from America. A prominent trading caste are the Mārwāris, who are numerous at Rājahmundry and Ambājipeta, the old centres of trade. Ambājipeta used to be the great opium market of the District, and the Mārwāris probably chose these towns as convenient places for disposing of that drug in exchange for cloth. Opium is still a noteworthy article of import, the annual consumption in this District being about 11 lb. per 1,000 of the population, compared with an average of $1\frac{1}{2}$ lb. for the Presidency as a whole. As has been mentioned, it is used as a prophylactic against malaria. The retail trade of the District is largely in the hands of the Komatis. The chief centres of internal commerce are Rājahmundry, where there are large dépôts for the timber floated down the Godāvari; Ellore, Pālakollu, and Ambājipeta. The last named is the centre of the coco-nut trade of the delta, and all these places carry on an extensive business with tracts beyond the District. There are also numerous weekly markets, at which retail trade is conducted. They are controlled by the local boards, which in 1903–4 derived an income of Rs. 32,000 from the fees collected at them. The most important are those at Tuni, Jaggammapeta, and Pentapādu. At Drākshārāma, Ambājipeta, and Pithāpuram large cattle fairs are held weekly.

The East Coast section of the Madras Railway (standard gauge)

enters the District about 10 miles west of Ellore, and running along the fringe of the delta crosses the Godāvari river at Rājahmundry on one of the finest bridges in the Presidency. This work is built of steel girders laid on masonry piers, which are sunk from 48 to 100 feet below low-water level and stand 44¾ feet above it. It has a total length of 9,000 feet, or over 1½ miles, between abutments, and consists of 56 spans of 150 feet each. It was opened to traffic in 1900. From Rājahmundry the line runs on to Sāmalkot, where a branch 10 miles long takes off to Cocanāda port, and thence north-eastwards until it leaves the District at Tuni on the Vizagapatam border.

The total length of metalled roads is 918 miles, and of unmetalled roads 299 miles. Five miles of metalled roads are maintained by the Public Works department, and the remainder by the local boards. There are avenues of trees along 814 miles of them. The District proper is well supplied with metalled roads; but in the Agency tract the only lines are those leading to Addatigala and Chodavaram, and a few miles in Polavaram. No tolls are levied along the roads, except in the municipalities.

Most important means of communication are the 493 miles of navigable canals in the delta, and above the anicut the Godāvari river itself, which affords the easiest approach to the interior. The canals are closed for clearance and repair for two months during the hot season every year. Ferry steamers ply from Rājahmundry to the opposite shore of the river, and up to Polavaram and across the river at Narasapur.

Famine.

Since the construction of the Godāvari irrigation system, the District has been immune from severe famine. The last serious distress was in 1833, but in 1896–7 a part of the Agency tract was affected.

Administration.

For administrative purposes the District proper is divided into four subdivisions, two of which are usually in charge of members of the Covenanted Service, and the others in charge of Deputy-Collectors. These subdivisions[1] are Cocanāda, which comprises the *tāluks* of Cocanāda and Peddāpuram and the *zamīndāri tahsīls* of Pithāpuram and Tuni; Rājahmundry, comprising the three *tāluks* of Rājahmundry, Rāmachandrapuram, and Amalāpuram; Ellore, comprising the three *tāluks* of Ellore, Tanuku, and Yernagūdem; and Narasapur, comprising the Narasapur and Bhīmavaram *tāluks*. The Agency forms a fifth division, usually in charge of a European Deputy-Collector. It consists of the Bhadrāchalam *tāluk* and the minor *tāluks* of Yellavaram, Chodavaram,

[1] Their limits have been changed since the alteration in the boundaries of the District above referred to, and the new distribution is given in the article on each subdivision.

and Polavaram. There is a *tahsīldār* at the head-quarters of each *tāluk*, and, except at Bhadrāchalam, a sub-magistrate also. In the minor *tāluks* the deputy-*tahsīldārs* exercise both revenue and criminal jurisdiction. The superior staff consists of the usual officers, except that (owing to the importance of the public works in this District) there are three Executive Engineers, one in charge of each of the three Delta systems mentioned above; and there are also two District Forest officers.

For the administration of civil justice District Munsifs' courts are held at the head-quarters of every *tāluk*, except Rāmachandrapuram and Yernagūdem, in the District proper. The District Judge sits at Rājahmundry, and a Sub-Judge at Cocanāda. In the Agency tract, the *tahsīldār* of Bhadrāchalam and the deputy-*tahsīldārs* have limited civil jurisdiction within their charges. From them appeals lie to the Agency Deputy-Collector, who himself tries the more important cases and is in turn subordinate to the Collector as Agent. Crime presents no salient features, but the total number of cases reported is higher than in any other District in the Presidency. This is specially noticeable as regards ordinary theft. Organized crime is attributable chiefly to a local tribe of Yānādis called Nakkalas, and to wandering gangs from the Ceded Districts.

Under the Muhammadans the District, with the exception of the *haveli* land (or land in the vicinity of military posts required for the support of troops), was parcelled out into *zamīndāris*. The yearly rent from these was settled in an arbitrary manner, and the *zamīndārs* had in theory no other claim to them but the favour and policy of their rulers. Gradually, however, they arrogated to themselves a proprietary and hereditary title, which, in spite of a brief period of dispossession under Asaf Jāh, obtained recognition in the end. The *zamīndārs* collected their revenues through agents or by sub-renting in their turn. 'By ancient and original establishment' the cultivators were entitled to half the gross produce. Unless, however, fortunate enough to have obtained a grant as *mokhāsa* or *inām*, they had no right in the soil; and after the customary fees had been paid and the rapacity of the *zamīndārs*' servants satisfied, only a fifth share usually remained for them. At the time of harvest the crop was valued, threshed, and measured; and the *zamīndār* then took his share in money or grain.

After the cession of the Northern Circārs (*Sarkārs*) no change was at first made in the mode of revenue administration. But soon some of the estates began to fall into Government possession, either through the rebellion of their owners or because the revenue on them was not paid. Such lands were as a rule rented out again by Government. In 1802–3 a permanent settlement on the model of that in Bengal was introduced. By this the estates of the *zamīndārs* were conferred on

them in perpetuity, subject to a *peshkash* fixed at two-thirds of the estimated collections; while the Government lands were divided into similar estates and sold to the highest bidder. From 1803 to 1844 the downfall of these proprietary estates rapidly progressed, till in the latter year a large part of the District had reverted to Government. The revenue systems then adopted for the Government lands were the *asara* and *visabādi*. The leading principle of the former was the ascertainment of the Government share by actual measurement; of the latter, the imposition of a lump assessment on each village, the incidence on particular holdings being settled by the cultivators among themselves. These were superseded in 1846 by the joint revenue system, under which, when the annual demand on a village had been settled, there was no further interference on the part of Government, and the cultivators were jointly and severally responsible for the whole demand.

The completion of the Godāvari irrigation works rendered imperative the introduction of a more definite method for the realization of the land revenue. Accordingly in 1862 a field survey and settlement were commenced. These operations were completed in 1866, in which year the *ryotwāri* system was extended to practically the whole of the District proper. In 1891 sanction was given for a resurvey, which was completed in 1896. A resettlement was also taken in hand in 1894 and completed in 1899. By the latter the rates in the uplands were enhanced about one-third, without reclassification of the soils. In the delta a reclassification was made to permit the consolidation of the land tax and water rate, all land which had been continuously irrigated during the previous five years being classed as 'wet.' The result of the resettlement was an addition of $4\frac{2}{5}$ lakhs, or about 14 per cent., to the revenue from Government land. The average rates of assessment in the delta and the uplands for 'wet' land are respectively Rs. 7–9–4 and Rs. 4–10–2 per acre; and for 'dry' land Rs. 3–6–8 and R. 0–12–9.

The course of events in the Rampa country and the Bhadrāchalam *tāluk* was different. A few villages in the Agency tract were settled in 1899–1900, but in Polavaram and Yellavaram the majority of them are still farmed out annually. In the Government villages of the Bhadrāchalam *tāluk* the hillmen used to pay 4 annas for the area one axe can clear, or about three acres, but now they pay 4 annas an acre.

The revenue from land and the total revenue in recent years are given below, in thousands of rupees:—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	46,84	56,64	77,34	70,01
Total revenue . .	57,02	74,24	1,02,37	1,07,35

Owing to the transfer of part of the District to Kistna, the land revenue demand is now about Rs. 43,20,000.

Outside the three municipalities of Cocanāda, Rājahmundry, and Ellore, local affairs are managed by the District board and the five *tāluk* boards, the areas under which correspond respectively with those of the five administrative subdivisions mentioned above. The expenditure of these boards in 1903–4 was about 10 lakhs. More than half of this was laid out on the maintenance and construction of roads and buildings. The chief source of income is the land cess. Twenty-five of the smaller towns are managed by Union *panchāyats*, constituted under Madras Act V of 1884.

The District Superintendent of police has his head-quarters at Rājahmundry. He has an Assistant Superintendent to help him. There are 84 police stations in the District; and the regular force, inclusive of a reserve of one inspector and 103 men, numbers 1,075, working under 19 inspectors, besides 835 rural police.

In addition to the Central jail at Rājahmundry there are 20 subsidiary jails, which can collectively accommodate 186 male and 121 female prisoners.

In the matter of elementary education Godāvari was the pioneer in the Madras Presidency, several villages having submitted to a voluntary cess for this purpose as early as 1855. Yet it now stands only sixteenth among the Districts as regards the literacy of its people. The percentage of those able to read and write is little more than 4 (8 males and 0·7 females); and the Agency tract, where the percentage is less than 2, is naturally far more backward than the rest. But progress in recent years has been considerable. In 1880–1 the total number of pupils under instruction was 21,787; in 1890–1, 32,255; in 1900–1, 52,258; and in 1903–4, 61,510. On March 31, 1904, there were 1,740 educational institutions in the District, of which 1,518 were classed as public and 222 as private. Of the former, 1,442 were primary, 70 secondary, and 3 training schools; and Arts colleges are maintained at Rājahmundry and Cocanāda, and a training college at the former of these places. These institutions contained altogether 13,939 girls. Of the total, 37 were managed by the Educational department, 445 by local boards, and 22 by the municipalities; while 586 were aided from public funds, and 428 were unaided but conformed to the rules of the department. As usual, the great majority of the pupils were in primary classes. This is specially marked in the case of female education. Of the male population of school-going age, 22·6 per cent. were in the primary stage, and of the female 7·8 per cent. Among Muhammadans the corresponding percentages were 105·5 and 34·7, far exceeding those in any other District. There were 308 schools for Panchamas, with 4,661 pupils. These are maintained principally by the missionary bodies.

The total expenditure on education in 1903-4 was Rs. 3,90,000, of which Rs. 1,62,000 was derived from fees. Of the total, 58 per cent. was devoted to primary instruction.

The District possesses 10 hospitals and 20 dispensaries maintained from Local funds, with accommodation for 163 in-patients. In 1903 the number of cases treated was 310,114, of whom 1,936 were in-patients, and 8,520 operations were performed. The expenditure was Rs. 67,000, of which all but 6 per cent. was derived from Local and municipal funds. Of private institutions the most important is the Killock Home for Lepers, opened at Rāmachandrapuram in 1900 by the Canadian Baptist Mission. It has now 70 inmates.

During 1903-4 the number of persons successfully vaccinated was 35·1 per 1,000 of the population, or slightly above the average for the Presidency. Vaccination is compulsory in the three municipalities and in ten of the Unions.

[Further particulars will be found in the *District Manual* by H. Morris (1878), and the *District Gazetteer* (1906).]

Godāvari River.—A great river of Southern India, which runs across the Deccan from the Western to the Eastern Ghāts; for sanctity, picturesque scenery, and utility to man, surpassed only by the Ganges and the Indus; total length about 900 miles; estimated area of drainage basin, 112,000 square miles. The source of the river is on the side of a hill behind the village of TRIMBAK, in Nāsik District, Bombay, only about 50 miles from the shore of the Indian Ocean. At this spot is an artificial reservoir reached by a flight of 690 steps, into which the water trickles drop by drop from the lips of a carven image, shrouded by a canopy of stone. From first to last the general direction of the river is towards the south-east. It passes by Nāsik town, and then separates Ahmadnagar District from the State of Hyderābād, its total course in the Bombay Presidency being about 100 miles. Above Nāsik it flows along a narrow rocky bed, but farther east the banks are lower and more earthy. Fifteen miles below Nāsik it receives, on the right, the Dārna from the hills of Igatpuri, and 17 miles farther down, on the left, the Kādva from Dindori. At the latter confluence, at Nander, the stream is dammed for irrigation. Near Nevāsa it receives on the right bank the combined waters of the Pravara and Mulā, which rise in the hills of Akola, near Harischandragarh.

After passing the old town of PAITHAN on its left bank, the Godāvari now runs for a length of about 176 miles right across the Hyderābād State, receiving on its left bank the Pūrna, which flows in near Kararkher in Parbhani District, and on the right the Mānjra near Kondalwādi in Nander, while near Dharmsāgar in the Chinnūr *tāluk* of Adilābād District it receives, again on the right, the Māner. Below Sironchā it is joined by the PRĀNHITA, conveying the united waters of the WARDHA

and WAINGANGĀ; and from this point it takes a marked south-easterly bend, and for about 100 miles divides Chānda District and the Bastar Feudatory State of the Central Provinces from the Karīmnagar and Warangal Districts of Hyderābād. Thirty miles below the confluence of the Prānhita, the Godāvari receives the Indrāvati river from Bastar State and lower down the Tāl. The bed of the Godāvari where it adjoins the Central Provinces is broad and sandy, from one to two miles in width, and broken by rocks at only two points, called the First and Second Barriers, each about 15 miles long. In 1854 it was proposed to remove these barriers, and a third one on the Prānhita, with the object of making a waterway from the cotton-growing Districts of Nāgpur and Wardhā to the sea; but in 1871, after very considerable sums had been expended, the project was finally abandoned as impracticable. One of the dams erected in connexion with this project still stands, with its locks and canal, at Dummagudem in the north of the Godāvari District of Madras. Although the Godāvari only skirts the Central Provinces, it is one of the most important rivers in their drainage system, as it receives through the Wardhā and Waingangā the waters of a portion of the Sātpurā plateau and of the whole of the Nāgpur plain.

Some distance below Sironchā the Godāvari leaves the Central Provinces behind, and for a while forms the boundary between the Godāvari District of the Madras Presidency and the Hyderābād State; and in this part of its course it is joined on the left bank by a considerable tributary, the Sabarī. Thence it flows to the sea through the centre of the old Godāvari District, which has recently been divided, mainly by the course of the river, into the two Districts of Godāvari and Kistna. At the beginning of its course along Madras territory, the river flows placidly through a flat and somewhat monotonous country, but shortly afterwards it begins to force its way through the Eastern Ghāts and a sudden change takes place. The banks become wild and mountainous, the stream contracts, and at length the whole body of the river pours through a narrow and very deep passage known as 'the Gorge,' on either side of which the picturesque wooded slopes of the hills rise almost sheer from the dark water. Once through the hills, the river again opens out and forms a series of broad reaches dotted with low alluvial islands (*lankas*), which are famous for the tobacco they produce. The current here is nowhere rapid. At Rājahmundry, where the river is crossed by the East Coast line of the Madras Railway on a bridge more than 1½ miles in length, it varies from 4 to 11 feet a second. In floods, however, the Godāvari brings down an enormous volume of water, and embankments on both of its banks are necessary to prevent it from inundating the surrounding country.

A few miles below Rājahmundry the river divides into two main

streams, the Gautami Godāvari on the east and the Vasishta Godāvari on the west, which run down to the sea through a wide alluvial delta formed in the course of ages by the masses of silt which the river has here deposited. It is in this delta that the waters of the Godāvari are first utilized on any considerable scale for irrigation. At Dowlaishweram, above the bifurcation, a great 'anicut' or dam has been thrown across the stream, and from this the whole delta area has been irrigated. *See* GODĀVARI CANALS.

The Godāvari is navigable for small boats throughout the Godāvari District. Vessels get round the anicut by means of the main canals, of which nearly 500 miles are also navigable, and which connect with the navigable canals of the Kistna delta to the south. Above the anicut there are several steamboats belonging to Government; but, as already observed, the attempts to utilize the Upper Godāvari as an important waterway have proved a failure.

The coast of the Godāvari delta was the scene of some of the earliest settlements of Europeans in India, the Dutch, the English, and the French having all established factories there. The channels of the river which led to these have now greatly silted up. The little French settlement of YANAM still remains, but the others—Bandamūrlanka, Injaram, Madapollam, and Pālakollu now retain none of their former importance.

The peculiar sacredness of the Godāvari is said to have been revealed by Rāma himself to the *rishi* Gautama. The river is sometimes called Godā, and the sacred character especially attaches to the Gautami mouth. According to popular legend, it proceeds from the same source as the Ganges, by an underground passage; and this identity is preserved in the familiar name of Vriddha-Gangā. But every part of its course is holy ground, and to bathe in its waters will wash away the blackest sin. The great bathing festival, called Pushkaram, celebrated in different years on the most sacred rivers of India, is held every twelfth year on the banks of the Godāvari at Rājahmundry. The spots most frequented by pilgrims are—the source at Trimbak; the town of Bhadrāchalam on the left bank, about 100 miles above Rājahmundry, where stands an ancient temple of Rāmachandra, surrounded by twenty-four smaller pagodas; Rājahmundry itself; and the village of Kotipalli, on the left bank of the eastern mouth.

Godāvari Canals.—The head of the delta of the Godāvari is at DOWLAISHWERAM, in Godāvari District, Madras, 40 miles as the crow flies from the Bay of Bengal. At this point the river bifurcates into two main streams, the Gautami Godāvari on the east and the Vasishta Godāvari on the west, which flow through a wide fan-shaped area of alluvial soil, cutting it into three portions called respectively the Eastern, Western, and Central Deltas, the land in which falls gradually to the

sea at the rate of about a foot a mile. Above the bifurcation a great masonry dam has been thrown across the main stream, and from this are led to the three deltas irrigation canals which branch and branch again so as to command every portion of them. The proposal thus to utilize the water of the river for irrigation was taken in hand by Sir Arthur (then Major) Cotton in 1845, and begun under his supervision in 1847. The work was practically completed in two years. It consists of a dam running straight across the river, composed of four sections, connected by islands in the bed of the stream, which are altogether 3,982 yards, or $2\frac{1}{4}$ miles, in length. The dam is formed of two parallel walls, 42 feet apart from centre to centre, which are built on brick wells. The upper wall is 10 feet high and the lower 7 feet; and the intervening space is filled in with sand covered by a rubble masonry apron, 20 feet of which is horizontal and the remainder curved to meet the lower wall. The top of this apron is faced with cut stone, and along the crest are automatic iron shutters 2 feet high. Below the lower wall is a loose stone apron 150 to 250 feet wide.

Three separate canal systems take off from this dam—one on either flank and one in the centre for the Central Delta. Together, these supply water to 662,000 acres and comprise 493 miles of main canals, which are all navigable, and 1,929 miles of smaller distributary channels. The capital cost of all the delta works to the end of 1903–4 has been 135 lakhs, and the gross revenue in that year was 33 lakhs. Deducting working expenses, the net revenue due to the scheme returns a profit of between 17 and 18 per cent. on the capital outlay. Next to the dam, the most important engineering work in the system is the Gunnavaram aqueduct, which extends the irrigation and navigation systems of the Central Delta across a branch of the river called the Vainateyam Godāvari to the Nagaram island on the seaward face of the delta. Full particulars of the whole scheme will be found in Mr. G. T. Walch's *Engineering Works of the Godāvari Delta* (Madras, 1896).

Goddā Subdivision.—Subdivision of the Santāl Parganas District, Bengal, lying between 24° 30′ and 25° 14′ N. and 87° 3′ and 87° 36′ E., with an area of 967 square miles. The subdivision comprises two distinct portions: to the west and south is a hilly country with rolling uplands covered with rock and jungle, and to the east is an alluvial plain of great natural fertility. Its population in 1901 was 390,323, compared with 384,971 in 1891. It contains 1,274 villages, one of which, GODDĀ, is the head-quarters; but no town. In the east the subdivision, which has a density of 404 persons per square mile, contains part of the sparsely inhabited Dāman-i-koh Government estate, but the Mahāgamā and Goddā *thānas* to the west form one of the most fertile and densely populated tracts in the District.

Goddā Village.—Head-quarters of the subdivision of the same

name in the Santāl Parganas District, Bengal, situated in 24° 50′ N. and 87° 17′ E. Population (1901), 2,208.

Godhra Tāluka.—Northern *tāluka* of the western portion of Pānch Mahāls District, Bombay, lying between 22° 42′ and 23° 6′ N. and 73° 22′ and 73° 58′ E., with an area of 585 square miles. It has one town, GODHRA (population, 20,915), the head-quarters; and 225 villages. The population in 1901 was 96,406, compared with 107,567 in 1891, the decrease being due to famine. The density, 165 persons per square mile, is nearly equal to the District average. The land revenue and cesses in 1903–4 amounted to Rs. 92,000. The *tāluka* is chiefly a roughly tilled plain, covered with brushwood and forest; but to the north its surface is broken by patches and peaks of granite rock. The westerly portion is well wooded and well tilled. The climate is unhealthy. The annual rainfall averages 40 inches. The Mahī and the Pānam flow through the *tāluka*. Maize is the staple of cultivation.

Godhra Town.—Head-quarters of the *tāluka* of the same name in Pānch Mahāls District, Bombay, and also head-quarters of the District, situated in 22° 46′ N. and 73° 37′ E., on the Godhra-Ratlām Railway, 319 miles from Bombay. Population (1901), 20,915; Hindus number 10,028, Muhammadans 10,083, and Jains 635. Formerly it was the residence of a provincial governor under the Muhammadan kings of Ahmadābād. Godhra is now the head quarters of the Rewā Kāntha Political Agency, which was transferred from Baroda to the Collector of the Pānch Mahāls in 1880. The Godhra municipality, constituted in 1876, had an average income of Rs. 19,000 during the decade ending 1901. In 1903–4 the income was Rs. 20,104. There are two tanneries doing a moderate business. Godhra is the centre of the trade in timber and firewood extracted from the forests of the District and neighbouring States, and exported to the rest of Gujarāt. Near the town is an embanked lake 70 acres in area. The town contains a Sub-Judge's court, a civil hospital, and an English high school with 154 pupils; also 5 vernacular schools for boys and 2 for girls, with 194 and 315 pupils respectively.

Godnā.—Town in Sāran District, Bengal. *See* REVELGANJ.

Gogha.—Town in the Dhandhuka *tāluka* of Ahmadābād District, Bombay, situated in 21° 41′ N. and 72° 17′ E., in the peninsula of Kāthiāwār, on the Gulf of Cambay, 193 miles north-west of Bombay City. Population (1901), 4,798. About three-quarters of a mile east of the town is an excellent anchorage, in some measure sheltered by the island of PIRAM, which lies still farther east. It appears to have been known as the port of Gundigar in the days of the Vallabhi kingdom, and was mentioned by Friar Jordanus in 1321 as Caga. The natives of this town are reckoned the best sailors or lascars in India; and ships touching here may procure water and supplies, or repair

damages. The roadstead is a safe refuge during the south-west monsoon, or for vessels that have parted from their anchors in the Surat roads, the bottom being a uniform bed of mud, and the water always smooth. There is a lighthouse on the south side of the entrance, visible for 10 miles. When the Dutch raised Surat to be the chief port of Gujarāt, the Cambay ports were more or less injured. Gogha has of late years lost its commercial importance. During the American Civil War it was one of the chief cotton marts of Kāthiāwār. It is now deserted, its cotton-presses idle, and its great storehouses ruinous and empty. Its rival, Bhaunagar, is 11 miles nearer to the cotton districts, and has the advantage of railway communication. North of the town is a black salt marsh, extending to the Bhaunagar creek. On the other sides undulating cultivated land slopes to the range of hills, 12 miles off. South of the town is another salt marsh. The land in the neighbourhood is inundated at high spring-tides, which renders it necessary to bring fresh water from a distance of a mile. The town contains a Sub-Judge's court, a dispensary, and four boys' schools, of which one is an English middle school with 18 pupils and three are vernacular schools with 230 pupils, including one girl. The municipality, established in 1855, had an average income during the decade ending 1901 of Rs. 4,000. In 1903–4 its income was Rs. 5,800. The sea-borne trade of Gogha in 1903–4 was valued at Rs. 1,87,000: exports, Rs. 81,000; imports, Rs. 1,06,000.

Gogrā (*Ghāgra*; Skt. *gharghara* = 'rattling' or 'laughter'; other names, Sarjū or Sarayū (the *Sarabos* of Ptolemy), and in the lower part of its course Deohā or Dehwā).—The great river of Oudh. Rising in Tibet (30° 40′ N. and 80° 48′ E.), it flows through Nepāl under the name Karnāli or Kauriāla, piercing the Himālayas at Shīshā Pānī, and shortly after throws off a branch to the east called the Girwā, which now brings down the main stream. The Kauriāla enters British territory between Kherī and Bahraich, and forms the boundary between those Districts. It receives the Girwā not many miles from the border, and just below this the Suhelī, one of the three branches of the Sārdā. The main branch of the Sārdā, called Dahāwar, joins it at Mallānpur, a few miles below Katai Ghāt, near which place the Sarjū is received. The Sarjū formerly joined the Gogrā in Gondā, but early in the nineteenth century a European timber merchant diverted its course into an old bed. At Bahrāmghāt a third branch of the Sārdā, named Chaukā, adds to its volume, and from this point the united stream is regularly called Gogrā or Sarjū, though these names are sometimes applied at Mallānpur. From the name Sarjū is derived the appellation of an important tribe of Brāhmans called Sarwaria, a contraction of Sarjūpāria, meaning those who 'dwell beyond' (i. e. on the north side of) the Sarjū. The Gogrā now turns east and divides Gondā on its north bank from

Bāra Bankī and Fyzābād on the south. After passing Ajodhyā city, it separates Bastī and Gorakhpur from Fyzābād, and then from Azamgarh and Balliā, and receives the RĀPTĪ and LITTLE GANDAK from the north. After being joined by the Chaukā it receives little drainage from the right bank, and is in fact higher than the valley of the Gumtī which lies south of it. In Azamgarh a branch is given off, called the Chhotī ('lesser') Sarjū, which was apparently an old bed of the river, and joins the Ganges after a long course through Azamgarh, Ghāzīpur, and Balliā. East of Gorakhpur District the Gogrā forms the boundary between Sāran District of Bengal and Balliā District of the United Provinces for about 40 miles. It falls into the Ganges in 25° 44′ N. and 84° 42′ E.

The Kauriāla and Girwā are both navigable for a short distance before entering British territory; and until the opening of the Bengal and North-Western Railway, within the last twenty years, trade on the Gogrā was of great importance. Many years ago a pilot service existed for a short time, and steamers plied as far as Bahrāmghāt in Bāra Bankī District. The traffic is still considerable, and large quantities of timber, grain, and spices come down from Nepāl, or are carried in the lower reaches. At Bahrāmghāt saw-mills used to be worked by the Forest department, but have recently been sold. The most important place on the banks of the river is Fyzābād, with Ajodhyā, the sacred birthplace of Rāma, adjoining it. Tāndā in Fyzābād and Barhaj in Gorakhpur are also towns of some size, engaged in trade. The chief mart on the banks of the Gogra in Bengal is Revelganj in Sāran District. The trade of Nawābganj in Gondā, which stands some miles from the river, is now largely carried by rail. River steamers from Patna ply as high as Ajodhyā, calling at many places and competing with the railways for both goods and passenger traffic.

The river is spanned by two fine railway bridges: the Elgin Bridge near Bahrāmghāt (3,695 feet long), and a bridge at Turtīpār (3,912 feet). The variability of its course is shown by the method of construction of the first-named bridge, which was built on dry land, the river being then trained under it. The height above sea-level is 350 feet at Bahrāmghāt and 193 feet at Turtīpār; and the flood discharges are 877,000 and 1,111,000 cubic feet per second respectively. At Ajodhyā a bridge of boats is maintained, except during the rains, when a steamer plies. Another important ferry is at Dohrīghāt on the road from Azamgarh to Gorakhpur.

Gogūnda.—Chief town of an estate of the same name in the State of Udaipur, Rājputāna, situated in 24° 46′ N. and 73° 32′ E., in the Arāvalli Hills, 2,757 feet above the sea, about 16 miles north-west of Udaipur city. Population (1901), 2,463. The estate, which consists of 75 villages, is held by one of the first-class nobles of Mewār, who is styled Rāj. He is a Jhāla Rājput and descended from the DELWĀRA

house. The income of the estate is about Rs. 24,000, and a tribute of Rs. 2,040 is paid to the Darbār.

Gohad.—Town in the Tonwarghār district of Gwalior State, Central India, situated in 26° 26′ N. and 78° 27′ E. Population (1901), 5,343. The town dates from the beginning of the eighteenth century, when it was seized by the Jāt family whose descendants now rule at Dholpur. From 1707 to 1739, however, it was held by the Bhadauria Rājputs, but was recovered by Rānā Bhīm Singh in the latter year. The Rānā in 1779 concluded a treaty with the British by which he was confirmed in possession of this place, while by the fourth article of the Treaty of Sālbai Sindhia was bound not to molest him. The Rānā, however, soon failed in carrying out the terms of his treaty; and on the withdrawal of our support Gohad was seized by Mahādjī Sindhia in 1784. Sindhia placed Ambājī Inglia in charge, who in 1803 concluded a treaty, without reference to Sindhia, surrendering Gohad to the British. The Treaty of Sarjī Anjangaon with Sindhia in the same year left it uncertain whether Gohad should be restored to Sindhia, and it was made over to the Rānā in 1804. Lord Cornwallis, on succeeding as Governor-General in 1805, reversed this policy and, under a treaty concluded in that year, withdrew his support of the Rānā. Sindhia at once seized the fort, which has since remained a part of Gwalior.

The town stands on the right bank of the Vaisali river, a tributary of the Sind, and is surrounded by three walls, within the innermost of which stands a massive fort. The latter was built by the Jāt chief Rānā Bhīm Singh in 1739, and contains a large palace built by Rānā Chhatrapati Singh, now used as an office, and several other buildings, all profusely covered with carving, which is, however, of no great merit. To the south of the palace is a large tank, the Lachman Tāl, with a small temple in the centre. A school, a resthouse, and a police station are situated in the town.

Gohāna Tahsīl.—*Tahsīl* of Rohtak District, Punjab, lying between 28° 57′ and 29° 17′ N. and 76° 29′ and 76° 52′ E., with an area of 336 square miles. The population in 1901 was 147,295, compared with 138,555 in 1891. It contains the three towns of GOHĀNA (population, 6,567), its head-quarters, BARAUDA (5,836), and BUTĀNA (7,509); and 78 villages, including MUNDLĀNA (5,657). The land revenue and cesses in 1903–4 amounted to 2·6 lakhs. The *tahsīl* is flat and well wooded, and ample means of irrigation are available.

Gohāna Town.—Head-quarters of the *tahsīl* of the same name in Rohtak District, Punjab, situated in 29° 8′ N. and 76° 42′ E., on the Western Jumna Canal, 20 miles north of Rohtak town. Population (1901), 6,567. The town is said to have been the site of a fort belonging to Prithwī Rāj, afterwards destroyed by Muhammad of Ghor. A yearly fair is held here at the shrine of Shāh Zia-ud-dīn Muhammad,

a saint who accompanied Muhammad of Ghor to India. There are also two temples in honour of the Jain Arhat Parasnāth, at which an annual festival takes place. The municipality was created in 1873. The income during the ten years ending 1902–3 averaged Rs. 9,300, and the expenditure Rs. 9,500. The income in 1903–4 amounted to Rs. 8,300, chiefly derived from octroi, and the expenditure to Rs. 8,200. The town is of no commercial importance. The municipality maintains a dispensary and an Anglo-vernacular middle school.

Gohelwār (*Gohilwād*).—*Prānt* or division of Kāthiāwār, Bombay. It takes its name from the Gohel Rājputs who own the greater part, and includes, among others, the chiefships of BHAUNAGAR and PALITANA. It lies along the Gulf of Cambay, with an area of 4,210 square miles. The population in 1901 was 581,079. The revenue in 1903–4 amounted to Rs. 55,27,787.

Gohnā (*Gauna*).—A lake of recent formation situated near the small village of the same name in the Garhwāl District of the United Provinces, in 30° 22′ N. and 79° 29′ E. Towards the end of the rains in 1893 two landslips took place on the right bank of the Birahi Gangā, a tributary of the Alaknandā (*see* GANGES). The side of a steep hill, towering 4,000 feet above the level of the stream, crashed down into the valley, hurling large blocks of limestone against the opposite cliff to the distance of a mile in places, and forming a dam more than two miles long at the base and one-third of a mile along the top, which completely blocked the valley to a height of 850 to 900 feet. It has been estimated that the dam contained 9 billion cubic feet of dolomite and detritus, weighing 800 million tons. Special arrangements were successfully made to avoid the damage to life and property to be expected when the water should reach the top of this dam and commence to cut it away. The pilgrim road to the shrines in the Upper Himālayas lies close along the line of escape, and bridges were dismantled and diversions constructed. At Hardwār it was necessary to protect the head-works of the Ganges Canal. In December, 1893, the area of the lake was about one square mile and its depth 450 feet. By July, 1894, the lake had become a large sheet of water, nearly 4 miles long and half a mile broad, and the level of the water had risen nearly 170 feet, while percolation was freely taking place. A month later the water was rising about 4 feet a day, and on the morning of August 25 water began to trickle over the dam, which was rapidly cut away. It was found next day that the level of the lake had fallen 390 feet, leaving a stretch of water 3,900 yards long with an average breadth of 400 yards. The depth near the dam was 300 feet, and the bed had already silted up about 85 feet. Immediately below the dam the flood rose 280 feet, but its height rapidly decreased as the channels of the rivers which carried it off widened. At Rudraprayāg, 51 miles away, the rise was

140 feet; at Beāsghāt, 99 miles, 88 feet; and at Hardwār, 149 miles, only 11 or 12 feet. The total damage caused to public property was valued at more than Rs. 95,000, but no lives were lost except those of five persons who insisted on remaining just below the dam. At Hardwār the head-works of the Ganges Canal were slightly damaged, but beyond this point the flood had no appreciable effect. The outlet of the lake now appears to have a stable bed.

[*Selections from Records, Government of India, Public Works Department, No. CCCXXIV.*]

Gojra.—Town in the Toba Tek Singh *tahsīl* of the new Lyallpur District, Punjab, situated in 31° 9′ N. and 72° 42′ E., 20 miles north of the *tahsīl* head-quarters. Population (1906), 2,589. The business done in this rising mart on the railway, which has sprung into existence in the last six years owing to the extension of the Chenāb Canal to the surrounding country, bids fair to rival in importance that of Lyallpur itself. The town contains two cotton-ginning factories, one cotton-press, one combined ginning and pressing factory, and one combined ginning factory and flour-mill. The total number of hands employed in 1904 was 250. It is administered as a 'notified area.'

Gokāk Tāluka.—Eastern *tāluka* of Belgaum District, Bombay, lying between 15° 57′ and 16° 30′ N. and 74° 38′ and 75° 18′ E., with an area of 671 square miles. It contains one town, GOKĀK (population, 9,860), the head-quarters; and 113 villages, including KONNŪR (5,667). The population in 1901 was 116,127, compared with 118,556 in 1891. The density, 173 persons per square mile, is below the District average. The demand for land revenue in 1903–4 was 1·5 lakhs, and for cesses Rs. 13,000. Gokāk has the worst climate in Belgaum, being malarious during the cold months and oppressive during the hot season. In the monsoon, however, it is pleasant, and free from the excessive rains of Belgaum town, the average fall being 25 inches. The sandstone hills in Gokāk intercept the monsoon showers from the west, rendering the plain beyond especially liable to drought. The two sections of the Gokāk Canal irrigate about 28 square miles. The source of supply is from the Ghatprabha river, on which are situated the famous Gokāk Falls.

Gokāk Town.—Head-quarters of the *tāluka* of the same name in Belgaum District, Bombay, situated in 16° 10′ N. and 74° 49′ E., 8 miles from Gokāk Road station on the Southern Mahratta Railway. Population (1901), 9,860. The town was formerly the seat of a large dyeing and weaving industry, not yet extinct, and was also known for its manufacture of toys representing figures and fruits, made of light wood and of a particular earth found in the neighbourhood. The municipality, established in 1853, had an average income of Rs. 12,500 during the decade ending 1901. In 1903–4 the income was Rs. 8,500.

A fort, standing on an isolated peak behind the town, is said to have been built by one of the Adil Shāhi Sultāns of Bijāpur. The earliest mention of Gokāk is probably as Gokāge, which occurs in an inscription dated 1047. In 1685 the town was the head-quarters of a district or *sarkār*. Between 1717 and 1754 it fell to the Nawābs of Savanūr, who built the mosque and Ganji Khāna. In 1836, on the death of Govind Rao Patvardhan, the town and *tāluka* lapsed to the British. The town contains a Subordinate Judge's court, a dispensary, a municipal English school, and five other schools with 427 pupils, of which one with 25 pupils is a girls' school.

About $3\frac{1}{2}$ miles north-west of Gokāk town and 3 miles from Dhupdal station on the Southern Mahratta Railway are the Gokāk Falls, where the Ghatprabha takes a mighty leap of 170 feet over a sandstone cliff into a picturesque gorge. In the monsoon the falls well repay a visit. On the right bank of the river close to the falls is a cotton-mill, established in 1887. The mill employs daily 2,038 hands, and produces annually 17,000,000 lb. of yarn and 2,000,000 lb. of cloth. To supply motive power, as well as for irrigation purposes, the Gokāk storage works were constructed in 1889–1902, whereby 907,000,000 cubic feet of water are impounded. The cost of the works was 17 lakhs.

Gokalpura.—Petty State in Mahī Kāntha, Bombay.

Gokarn.—Town in the Kumta *tāluka* of North Kanara District, Bombay, situated in 14° 32′ N. and 74° 19′ E., 10 miles north of Kumta town. Population (1901), 4,834. Gokarn is a place of pilgrimage frequented by Hindu devotees from all parts of India, especially by wandering pilgrims and ascetics who go round the principal shrines of the country. The Mahābaleshwar temple here is built in the Dravidian style, and is famed as containing a fragment of the original *lingam* given to Rāvana by Siva—one of the twelve famous *lingams* of all India. Upwards of a hundred lamps are kept perpetually alight from funds supplied by devotees. A fair is held annually in February, at which from 2,000 to 8,000 people assemble. Gokarn is mentioned in both the Rāmāyana and Mahābhārata. The municipality, established in 1870, had an average income during the decade ending 1901 of Rs. 1,300. In 1903–4 the income was Rs. 1,600. Besides the great temple of Mahābaleshwar, twenty smaller shrines, thirty *lingams*, and thirty holy bathing-places are held in special reverence by Smārtas and Lingāyats.

Golā.—Town in the Bānsgaon *tahsīl* of Gorakhpur District, United Provinces, situated in 26° 21′ N. and 83° 21′ E., on the left bank of the Gogra. Population (1901), 4,944. The town is one of the most important in the south of the District, but its trade has suffered from the competition of Barhaj, which is now on the railway. Potatoes

are largely cultivatedin the neighbourhood. Golā is administered under Act XX of 1856, with an income of about Rs. 1,200. It contains a town school with 112 pupils, and a girls' school with 22.

Golā.—Town in the Muhamdī *tahsīl* of Kherī District, United Provinces, situated in 28° 5′ N. and 80° 28′ E., on the Lucknow-Bareilly State Railway. Population (1901), 4,913. The place is of great antiquity, and carvings and terra-cotta figures of Buddhist types have been found in the neighbourhood. It is picturesquely situated near a *sāl* forest. To the east lies the celebrated temple of Gokarannāth, round which are situated many smaller temples, *dharmsālas*, and monasteries inhabited by *gosains*. The temple is esteemed one of the most sacred in the whole of Oudh, and contains a *lingam*, of which several tales are told. It is said to have been brought by Rāvana, king of Ceylon. Aurangzeb attempted to pull it up with chains and elephants; but flames burst forth, and the emperor was induced to endow the shrine. Golā is one of the chief trading centres in the District, and grain and sugar are exported in considerable quantities. The town contains a branch of the American Methodist Mission, a dispensary, and a school with 90 pupils.

Golāghāt Subdivision.—The most westerly subdivision of Sibsāgar District, Eastern Bengal and Assam, lying between 25° 49′ and 26° 55′ N. and 93° 3′ and 94° 11′ E., with an area of 3,015 square miles. The eastern portion is a level plain, which supports over 200 persons per square mile. Rice is grown on the low land, and tea and sugar-cane on land which is too high for rice. West of Golāghāt town there is comparatively little population. The upper valley of the Dhansiri is for the most part covered with dense jungle, and north of this river lie the forest-clad Mīkīr Hills. The density for the whole subdivision is thus only 55 persons per square mile, compared with 120 for the District as a whole. The population in 1901 was 167,068, or nearly 20 per cent. more than in 1891 (139,203). The subdivision contains one town, Golāghāt (population, 2,359), the head-quarters; and 792 villages. The annual rainfall at Golāghāt averages 82 inches, but at Dimāpur, on the southern border, less than 60 inches. The tea industry has contributed to the development of the subdivision. In 1904 there were 47 gardens, with 20,324 acres under plant, which gave employment to 45 Europeans and 23,883 natives. In the Mīkīr Hills and the Dhansiri valley are extensive forest Reserves, which in 1903–4 covered an area of 780 square miles. The assessment for land revenue and local rates in 1903–4 was Rs. 4,18,000.

Golāghāt Town.—Head-quarters of the subdivision of the same name in Sibsāgar District, Eastern Bengal and Assam, situated in 26° 31′ N. and 93° 59′ E., on the right bank of the Dhansiri river. The town had a population in 1901 of 2,359, and is administered as

a Union under (Bengal) Act V of 1876, the expenditure in 1903–4 amounting to about Rs. 6,000.' There is a flourishing bazar, the principal shops in which are owned by Mārwāri merchants, who do a large business with the tea gardens in the neighbourhood. The chief articles of export are cotton, which is brought down by the Nāgās, mustard seed, and molasses. The chief imports are cotton piece-goods, grain and pulse, kerosene and other oils, and salt. During the rains feeder-steamers come up the Dhansiri as far as Golāghāt, but in the dry season the nearest steamer *ghāt* is at Shikārighāt, 18 miles away. The nearest railway station is at Kamarband Ali, about 8 miles south of the town. The Subdivisional Officer is almost invariably a European. Besides the usual offices, Golāghāt has a small jail, a dispensary with fourteen beds, and a high school under private management.

Golconda.—Fortress and ruined city in the Atrāf-i-balda District of Hyderābād State, situated in 17° 23′ N. and 78° 24′ E., 5 miles west of Hyderābād city. The fort was originally constructed by the Rājā of Warangal, who ceded it in 1364, together with its dependencies, to Muhammad Shāh Bahmani of Gulburga. For a time it was known as Muhammadnagar. In 1512 the place passed from the Bahmanis to the Kutb Shāhis, who had their capital here till the foundation of Hyderābād. In 1687 the city was taken by Aurangzeb after a siege of eight months, and the last of the Kutb Shāhis was deported to Daulatābād. The fortress, which is situated on a rocky ridge of granite, is extensive, and contains many enclosures. It is surrounded by a strong crenelated stone wall, over 3 miles in circumference, with 87 bastions at the angles; some of these still contain large pieces of ordnance bearing Persian inscriptions. Inside the walls are ruins of numerous palaces, mosques, and dwellings, scattered everywhere, while the citadel or *bālā hisār* is in good preservation. There are eight gates to the fort, of which four are now in use. The moat which surrounds the fort is choked with rubbish in most places. About half a mile to the north of the fort are the tombs of the Kutb Shāhi kings. These buildings, though constructed of granite, have suffered from the ravages of time and the damage done by the siege guns of Aurangzeb, while the enamelled tiles which once adorned them have been stolen. In shape the tombs are oblong or square, the lower portion being an arcade of pointed arches on a raised terrace, and the whole crowned by a dome. The actual sarcophagus is usually of black basalt or greenstone, beautifully carved. Golconda is now garrisoned by a few Arabs and by the Golconda Brigade, consisting of a battery and one regiment each of cavalry and infantry. The river Mūsī flows south of the fort. In English literature Golconda has given its name to the diamonds which were found at many places within the dominions of the Kutb Shāhi dynasty.

There are no diamond mines within the immediate neighbourhood of Golconda itself.

Gold Fields.—Municipal area in Kolār District, Mysore. *See* KOLĀR GOLD FIELDS.

Goler.—Estate in the Dera *tahsīl* of Kāngra District, Punjab, with an area of 25 square miles. Legend says that Hari Chand, the Katoch Rājā of Kāngra, fell into a dry well when hunting. He was missed by his companions, and believed to have been killed, so his heir was proclaimed king. When rescued from the well Hari Chand could not reclaim his throne, but he founded Harīpur as the capital of a separate principality, called Goler. Under Shāh Jahān, Rājā Rūp Chand was employed in subduing a Katoch rebellion; and under Akbar, Kunwar Mān Singh and his son Jagat Singh played a great part, the fief of Kābul being bestowed on the former in 1585. Under the Sikhs, Rājā Bhūp Singh was at first an ally of Ranjīt Singh against the Katoch kings, but in 1812 his territory was confiscated. On the British annexation, his son, Shamsher Singh, obtained a *jāgīr* of 20 villages. This grant is now held by his nephew, Rājā Raghunāth Singh, and its revenue amounts to about Rs. 26,000.

Golgonda.—*Tāluk* in the south-west of Vizagapatam District, Madras, lying between 17° 22′ and 18° 4′ N. and 82° and 82° 50′ E., with an area of 1,263 square miles (of which 738 square miles are in the Agency tract). The population in 1901 included 123,507 persons in the ordinary and 33,929 in the Agency tract: total, 157,436, compared with 147,841 in 1891. The head-quarters are at NARASAPATNAM (population, 10,589), and there are 517 villages. The demand for land revenue and cesses in 1903–4 was Rs. 2,02,000. The Agency part of the *tāluk* is exceedingly hilly and is situated on both slopes of the Ghāts, the drainage of the northern part passing into the Machkund river and thence to the Godāvari. The hills are, as a rule, covered with fine forests, and considerable areas of these (about 260 square miles) have been 'reserved,' forming the most important of the Government forests in the District. The *tāluk* was one of the sixteen ancient *zamīndāris* which existed in Vizagapatam at the time of the permanent settlement, the *zamīndār* being a relation and feudatory of the Jeypore Rājā; but disturbances arose caused by the incapacity of the *zamīndār*, and in 1837 the estate was sold at auction for arrears of revenue and bought in by Government. To it were added the Kottakota and Vemulapūdi estates, which had been similarly purchased by Government in 1833 and 1831, and this tract forms the *ryotwāri* portion of the *tāluk*; the southern part is still *zamīndāri*. In 1845–8, and again in 1857–8, extensive risings took place among the hill chiefs, but since 1858 no trouble has occurred. The eastern part of the plains portion of the *tāluk* is under continuous cultivation, irrigated from

the Komaravolu Ava lying on the Vīravilli *tahsīl* boundary. From Kondasantha and Krishnadevipeta, *ghāt* roads run up into the hills, and along the latter there is considerable traffic in jungle produce, grain, and salt.

Gomal.—River and mountain pass in the South Wazīristān Agency, North-West Frontier Province. *See* GUMAL.

Gond.—Tribe in Central Provinces. *See* GONDWĀNA.

Gondā District.—North-eastern District of the Fyzābād Division, United Provinces, lying between 26° 46′ and 27° 50′ N. and 81° 33′ and 82° 46′ E., with an area of 2,813 square miles. It is bounded on the north by the lower range of the Himālayas, separating it from Nepāl; on the east by Bastī; on the south by the Gogra, which divides it from Fyzābād and Bāra Bankī; and on the west by Bahraich.

Physical aspects.

The District forms a level plain with slight inequalities, and is well wooded. During the fine clear months at the end of the rainy season the range of the Himālayas, with the snowy peak of Dhaulāgiri in the centre, forms a magnificent background to the north. The people live in small hamlets scattered about the village lands. There are three natural divisions. In the north is situated a moist tract of *tarai* land extending a little south of the Rāptī. The centre forms a level upland area or *ūparhār*, and south of it lies a broad low tract extending to the alluvial soil in the bed of the Gogra. The GOGRA and RĀPTĪ, the principal streams, flow from north-west to south-east. In the *tarai* a number of small streams flow from north to south to meet the Būrhī (or 'old') Rāptī. The remaining rivers have a course from north-west to south-east, and are, in order: the Suwāwan, Kuwānā, Bisūhī, Chamnai, Manwār, Tirhī, and Sarjū or Suhelī. Most of these are only small streams in the hot season. The whole District is studded with small shallow lakes or *jhīls*, the water of which is largely used for irrigation.

In the north limestone boulders are found in the beds of the torrents rushing down from the Outer Himālayas. Elsewhere the formation is the ordinary alluvium, which in places contains calcareous limestone or *kankar*.

Forests are 'reserved' in the north of the District and in a small area in the centre. There is also a large tract of forest on the banks of the Kuwānā, which is private property. These contain *sāl* (*Shorea robusta*), *asna* (*Terminalia tomentosa*), *dhau* (*Anogeissus latifolia*), *khair* (*Acacia Catechu*), &c. Mango, *mahuā* (*Bassia latifolia*), *shīsham* (*Dalbergia Sissoo*), and various kinds of fig are the commonest trees in other parts.

Tigers and bears are found in the northern forests, and leopards are common there and are occasionally met with farther south. Several

kinds of deer are found, and antelope, *nīlgai*, wolves, and jackals are common. Snipe, water-fowl, jungle-fowl, pea fowl, quail, partridges, and ortolans are the chief game-birds. Fish abound in the rivers and lakes, and crocodiles are also common.

The damp submontane tract is very unhealthy, and fever is also prevalent in all parts of the District. The proximity of the mountains and the heavy rainfall make the climate comparatively cool, the average monthly temperature ranging from about 62° in January to 91° in May.

The annual rainfall over the whole District averages 44 inches, ranging from 51 in the north to 40 in the south. Extreme fluctuations occur from year to year; the fall amounted to 75 inches in 1894 and to only 22 inches in 1874. In 1901 nearly 17 inches of rain fell in twenty-four hours at Tarabganj, one of the heaviest falls ever recorded in the plains of the United Provinces.

History.

The District formed part of the great kingdom of KOSALA, ruled over by the kings of the Solar race from Ajodhyā. At the death of Rāma the northern portion fell to his son, Lava, with the capital city of Srāvastī, which is identified by some writers with SET MAHET. Ancient remains show that many sites were inhabited during the palmy days of Buddhism: but when the Chinese pilgrims visited the holy places in the fifth and seventh centuries the country had relapsed into jungle. Many traditions are related of the young warrior of Islām, Saiyid Sālār, who died fighting the chiefs of this tract near Bahraich, and many tombs are pointed out as those of his warriors. The history during the Muhammadan period is chiefly that of the varying fortunes of the Rājput clans who seized it from the Doms. The Muhammadan governor resided at Bahraich, but often had no authority outside his own fort. The rise of the Rājputs, according to their own traditions, dates from the fourteenth century. The Kalhans clan was the first to attain importance; but it fell at the end of the fifteenth century, owing to the curse of a Brāhman, whose daughter had been carried off by the Rājā. The Janwārs spread over the north of the District, and finally the Bisens acquired a great territory covering 1,000 square miles. When Oudh was granted to Saādat Khān early in the eighteenth century, the local Rājās north of the Gogra were virtually independent. The Rājā of Gondā slew Nawāb Alāwal Khān, the first of the new governors of Bahraich, but was later so far conquered that he undertook to pay a fixed tribute. It was not, however, till the close of the eighteenth century that the Oudh government was able to break up the Bisen power and to collect revenue direct from the village headmen. The chiefs in the north and east of the District retained a partial independence still longer. Gondā suffered much from misrule in the eighteenth and nineteenth centuries, during which several great *tālukas* were

acquired by bankers and officials. Annexation in 1856 passed off quietly; but Colonel Boileau, the Deputy-Commissioner, lost his life in attempting to arrest a notorious freebooter.

On the outbreak of the Mutiny, the Rājā of Gondā threw in his lot with the rebels and joined the standard of the Begam of Oudh at Lucknow. The Rājā of Balrāmpur remained loyal throughout. He steadily declined to recognize the rebel government, received and protected Sir C. Wingfield, the Commissioner of Gondā and Bahraich, together with other English officers in his fort, and afterwards forwarded them safely under a strong escort to Gorakhpur. The Rājā of Gondā, after the relief of Lucknow, fixed his camp at Lampti on the Chamnai river, with a force said to amount to 20,000 men, who were, however, dispirited at the English successes elsewhere. After only a feeble resistance the broken remnants of his force were swept across the Rāptī and over the lower range of the Himālayas into Nepāl. Most of the rebel *talukdārs* accepted the amnesty; but neither the Rājā of Gondā nor the Rānī of Tulsīpur could be induced to surrender (although the conduct of the former throughout the Mutiny had been free from overt crime), and their estates were accordingly confiscated and conferred as rewards upon Mahārājās Sir Drigbijai Singh of Balrāmpur and Sir Mān Singh of Ajodhyā.

SET MAHET is the only site which has been excavated; but ruins are known to exist at many other places, among which may be named Bānsdīlā, Paltīpur, Lodhā Dīh, Rayā-ke-thān, and Parās. There are no striking buildings of the Muhammadan period. The chief Hindu shrines are at DEBĪ PĀTAN and CHHAPIA.

Population.

The District contains 8 towns and 2,760 villages. At the last four enumerations the numbers were as follows: (1869) 1,168,462, (1881) 1,270,926, (1891) 1,459,229, and (1901) 1,403,195. There are three *tahsīls*—GONDĀ, TARABGANJ, and UTRAULĀ—each named from its head-quarters. The principal towns are the municipalities of BALRĀMPUR and GONDĀ, and the 'notified areas' of NAWABGANJ and UTRAULA. The following table gives the chief statistics of population in 1901:—

Tahsīl.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Gondā . .	619	3	784	384,021	620	— 5·0	12,269
Tarabganj .	627	3	546	364,993	582	— 5·3	16,584
Utraulā . .	1,567	2	1,430	654,181	417	— 2·3	14,892
District total	2,813	8	2,760	1,403,195	499	— 3·8	43,745

Hindus number nearly 85 per cent. of the total, and Muhammadans 15 per cent. The District is thickly populated, except in the north, where there is a large area of forest. The decrease between 1891 and 1901 was chiefly due to the effects of excessive rain in 1894, and to a smaller extent to the drought of 1896. Many emigrants go from Gondā to the West Indies, Fiji, and Natal. Eastern Hindī of the Awadhī dialect is spoken almost universally.

Brāhmans are the most numerous of the Hindū castes, numbering about 214,000, or 18 per cent. of the total. Other castes found in large numbers are the Ahīrs (graziers and cultivators), 140,000; Korīs (weavers and labourers), 126,000; Kurmīs (agriculturists), 105,000; Rājputs, 55,000: Kahārs (servants and cultivators), 49,000: Muraos (market-gardeners), 47,000; and Baniās, 32,000. The Barwārs, who number 2,218, are a small caste of criminals who have been settled here in the hope of reformation. A few Thārus, who appear to be of Mongolian origin, are the only people who can survive in the most fever-stricken parts of the *tarai*. Among Musalmāns, Rājputs number 41,000; Shaikhs, 23,000; Pathāns, 22,000; and Julāhās (weavers), 19,000. Agriculture supports 64 per cent. of the total population, and general labour 9 per cent. Brāhmans cultivate 29 per cent. of the total area held by tenants, and Rājputs 12 per cent. Kurmīs, Muraos, and Kāchhīs, who are the best tenants, hold about 14 per cent.

In 1901 there were 175 native Christians, of whom 61 were Methodists. The American Methodist Mission was opened at Gonda in 1859.

Agriculture.

The agricultural conditions are closely connected with the physical features already described. The *tarai* is pre-eminently a rice country, but is very unhealthy, and is liable to heavy floods. South of it lies the *ūparhār* or upland area, in which the soil is usually a rich loam, which deteriorates to sand in the west and on the high banks of the streams. Wheat and rice, varied by gram and *arhar*, are the staples here. Sugar-cane and poppy are grown near the village sites, and near the swamps the valuable *jarhan* or late rice is cultivated. In the *tarhar* or lowlands the subsoil is sand, and fertility depends on the composition and thickness of the surface layer. This tract requires little irrigation, but is subject to floods, and the chief crops are maize in the autumn and peas or barley in the spring. Poppy is grown in all parts and is a very valuable crop. In the neighbourhood of the Tikrī forest much damage is done to cultivation by wild beasts.

The ordinary tenures of the Province of Oudh are found. *Talukdāri* estates include about 60 per cent. of the total area, and nearly 15 per cent. is sub-settled. There is also a large area held in small plots on

complicated tenures by under-proprietors. The main agricultural statistics for 1903–4 are given below, in square miles:—

Tahsīl.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Gondā . . .	619	422	187	103
Tarabganj . .	627	367	93	127
Utraulā . . .	1,567	1,006	221	233
Total	2,813	1,795	501	463

Rice is the staple most largely grown, occupying 732 square miles, or 41 per cent. of the net area cultivated. Wheat (463 square miles), maize (489), gram (247), peas and *masūr* (241), and barley (118) are also important food-crops, while poppy covered 37 square miles, sugar-cane 28, and oilseeds 12.

There has been a considerable increase in the cultivated area since the first settlement: but this has chiefly taken place in the single *tahsīl* of Utraulā, where population has grown rapidly, large tracts of jungle have been reclaimed, and the extension of the railway has made markets more accessible. Few changes have occurred in methods of cultivation. The area under poppy and sugar-cane has risen, and more land is under the valuable late rice than formerly. The prevailing feature of the cultivation is mediocrity, which is due to the large proportion of high-caste tenants, who are obliged by social custom to employ labourers instead of working with their own hands. Very few advances are taken under the Agriculturists' Loans Act, and none has been given under the Land Improvement Act except in 1896–7. Out of a lakh advanced during the ten years ending 1900, Rs. 28,000 was lent in the wet year 1894–5, and Rs. 33,000 in the drought of 1896–7. The loans in the next four years amounted to only Rs. 250.

The cattle bred locally are of poor quality, and animals of a better class are usually imported from the neighbouring District of Bahraich. Ponies are used to a large extent as pack-animals. Sheep and goats are fairly numerous, but no particular breeds are recognized.

In 1903–4 tanks and swamps supplied irrigation for 248 square miles and wells for 240, while rivers were used to serve only 13 square miles. Few Districts have better natural advantages. In the *tarhar* irrigation is little required in ordinary years, and the *ūparhār* is provided with numerous tanks and wells. The number of wells is steadily increasing, and they can be made at a comparatively small cost. Water is usually raised from wells by means of a long lever, to which a pot is attached by a rope. The swing-basket is used to distribute water from *jhīls*. Only a few crops are flooded, and the ordinary method of irrigation is to scatter water from small channels with a wooden shovel. In the *tarai* the rain-water is held up by small embankments to keep the rice-fields moist.

'Reserved' forests cover an area of 162 square miles. The most important is a tract of 142 square miles, lying along the base of the hills with a width varying from three to six miles. Near the east this forest contains valuable *sāl* (*Shorea robusta*) and *asna* (*Terminalia tomentosa*). Towards the west the *sāl* gives place to *dhau* (*Anogeissus latifolia*) and *haldu* (*Adina cordifolia*). A little *shīsham* (*Dalbergia Sissoo*) is found in the moister tracts near the mountain torrents. The Tikrī forest has an area of about twenty square miles, chiefly in the Tarabganj *tahsīl* near the centre of the District. It supplies *sāl* timber and fuel to Gondā and Ajodhyā. In 1903–4 the forests yielded a revenue of Rs. 50,000, the chief items being firewood and charcoal.

The only mineral product is *kankar* or nodular limestone, which is used for metalling roads and for making lime.

The District has few industries besides agriculture. Coarse cotton cloth is woven for local use at several places, but no fine tissues are produced. At Utraulā there is a small manufacture of ornamental pottery. No other articles are produced locally except those of use in agriculture or in domestic life, which can be made by the blacksmith, the carpenter, and the potter.

Trade and communications.

The export trade consists almost entirely of agricultural produce. Rice, peas, maize, opium, timber, and fuel are the chief exports, while piece-goods, salt, metals, and refined sugar are imported. Nawābganj and Colonelganj attract most of the trade in the south of the District, and Utraulā and Tulsīpur are the chief centres for the export of the rice tracts in the north. Smaller but flourishing bazars have grown up at most of the villages near stations on the railway. Some traffic is still carried by the Rāptī and Gogra, especially the latter; but the railway is now the chief means of transport. There is a small trade with Nepāl, which supplies grain in exchange for piece-goods and sugar; but it is hampered by the absence of roads.

Gondā is better supplied with communication by rail than with roads, but the latter have recently been improved and added to. The main line of the Bengal and North-Western Railway crosses the south of the District. From Gondā town one branch strikes off to the north-west, leading to Bahraich, while another leads north and north-east towards the Nepāl border. The latter till recently terminated at Tulsīpur, but has now been continued to Uskā Bāzār in Bastī, and gives off a short line to the Nepāl frontier. A third branch runs south from the main line at Mankāpur to the bank of the Gogra opposite Ajodhyā. Out of 606 miles of road, only 110 are metalled. The latter are in charge of the Public Works department, but the whole cost is charged to Local funds. Avenues of trees are maintained on 388 miles. The chief routes are from Gondā town to Fyzābād and Balrāmpur and towards Utraulā.

Scarcity was experienced in 1865, 1869, and 1874, and in the latter year relief works were required, and distress was severe. In 1878–9 relief works were again opened, but only for about two and a half months. The drought of 1896 followed a succession of bad years in which the crops had been injured by excessive rain, and the health of the people had been severely affected. Relief works and poorhouses were opened, but the proportion of the population relieved was not high.

Famine.

The Deputy-Commissioner is usually assisted by a member of the Indian Civil Service, and by four Deputy-Collectors recruited in India. There are two officers of the Opium department, and a *tahsīldār* is stationed at the head-quarters of each *tahsīl*.

Administration.

Civil cases are heard by three Munsifs and a Subordinate Judge, and the District and Sessions Judge of Gondā has civil and criminal jurisdiction also in Bahraich. Crime is of the ordinary type. Dacoity is very rare. The Barwārs commit their crimes far beyond the limits of the District. The complicated tenures on which land is held give rise to much litigation, and the Brāhmans of Gondā have a bad reputation for perjury and forgery.

A large area in the south-east of the District was ceded to the British in 1810, but was restored to the Nawāb of Oudh at the close of the Nepālese War in 1816, in return for land acquired elsewhere and in extinction of a loan. At annexation in 1856, a summary settlement was made, by which the revenue was fixed at 9·7 lakhs. On the restoration of order after the Mutiny the same demand was again levied. Owing to the backward state of the District the regular settlement was postponed for some years. It was preceded by a survey and was commenced in 1868, the first assessment being completed in 1873. This assessment was based on estimates of the annual value of each village. In forming the estimates the rent-rolls were used, but they were corrected by applying what were found to be prevailing rates, and still more reliance was placed on rates obtained by estimating the value of agricultural produce. No allowance was made for the great difference between the rents paid by high-caste and low-caste tenants, and a succession of bad seasons soon showed that the revenue fixed could not be paid. A revision was at once undertaken and was completed by 1876, the 'assets' being now calculated on the basis of the actual rent-rolls, and allowances being made for the low rents paid by high castes. The revenue demand thus fixed amounted to 15·3 lakhs. The latest revision of settlement was made between 1897 and 1902, the first two years being occupied in a resurvey. An area of 860 square miles, or almost the whole of the *tarai*, is held by the Mahārājā of Balrāmpur on a permanent settlement, as a reward for services in the Mutiny,

and was thus excluded. The revision in the rest of the District was based as usual on the corrected rent-rolls, and the new revenue demand amounted to 45·5 per cent. of the rental 'assets.' In 1903–4 the land revenue demand for the whole District was 16·6 lakhs, the incidence being R. 1 per acre, varying from R. 0·7 to Rs. 1·4 in different *parganas*.

Collections on account of land revenue and revenue from all sources have been, in thousands of rupees:—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	15,09	15,03	15,73	16,63
Total revenue . .	18,11	20,32	21,96	23,17

There are two municipalities, GONDĀ and BALRĀMPUR, and two 'notified areas,' NAWABGANJ and UTRAULĀ, besides four towns administered under Act XX of 1856. Beyond the limits of these places, local affairs are managed by the District board, which had an income of 1·7 lakhs in 1903–4, chiefly derived from rates. The expenditure was 1·6 lakhs, including a lakh spent on roads and buildings.

Gondā contains 17 police stations; and the District Superintendent of police has under him a force of 3 inspectors, 91 subordinate officers, and 361 constables, besides 112 municipal and town police, and 2,911 rural and road police. The District jail contained a daily average of 446 prisoners in 1903.

The population of the District is not remarkable for its literacy. Three per cent. of the total (6 males and 0·1 females) could read and write in 1901. The number of public schools increased from 137 with 4,361 pupils in 1880–1 to 150 with 6,955 pupils in 1900–1. In 1903–4 there were 191 such schools with 9,390 pupils, of whom 248 were girls, besides 35 private schools with 445 pupils. Only 437 pupils had advanced beyond the primary stage. Two schools are managed by Government and 144 by the District board. The total expenditure on education was Rs. 46,000, of which Local funds provided Rs. 30,000, and fees Rs. 6,000.

There are 16 hospitals and dispensaries, with accommodation for 148 in-patients. In 1903 the number of cases treated was 143,000, including 2,237 in-patients, and 4,687 operations were performed. The expenditure in the same year amounted to Rs. 16,000, chiefly met from Local funds.

About 33,000 persons were successfully vaccinated in 1903–4, representing the low proportion of 24 per 1,000 of population. Vaccination is compulsory only in the municipalities.

[H. R. C. Hailey, *Settlement Report* (1903); H. R. Nevill, *District Gazetteer* (1905).]

Gondā Tahsīl.—Head quarters *tahsīl* of Gondā District, United

Provinces, comprising the *parganas* of Gondā and Pahārāpur, and lying between 27° 1′ and 27° 26′ N. and 81° 38′ and 82° 19′ E., with an area of 619 square miles. Population fell from 404,172 in 1891 to 384,021 in 1901. There are 784 villages and three towns, including GONDA (population, 15,811), the District and *tahsīl* head-quarters. The demand for land revenue in 1903–4 was Rs. 491,000, and for cesses Rs. 50,000. The density of population, 620 persons per square mile, is the highest in the District. The *tahsīl* lies chiefly in the central upland area, which forms the most fertile portion. It is bounded on the north by the Kuwānā, along which stretches a belt of jungle, while the Tirhī flows across the south and the Bisūhī across the centre. In 1903–4 the area under cultivation was 422 square miles, of which 187 were irrigated. In ordinary years tanks or swamps supply almost as large a proportion as wells.

Gondā Town.—Head quarters of Gondā District and *tahsīl*, United Provinces, situated in 27° 8′ N. and 81° 58′ E., at the junction of several branches of the Bengal and North-Western Railway. Population (1901), 15,811. The name of the town is popularly derived from *gouthā* or *gothān*, a 'cattle pen,' and its foundation is ascribed to Mān Singh, a Bisen Rājput, who possibly lived in the early years of Akbar's reign. The last Rājā of Gondā threw in his lot with the mutineers in 1857, and his estates were forfeited and conferred on the owner of the AJODHYĀ ESTATE. The town is of mean appearance, but is adorned with two large tanks. The chief public buildings, besides the usual courts, are the male and female hospitals, the District school, and a literary institute with a library. Gondā has been administered as a municipality since 1869. During the ten years ending 1901 the income and expenditure averaged Rs. 18,000. In 1903–4 the income was Rs. 22,000, including octroi (Rs. 11,000) and rents (Rs. 3,600); and the expenditure was also Rs. 22,000. There is a considerable trade in agricultural produce, but no manufacturing industry. Eight schools have 260 pupils.

Gondal State.—Native State in the Kāthiāwār Political Agency, Bombay, lying between 21° 42′ and 22° 8′ N. and 70° 3′ and 71° 7′ E., with an area of 1,024 square miles. With the exception of the Osam hills, the country is flat. Several streams intersect the State, the largest, the Bhadar, being navigable by small boats during the rains. The climate is good, and the annual rainfall averages 25 to 30 inches.

The chief of Gondal is a Rājput of the Jādeja stock, with the title of Thākur Sāhib. Gondal is mentioned in the *Ain-i-Akbarī* and the *Mirāt-i-Ahmadī* as a Vāghela holding in *sarkār* Sorath. The founder of the State was Kumbhojī I, who received Ardoi and other villages in the seventeenth century from his father Merāmanji. Kumbhojī II, fourth of the line, raised the State to its present position, by acquiring

the rich *pargana* of Dhorāji and Upleta as well as Sarsai, &c. The ruler entered into engagements with the British in 1807. The family holds a *sanad* authorizing adoption; the succession follows the rule of primogeniture. The chief is entitled to a salute of 11 guns. The present chief, H. H. Thākur Sāhib Sir Bhagvat Sinhji, was created a K.C.I.E. in 1887, and a G.C.I.E. in 1897. He has also received the degrees of LL.D. and D.C.L.

The population at the last four enumerations was: (1872) 137,217, (1881) 135,604, (1891) 161,036, and (1901) 162,859. There are 5 towns and 169 villages. In 1901 Hindus numbered 125,397, Musalmāns 30,442, and Jains 6,811. The capital is GONDAL TOWN.

For purposes of irrigation, water is drawn in leathern bags from wells and rivers by means of bullocks. A new water-works scheme for both irrigation and water-supply has recently been completed at a cost of $5\frac{1}{2}$ lakhs. The net revenue realized by the end of 1904 showed a return of 1·14 per cent. on irrigation outlay and 1·04 per cent. on water-supply outlay. Out of the total area of 1,024 square miles, 612 were returned in 1903–4 as cultivated. The total irrigated area is 53 square miles. An experimental farm and four public gardens are maintained. Horse-breeding is carried on with four stallions, and cattle-breeding with two bulls. The chief products are cotton and grain; and the chief manufactures are cotton and woollen fabrics, gold embroidery, brass and copper utensils, wooden toys, and ivory bangles. The State contains six ginning factories and one cotton-press. There are $11\frac{1}{2}$ miles of first-class metalled road between Gondal and Rājkot. Gondal has always been pre-eminent amongst the States of its class for the vigour and success with which public works have been prosecuted. The produce of the State is exported from Māngrol, Verāval, and Jodiya. In 1903–4 the exports were valued at more than 8 lakhs, and the imports at $22\frac{1}{2}$ lakhs. The Bhavnagar-Gondal-Junāgarh-Porbandar Railway passes through the State, which has a share in the line, and also a branch of it, the Jetalsar-Rājkot Railway, in which the State has a three-eighths share.

Gondal ranks as a first-class State in Kāthiāwār. The chief has power to try his subjects for all offences, the trial of British subjects for capital offences, however, requiring the previous permission of the Agent to the Governor. The estimated gross revenue in 1903–4 was more than 15 lakhs, chiefly derived from land (12 lakhs): and the expenditure was 13 lakhs. The State pays a tribute of Rs. 1,10,721 to the British Government, the Gaikwār of Baroda, and the Nawāb of Junāgarh. Of the five municipalities, the largest is Gondal. The police force consists (1905) of 400 mounted and foot police, and there is an armed irregular force of 203 men. Eleven courts administer civil and criminal justice; and there are two jails and two lock-ups, which had

a daily average of 93 prisoners in 1903–4. Besides a Girāsia college at Gondal, the State contains 85 schools with 6,803 pupils. In 1903–4 there were 2 hospitals and 4 dispensaries, affording relief to 46,000 persons, of whom 1,300 were in-patients. In the same year 3,800 persons were vaccinated.

Gondal Town.—Capital of the State of the same name in Kāthiāwār, Bombay, situated in 21° 57′ N. and 70° 53′ E., on the western bank of the Gondali river. Population (1901), 19,592, including 12,995 Hindus, 4,289 Musalmāns, and 2,239 Jains. Gondal is connected with Rājkot, Jetpur, Junāgarh, Dhorājī, Upleta, and Mānekwāra by good roads. It is a railway station on the branch line between Rājkot-Jetalsar on the Bhavnagar-Gondal-Junāgarh-Porbandar Railway. The town is fortified. It contains two public gardens, an orphanage, an asylum, a hospital, and a Girāsia college.

Gondiā.—Village in the Tirorā *tahsīl* of Bhandāra District, Central Provinces, situated in 21° 28′ N. and 80° 13′ E., on the Bengal-Nāgpur Railway, 81 miles from Nāgpur and 601 from Bombay. Gondiā is the junction for the new Sātpurā narrow-gauge railway which runs to Jubbulpore across the Sātpurā plateau. Population (1901), 4,457. It is one of the two leading goods stations in Bhandāra District, receiving the produce of the surrounding area of Bhandāra and of the lowlands of the adjoining Bālāghāt District. A large weekly grain market is held here. The greater part of the town stands on Government land, and the ground rents realized are credited to a fund for sanitary purposes, which is supplemented by a house rate. A branch station of the American Pentecostal Mission at Rāj-Nāndgaon has recently been established. Gondiā contains Hindī and Marāthī primary schools, and a dispensary.

Gondwāna.—A name given by the Muhammadans to a tract of country now in the Central Provinces and Central India. Abul Fazl describes Gondwāna or Garhā Katankā as bounded on the east by Ratanpur, a dependency of Jhārkhand or Chotā Nāgpur, and on the west by Mālwā, while Pannā lay north of it, and the Deccan south. This description corresponds fairly closely with the position of the SĀTPURĀ plateau, as the Chhattīsgarh plain on the east belonged to the Ratanpur kingdom, incorrectly designated as a dependency of Chotā Nāgpur, while part of the Narbadā valley was included in the old Hindu kingdom of Mālwā. Little or nothing was known of Gondwāna at this time; and indeed as late as 1853 it was stated before the Royal Asiatic Society that 'at present the Gondwāna highlands and jungles comprise such a large tract of unexplored country that they form quite an oasis in our maps.' Gondwāna to the Muhammadans signified the country of the Gonds, the Dravidian tribe at present bearing that name. How they obtained it is a question which has

been discussed by General Cunningham[1]. As pointed out by him, the Gonds do not call themselves by this name, but commonly by that of Koitūr. He considers that Gond probably comes from Gauda, the classical name of part of the United Provinces and Bengal. A Benares inscription relating to one of the Chedi kings of Tripura or Tewar (near Jubbulpore) states that he was of the Haihaya tribe, who lived on the banks of the Narbadā, in the district of the western Gauda in the province of Mālwā. Three or four other inscriptions also refer to the kings of Gauda in the same locality. The hypothesis can scarcely be considered as more than speculative; but, if correct, it shows that the name Gond has simply a local signification, the Gonds being the inhabitants of western Gauda, and the name being derived from the same source as that of the Gaur Brāhmans and Rājputs.

More than $2\frac{1}{4}$ millions of Gonds were enumerated at the Census of 1901, of whom nearly 2 millions belong to the Central Provinces, and the remainder to Bengal, Madras, and Berār. Large numbers of them live on the Sātpurā plateau, the Chotā Nāgpur plateau, and the hills of Bastar between the Mahānadī and Godāvari, while they are less numerous on the Vindhyan Hills. The Gonds are among the most important of all the Dravidian tribes, and were formerly a ruling race, the greater part of the Central Provinces having been held by three or four Gond dynasties from about the fourteenth to the eighteenth century. Such accounts of them as remain, even allowing for much exaggeration, indicate the attainment of a surprising degree of civilization and prosperity. So far back as the fifteenth century we read in Firishta that the king of Kherlā sumptuously entertained Ahmad Shāh Walī, the Bahmani Sultān, and made him rich offerings, among which were many diamonds, rubies, and pearls. Under the Garhā-Mandlā dynasty the revenues of Mandlā District are said to have amounted to 10 lakhs of rupees. When the castle of Chaurāgarh was sacked by one of Akbar's generals in 1564, the booty found, according to Firishta, comprised, independently of jewels, images of gold and silver and other valuables, no fewer than a hundred jars of gold coin, and a thousand elephants. Of the Chānda rulers the Settlement officer who has recorded their history wrote that 'they left, if we forget the last few years, a well-governed and contented kingdom, adorned with admirable works of engineering skill, and prosperous to a point which no after-time has reached.'

These States were subverted by the Marāthās in the eighteenth century, and the Gonds were driven to take refuge in the inaccessible highlands, where the Marāthās continued to pillage and harass them, until they obtained an acknowledgement of their supremacy and the promise of an annual tribute. Under such treatment the hill Gonds

[1] *Records of the Archaeological Survey*, vol. ix, p. 150.

soon lost every vestige of civilization, and became the cruel treacherous savages depicted by travellers of this period, when they regularly plundered and murdered stragglers and small parties passing through their hills, while from their strongholds, built on the most inaccessible spurs of the Sātpurās, they would make a dash into the rich plains of Berār or the Narbadā valley, and after looting and killing all night, return straight across country to their jungle fortresses, guided by the light of a bonfire on some commanding peak. With the pacification of the country and the introduction of a strong and equable system of government by the British, these wild marauders soon settled down and became the timid and inoffensive labourers which they now are.

Owing to their numbers and wide distribution, the internal structure of the Gond tribe is somewhat complex. In Chānda and Bastar especially are found a number of sub-tribes, as the Mārias, Parjās, and Koyās, of whom it may at least be surmised that the name of Gond, as applied to them, has rather a local than a tribal signification, and that they are as distinctly separate tribes as the other branches of the Dravidian stock. A number of occupational groups have also come into existence, which are endogamous, and sometimes occupy a lower position in the social scale than the Gonds proper. Such are the Pardhāns or bards and minstrels, Ojhās or soothsayers, Agariās or iron-workers, Gowāris or graziers, Naiks or those who were formerly soldiers, and Koilābhūtis or dancers and prostitutes. The Pardhāns, Ojhās, and Koilābhūtis will eat from a proper Gond's hand, but a Gond will not eat with them. These professional groups, though included among Gonds by common usage, form practically separate castes. The tribe proper has two main divisions: the Rāj Gonds, who form the aristocracy; and the Dhūr, or 'dust' Gonds, the people. The latter are also called by the Hindus Rāvanvansis or descendants of the demon Rāvana, who was destroyed by Rāma. The Rāj Gonds, who include the majority of the *zamīndārs*, may roughly be taken to be the descendants of Gond landed proprietors who have been formed into a separate subdivision and admitted to Hinduism with the status of a cultivating caste, Brāhmans taking water from them. The elevation is justified by the theory that they have intermarried with Rājputs, but this has probably occurred only in a few isolated instances. Some Rāj Gonds wear the sacred thread, and outdo Brāhmans in their purificatory observances, even having the wood which is to cook their food washed before it is burnt. But many of them are obliged once in four or five years to visit their god Būra Deo, and to place cow's flesh to their lips wrapped in a cloth, lest evil should befall their house. The Khatulhā Gonds, found principally in the north, also have a somewhat higher status than the ordinary Gonds, and appear to have belonged to the old Khatolā State in Bundelkhand.

The exogamous divisions of the Gonds are somewhat complicated. The primary classification is according to the number of gods worshipped. The worshippers of 7, 6, 5, and 4 gods form different divisions, within which marriage is prohibited: that is, worshippers of the same number of gods may not intermarry. Each division also has a totem—that of the 7-god worshippers being a porcupine, of the 6-god worshippers a tiger, of the 5-god worshippers a crane, and of those of 4 gods a tortoise. But each of these divisions is further split up into a number of totemistic septs, and members of a sept may not marry those of a sept having the same totem in another division though worshipping a different number of gods. In many cases also particular septs with different totems in different divisions may not intermarry, the explanation being that a relationship exists between these septs. The whole system is somewhat confused, and the rules are indefinite, while the divisions according to numbers of gods worshipped appear to be absent in the northern Districts of the Central Provinces.

The marriage ceremony is performed in several ways. The Rāj Gonds have adopted the Hindu ceremonial. On the other hand, in Bastar and Chānda, the primitive form of marriage by capture is still in vogue, though the procedure is now merely symbolical. The most distinctive feature of a Gond wedding is that the procession usually starts from the bride's house and the ceremony is performed at that of the bridegroom, in contradistinction to the Hindu practice. When a Gond wishes to marry his children he first looks to his sister's children, whom he considers himself to be entitled to demand for his own, such a marriage being called 'bringing back the milk.' Among the poorest classes the expectant bridegroom serves the bride's father for a period varying from three to seven years, at the end of which the marriage is celebrated at the latter's expense. In Khairāgarh the bridal pair are placed in two pans of a balance and covered with blankets. The caste priest lifts up the bridegroom's pan and the girl's relatives the other, and they walk round with them seven times, touching the marriage-post at each turn. After this they are taken outside the village without being allowed to see each other. They are placed standing at a little distance with a screen between them, and liquor is spilt on the ground to make a line from one to the other. After a time the bridegroom lifts up the screen, rushes on the bride, gives her a blow on the back, and puts the ring on her finger, at the same time making a noise in imitation of the cry of a goat. All the men then rush indiscriminately upon the women, making the same noise, and indulge in bacchanalian orgies, not sparing their own relations. The Māria Gonds consider the consent of the girl to be an essential preliminary to the marriage. She gives it before a council of elders, and if

necessary is allowed time to make up her mind. For the marriage ceremony the couple are seated side by side under a green shed, and water is poured on them through the shed in imitation of the fertilizing action of rain. Some elder of the village lays his hands on them, and the wedding is over. In the Māria villages, as in Chhattīsgarh, there are *gotalghars*, or two houses or barracks in which all the youths and maidens respectively of the village sleep. They sing and dance and drink liquor till midnight, and are then supposed to separate, and each sex to retire to its own house. Marriage is adult, and divorce and widow marriage are freely allowed.

The funeral ceremonies of the Gonds are interesting. The corpse is usually buried with its feet to the south; the higher classes burn their dead, this honour being particularly reserved for old men on account of the expense involved in cremation. Formerly the dead were buried in the houses in which they died, but this practice has now ceased. On the fifth day after death the ceremony of bringing back the soul is performed. The relations go to the river-side and call aloud the name of the dead person, and then enter the river, catch a fish or an insect, and taking it home, place it among the sainted dead of the family, believing that the spirit of the dead person has in this manner been brought back to the house. In some cases it is eaten, in the belief that it will thus be born again as a child. The good souls are quickly appeased, and veneration for them is confined to their descendants. But the bad ones excite a wider interest because their evil influences may extend to others. A similar fear attaches to the spirits of persons who have died a violent or unnatural death.

The religion of the Gond is simply animistic. He deifies ancestors, who are represented by small pebbles kept in a basket in the holiest part of the house, that is, the kitchen, where he regularly worships them at appointed intervals. His greatest god is Būra Deo; but his pantheon includes many others, some being Hindu gods, and others animals or implements to which Hindu names have been attached. Among them may be mentioned Bhīmsen, one of the Pāndava brothers; Pharsī Pen, the battle-axe god; Ghangrā, the bell on a bullock's neck; Chawar, the cow's tail; Bāgh Deo, the tiger; Dūlha Deo, a young bridegroom who was carried off by a tiger; Pālo, the cloth covering for spear-heads; and others. In Chhindwāra are found *deo khalās*, or 'gods' threshing-floors,' at which collections of the gods reside, and where gatherings are held for worship several times a year.

The Gonds are principally engaged in agriculture, and the majority of them are farm servants and labourers. The more civilized are also police constables and *chaprāsis*, and the Mohpāni coal-miners are mainly Gonds. They work well, but like the other forest tribes are improvident and lazy when they have got enough for their immediate

wants. 'A Gond considers himself a king if he has a pot of grain in his house,' says a proverb. The Gonds are of small stature and dark in colour. Their bodies are well proportioned, but their features are ugly, with a round head, distended nostrils, a wide mouth and thick lips, straight black hair, and scanty beard and moustache. The Mārias are taller and have more aquiline features than the other tribes.

About half of the Gonds in the Central Provinces speak a broken Hindī, while the remainder retain their own Dravidian language, popularly known as Gondī. This has a common ancestor with Tamil and Kanarese, but little immediate connexion with its neighbour Telugu. Gondī has no literature and no character of its own; but the Gospels and the Book of Genesis have been translated into it, and several grammatical sketches and vocabularies have been compiled.

Goomsur Subdivision.—Subdivision of Ganjām District, Madras, consisting of the *tāluk* of GOOMSUR and the *zamīndāri tahsīls* of SURADA and ASKA.

Goomsur Tāluk.—Northernmost Government *tāluk* in the plains of Ganjām District, Madras, lying between 19° 35′ and 20° 17′ N. and 84° 8′ and 84° 59′ E., with an area of 1,141 square miles. The population in 1901 was 200,357, compared with 185,870 in 1891. The number of villages is 697. The head-quarters are at RUSSELLKONDA (population, 3,493). The demand for land revenue and cesses in 1903–4 was Rs. 3,28,000. More than half of the *tāluk* consists of forest, and this is the most important timber-growing area in the District, the *sāl* (*Shorea robusta*) being especially fine. The land is fertile and much of it is irrigated by the RUSHIKULYA Project and several large streams, but a considerable area is still unoccupied. Sugar-cane is grown in the centre and south. The *paiks*, who hold about 10,000 acres of land at favourable rates on condition of performing service if called upon, are an interesting remnant of the old feudal system. They are now generally employed as guards at public offices.

Goomsur-Udayagiri.—Agency *tāluk* of Ganjām District, Madras. *See* UDAYAGIRI.

Goona.—Town and military station in Central India. *See* GUNA.

Gooty Subdivision.—Subdivision of Anantapur District, Madras, consisting of the GOOTY and TĀDPATRI *tāluks*.

Gooty Tāluk.—Northern *tāluk* of Anantapur District, Madras, lying between 14° 47′ and 15° 14′ N. and 77° 6′ and 77° 49′ E., with an area of 1,054 square miles. The population in 1901 was 156,155, compared with 142,917 in 1891. There are 142 villages and three towns: GOOTY (population, 9,682), the head-quarters of the *tāluk* and subdivision, famous for its ancient rock-fortress; URAVAKONDA (9,385), the head-quarters of the deputy-*tahsīldār*; and PĀMIDI (10,657), noted for its hand-printed chintzes. The demand for land revenue and cesses

in 1903–4 amounted to Rs. 3,16,000. In the south and west of the *tāluk* are large plains of fertile black cotton soil. A soft limestone is generally found from 5 to 10 feet below this, which is partially soluble in water. Trees planted here grow well for three or four years, but as soon as their roots strike the limestone strata they cease to flourish. In the north and east the soil is red and gravelly; in many places rocky and stony. The Penner is the only river in the *tāluk*. Small channels are dug from it by the villagers and are renewed year by year. The custom is that each ryot contributes a day's labour (personal or hired) towards the clearing of the channels for every acre irrigated from them which he possesses. The tanks in the *tāluk* are insignificant and only two of them supply more than 200 acres each. The principal crops are *cholam* and cotton on the 'dry,' and rice and *rāgi* on the 'wet' soil.

Gooty Town (*Gutti*).—Head-quarters of the subdivision and *tāluk* of the same name in Anantapur District, Madras, situated in 15° 7′ N. and 77° 39′ E., on the Madras Railway, 30 miles from Anantapur town, 47½ miles from Bellary, and 258 miles from Madras. Population (1901), 9,682.

The centre of the place is its famous old hill-fortress. A roughly circular cluster of steep, bare, rocky hills, each connected with the next by lower spurs, encloses in its midst a considerable area of level ground. Within this enclosure is the original town of Gooty. Round the outside of the cluster of hills runs a strong wall or rampart, built of stone pointed with *chunām*, which is guarded by frequent round towers or bastions. On the north and on the west, where the connecting spurs are lowest, two openings through this wall lead into the town. In former days these were fortified and provided with gates. Two small sally-ports in the wall also lead to paths across the outer circle of hills. The westernmost hill of this circle is a huge, precipitous mass of bare rock, which towers hundreds of feet above all the others. On this is built the citadel. It is approached by a paved path which leads first to an outlying spur of considerable extent, itself strongly fortified, and known formerly as Mar Gooty, then passes through the fortifications on this spur, winds upwards round the steep sides of the great rock above it, and at length reaches the summit of the fortress, 2,105 feet above sea-level and about 1,000 feet above the surrounding country. This rock commands the whole of the other fortifications, and also the town in their centre; it is defended by a series of walls perched one above the other along its precipitous sides and connected with re-entering gateways flanked by bastions, forming a citadel which famine or treachery could alone reduce. It is supplied with water from a number of reservoirs made in the clefts of the rock to catch the rain. One of these is traditionally declared to be connected with a stream at its foot. The fort contains no buildings or remains of architectural

interest. On the top are two erections which were apparently a gymnasium and a powder-magazine; and on the edge of a cliff some 300 feet high stands a small pavilion of polished *chunām*, called Morāri Rao's Seat, which commands an excellent view of the town below. Here, it is said, Morāri Rao used to sit and play chess or swing himself, varying the monotony by now and again watching a prisoner hurled from the top of the adjoining rock. Many other buildings are in ruins, and some of these were used by Munro as state prisons for refractory *poligārs*. In 1838 the hill chiefs who had been concerned in the rebellions in Ganjām were confined here. Within Mar Gooty are the barracks at one time occupied by the detachment of Native infantry which was posted here when the place was ceded to the Company. The fort and the buildings are on the list of constructions specially maintained by Government.

The old town of Gooty in the hollow within the circle of hills is very crowded and, owing to its situation, unpleasantly warm in the hot season. Consequently the place is now extending on the level ground to the west of the hills, outside the fortifications. Here are the divisional and *tāluk* offices, the travellers' bungalow, and the buildings belonging to the London Missionary Society. The only public office still within the fort is the District Munsif's court.

At the foot of the path leading to the citadel is the European cemetery. Here rested for a short time the body of Sir Thomas Munro, who died at Pattikonda in Kurnool on July 6, 1827, when on a farewell tour, as Governor of the Presidency, through his beloved Ceded Districts. His remains now lie in St. Mary's Church in the Fort at Madras, but a cenotaph stands in the Gooty cemetery. At Pattikonda, Government planted a grove and constructed a reservoir to his memory; and at Gooty it built at a cost of Rs. 33,000 the Munro Chattram (in which hangs an engraving of Archer Shee's full-length portrait of Munro now in the Banqueting Hall at Madras), and also the tank facing the hospital and adjoining the road to the station. For the upkeep of these an endowment in land and money of Rs. 2,045 per annum was granted. Part of this was originally expended in feeding travellers in the *chattram*, and part in the maintenance of a dispensary in the veranda. In 1869 the dispensary was removed to the building now occupied by the hospital, which was erected from the endowment, the feeding of travellers was discontinued, and Rs. 1,500 out of the endowment was transferred to the upkeep of the dispensary in its new quarters. In 1884 the institution was handed over to the management of the *tāluk* board, and it is now known merely as the hospital, few people seeming to remember that it ever had any connexion with the Munro memorials.

Materials for a complete history of the fort are not available. In-

scriptions on the rocks on the summit show that it was a place of importance as far back as the eleventh century. It was one of the chief strongholds of the Vijayanagar kings, and the Musalmāns did not succeed in taking it until some years after they had finally defeated that dynasty. About 1746, Morāri Rao, the famous Marāthā warrior whose exploits figure so largely in South Indian history, established himself here, and he repaired its fortifications. In 1775 Haidar Alī of Mysore captured the place after a long siege. The water-supply ran out and the garrison were dying of thirst, and Morāri Rao was obliged to capitulate. Haidar sent him to a prison on the Kabbāldurga hill in Mysore, from which he never emerged again. Haidar and his son Tipū held the fort until 1799, when, on the latter's death at the storm of Seringapatam, it fell to the Nizām. It was captured by Colonel Bowser on the Nizām's behalf in the same year from a rebel who had seized it, and since 1800 it has been a British possession. A garrison of two companies was maintained in it until about 1860.

Gopālganj Subdivision.—Northern subdivision of Sāran District, Bengal, lying between 26° 12′ and 26° 39′ N. and 83° 54′ and 84° 55′ E., with an area of 788 square miles. The subdivision consists of a level alluvial plain, bounded on the east by the river Gandak. The population in 1901 was 635,047, compared with 634,630 in 1891. This is the least crowded part of the District, supporting only 806 persons per square mile. It contains one town, MĪRGANJ (population, 9,698), and 2,148 villages; the head-quarters are at GOPALGANJ VILLAGE.

Gopālganj Village.—Head-quarters of the subdivision of the same name in Sāran District, Bengal, situated in 26° 28′ N. and 84° 27′ E. Population (1901), 1,614. It contains the usual public offices; the sub-jail has accommodation for 18 prisoners.

Gopālpur.— Chief port of Ganjām District, Madras, situated in 19° 16′ N. and 84° 53′ E., 9 miles south-east of Berhampur. Population (1901), 2,150. It is a port of call for the coasting steamers of the British India Steam Navigation Company, and for many other vessels. The principal exports are grain and pulse, hides and skins, *sāl* timber, hemp, coir manufactures, oilseeds, myrabolams, and dried fish; while the chief imports are sugar, piece-goods, apparel, jute manufactures, liquors, matches, kerosene oil, cotton twist, and metals. In 1903–4 the exports were valued at Rs. 14,32,000 and the imports at Rs. 2,57,000; and 7,400 passengers proceeded to and 8,300 returned from Burma. The port light (fixed white) is exhibited from a platform on the flagstaff at a height of 54 feet above high water, and is visible for 10 miles in clear weather. There is also a small red light on the extreme end of the pier-head, 25 feet above high water, and visible about 3 miles. The port is an open roadstead with no shelter whatever, but landing and shipping operations are possible throughout the year, except

occasionally when the surf is very high. An iron screw-pile pier, 860 feet in length, is useless to the shipping, as it does not extend outside the line of surf. It is undergoing rapid deterioration; but the Government has decided not to incur any further expenditure upon it, as the trade of the port has greatly diminished since the construction of the railway. The best anchorage (sand and mud) is found in 6 to 7 fathoms about $1\frac{1}{2}$ miles from the shore. The sandhills in the vicinity have been planted with casuarina trees to stop further encroachment.

Gopālswāmi Betta.—Hill in the Gundalpet *tāluk* of Mysore District, Mysore, situated in 11° 43′ N. and 76° 35′ E.; 4,770 feet high. The base is about 16 miles in circuit and the ascent is about 3 miles. The hill is generally enveloped in clouds and mist, whence its name of Himavad Gopālswāmi, but when clear it commands an extensive view over Mysore and the Wynaad. The Purānic name is Kamalādri, or Dakshina Govardhangiri. It abounds in springs. About the eleventh century it was fortified by the Nava Danāyaks, and from the end of the fifteenth to the middle of the seventeenth century was the stronghold of the Kote or Bettadakote chiefs, who were also rulers of the Nilgiris. The temple of Gopālswāmi (Vishnu), inside the fort, is visited by pilgrims.

Gopāmau.—Town in the District and *tahsīl* of Hardoī, United Provinces, situated in 27° 32′ N. and 80° 18′ E., near the Gumti. Population (1901), 5,656. According to tradition, it was founded in the eleventh century by an Ahban chief, named Rājā Gopī, who drove out the Thatherās from what was then a clearing in the forest. The Muhammadan invasion is said to date from the invasion of Oudh by Saiyid Sālār, but the first authentic occupation was in the thirteenth century. The town flourished under native rule and sent out numbers of distinguished soldiers and men of letters, who returned to adorn their native place with mosques, wells, and large buildings. It is now a place of small importance and has little trade; but silver thumb-rings made locally, in which small mirrors are set, have some artistic merit. There is a school with 112 pupils.

Gopichettipālaiyam.—Head-quarters of the Satyamangalam *tāluk* in Coimbatore District, Madras, situated in 11° 27′ N. and 77° 26′ E., 25 miles north-west of Erode railway station. Population (1901), 10,227. It contains the best 'wet' land in the *tāluk*, and is inhabited by well-to-do ryots and traders. It has therefore recently supplanted Satyamangalam as the chief town of the *tāluk*. Corundum has been found here in fair quantities.

Gorāghāt.—Ruined city in Dinājpur District, Eastern Bengal and Assam. *See* GHORĀGHĀT.

Gorai.—River of Bengal and Eastern Bengal and Assam. *See* GARAI.

Gorakhpur Division.—Division in the north-east of the United Provinces, extending from the borders of Nepāl to the south of the Gogra, and lying between 25° 38′ and 27° 30′ N. and between 82° 13′ and 84° 26′ E. The northern portion includes a damp alluvial tract in Gorakhpur District, containing forests. It is crossed by the RĀPTĪ, and skirted on the north-east by the GREAT GANDAK. The head-quarters of the Commissioner are at GORAKHPUR CITY. Population increased rapidly from 1872 to 1891, but received a check in the next decade, owing to mortality from an epidemic of fever, increased emigration, and the effects of the famine of 1896–7. The numbers at the four enumerations were as follows: (1872) 4,810,016, (1881) 5,852,386, (1891) 6,508,526, and (1901) 6,333,012. The total area is 9,534 square miles, and the density of population is 664 persons per square mile, compared with 445 for the whole of the United Provinces. This Division, though it contains a smaller area than any other, ranks second in population. In 1901 Hindus formed 87 per cent. of the total, and Musalmāns nearly 13 per cent. Christians numbered 1,721 (1,197 being natives), and Sikhs 1,646. The Division contains three Districts, as shown in the following table:—

District.	Area in square miles.	Population, 1901.	Land revenue and cesses, 1903–4, in thousands of rupees.
Gorakhpur	4,535	2,938,176	29,38
Bastī	2,792	1,846,153	23,21
Azamgarh	2,207	1,548,683	20,69
Total	9,534	6,333,012	73,28

Gorakhpur and Bastī are situated north of the Gogra, and Azamgarh south of that river. The Division contains 19,135 villages, but only 34 towns, and is remarkable for the manner in which houses are scattered about in small hamlets, instead of being collected in central sites, as in the western portions of the United Provinces. The only town with a population exceeding 20,000 is GORAKHPUR (64,148, with a small area which was till lately a cantonment). GORAKHPUR, AZAMGARH, BARHAJ, BARHALGANJ, USKĀ, PADRAUNĀ, and GOLĀ are at present the chief trading centres, but the recent improvements in railway communications are changing the former conditions. The site of KAPILAVASTU, where Gautama Buddha was born, is now known with some degree of certainty to lie close to the northern border of Bastī District, and both Bastī and Gorakhpur contain many ruins dating from Buddhist times. The site near KASIĀ is especially interesting. MAGHAR is connected with the life of the great reformer, Kabīr.

Gorakhpur District.—Eastern District in the Division of the same

name, United Provinces, lying between 26° 5′ and 27° 29′ N. and 83° 4′ and 84° 26′ E., with an area of 4,535 square miles. It is bounded on the north by Nepāl territory; on the east by the Champāran and Sāran Districts of Bengal; on the south by the Gogra, which divides it from Ballia and Azamgarh; and on the west by Basti. The

Physical aspects.

District lies a few miles from the most southern slopes of the lower range of hills in Nepāl, but no greater elevation than a few sandhills breaks the monotony of its level surface. It is, however, intersected by numerous rivers and streams, and dotted over with lakes and marshes. The water-supply is abundant, and the moisture of the soil gives a verdant appearance to the country which contrasts strongly with the arid aspect of the Districts south of the Gogra. In the north and centre extensive tracts of *sāl* forest diversify the scene, though the trees are not as a rule of any great size. In the south the general expanse of close cultivation is diversified by shady mango groves or intersected by frequent small lakes. The west and south-west are low-lying plains subject to extensive inundations. In seasons of heavy rain the water collects in the valley of the Amī, and, joining the lakes to the east, forms an immense inland sea. The District is drained chiefly into the GOGRA, a large and rapid river which forms the southern border. Its main tributary is the RĀPTĪ, which winds across the west with a very tortuous and shifting channel, and receives a number of affluents, including the Rohini and Amī. West of the Rāptī flows the Kuwānā, and east of it the LITTLE GANDAK. The eastern border is skirted in places by the GREAT GANDAK or Nārāyanī, a large and rapid stream which receives very little drainage from Gorakhpur. The chief perennial lakes are the Nadaur, Rāmgarh, Narhar, Chillūā, Rāma Bhār, Amiār, and Bheori Tāls.

The District exposes nothing but alluvium. As is usual in the submontane tract, even the calcareous limestone commonly found throughout the Gangetic valley is rare.

The flora of the District resembles that found in the submontane tract of Northern India. Outside the forests, which are described separately, the principal trees are mango, various kinds of fig, *shīsham* (*Dalbergia Sissoo*), *mahuā* (*Bassia latifolia*), guava, jack-fruit, and *jāmun* (*Eugenia Jambolana*).

Tigers and leopards are fairly common in the north of the District, and a few wild buffaloes and a single rhinoceros have been shot within the last few years. Spotted deer and hog deer, and occasionally sloth bears, are found in the same locality. Wild hog, *nīlgai*, wolves, and jackals occur all over the District. The numerous lakes are the homes of an immense variety of water-birds. Snakes are found everywhere, and the python is sometimes seen in the forest. Fish are plentiful in

both rivers and lakes, and form an important article of food. The crocodile and the *gharīāl* are common, and the former often causes loss of life.

The District is not subject to intense heat, being secured from extremes by its vicinity to the hills and the moisture of its soil. The climate is, however, relaxing, and there is no bracing cold; temperature seldom rises above 92° in the hot season or falls below 60° in the winter. The southern and eastern portions, where the jungle has been cleared, are as healthy as most parts of the Provinces; but the damp *tarai* and the forest tracts are still subject to malaria.

The annual rainfall over the whole District averages 45 inches; but the north receives more than 54 inches, while the south-east receives only 44. Variations from year to year are considerable. In 1890 the fall was 87 inches, and in 1868 only 25.

History.

The history of the District up to a comparatively recent date is chiefly to be gathered from the uncertain and contradictory traditions current among the inhabitants. The birthplace of Gautama Buddha is situated close to the north-east border, and for many years the remains near Kasiā were believed to mark the spot at which he died; but the identification is now disputed[1]. In the fifth century the south of Gorakhpur was probably included in the Gupta kingdom of MAGADHA. The Chinese pilgrim in the seventh century A.D. describes the north of the District or the tract on its border as waste and desolate, though many ruins were found. Local tradition declares that the Bhars ruled in the District, and were gradually displaced by the Rājput clans which now hold it. During the twelfth century it appears to have been included in the great kingdom of Kanauj. The Musalmāns for long obtained no hold of Gorakhpur, which continued to be governed by petty Rājās. In the fifteenth century one of these founded a small kingdom, which extended over a considerable area in both Gorakhpur and Champāran. Under Akbar an expedition was sent across the Gogra for the first time in pursuit of Khān Zamān, the rebel governor of Jaunpur. Other expeditions followed, and a *sarkār* of Gorakhpur was formed, and included in the *Sūbah* of Oudh. The Muslim yoke was, however, shaken off in the early part of the seventeenth century, and it was not till the accession of Aurangzeb that the Mughal power was really felt. About 1680 prince Muazzam (afterwards Bahādur Shāh) visited Gorakhpur, and a new division, called Muazzamābād, was formed in his honour, which included part of Sāran. Under the Nawābs of Oudh a firmer grasp of the country was taken. Intestine quarrels between the Rājās and the incursions of the Banjārās in the early part of the eighteenth century led to a decline in prosperity, and

[1] V. A. Smith, *The Remains near Kasiā*, 1896.

in 1750 the Nawāb of Oudh sent a large army under Alī Kāsim Khān. The submission of the Rājās was obtained and tribute was collected from them; but no regular government was carried on by the Muhammadans. After the battle of Buxar in 1764 a British officer was lent to the Oudh government, who exercised almost supreme power over the south of the District; but in the north the local Rājās and a few officials were employed to collect the revenue, which was exceedingly precarious. Extortion and internecine quarrels had reduced the District to great misery, when in 1801 it was ceded to the British. In the next few years the Nepālese encroached on the northern border, and remonstrances being fruitless war was declared in 1814. The contest ended in 1816, and small concessions were made in this District to the Nepālese. On the outbreak of the Mutiny in 1857 disturbances occurred, and most of the troops at Gorakhpur mutinied. In August the station was abandoned and a rebel government under Muhammad Hasan was established; but in January, 1858, a Gurkha force under Jang Bahādur marched in from the north and Colonel Rowcroft's troops from the south. Muhammad Hasan was driven away and order was soon re-established.

Memorials of the time when Buddhism was the prevailing religion are found in the shape of ruined brick *stūpas* and monasteries in all parts of the District; but few of these have been excavated. The best known is the *stūpa* near KASIĀ, and the temple containing a stone figure of the dying Buddha. An inscription dated A.D. 460–1, in the reign of Skanda Gupta, was found on a pillar in the south of the District. A number of copperplate grants of the last Hindu kings of Kanauj have been dug up from time to time. There are no Muhammadan buildings of interest.

Gorakhpur District contains 18 towns and 7,544 villages. Population increased considerably between 1872 and 1891, but decreased in the next decade. The numbers at the four enumerations were as follows: (1872) 2,019,361, (1881) 2,617,120, (1891) 2,994,057, and (1901) 2,957,074. The District supplies many emigrants to other parts of India and abroad. In 1894 an epidemic of fever caused great mortality, and drought in 1896 increased emigration, especially to Nepāl. There are six *tahsīls*—BĀNSGAON, MAHĀRĀJGANJ, PADRAUNĀ, HĀTĀ, DEORIĀ, and GORAKHPUR—each named from its head-quarters. The only municipality is GORAKHPUR CITY, the administrative head-quarters of the District. The table on the next page gives the chief statistics of population in 1901.

Population.

In 1904 an area of 52 square miles belonging to the Bānsgaon *tahsīl* in the south of the District was transferred to Azamgarh, with a population of 18,898. Hindus form nearly 90 per cent. of the total and Musalmāns 10 per cent. In the northern part the density of population

is comparatively low, owing to the presence of forests and large areas of uncultivated land; but in the south it is exceedingly high. The northern portion suffered from the fever epidemic of 1894, while in the south famine was experienced in 1896 and 1897. More than 94 per cent. of the population speak Bihārī.

Tahsīl.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Bānsgaon . .	614	4	1,667	438,364	714	− 2·9	17,907
Mahārājganj .	1,239	1	1,265	504,325	407	− 1·4	9,969
Padraunā . .	928	3	1,285	595,706	642	− 1·6	10,879
Hātā . .	571	2	950	428,846	751	− 0·3	8,415
Deoriā . .	583	6	1,287	493,822	847	− 4·6	16,936
Gorakhpur .	652	2	1,090	496,011	761	+ 3·9	19,186
District total	4,587	18	7,544	2,957,074	645	− 1·2	83,292

The most numerous Hindu castes are: Chamārs (leather-workers and labourers), 353,000; Ahīrs (graziers and cultivators), 342,000; Brāhmans, 263,000; Kurmīs (agriculturists), 198,000; Koirīs (cultivators), 152,000; Rājputs, 141,000; Kewats (cultivators), 123,000; Baniās, 86,000; Bhars (labourers), 70,000; and Luniās (navvies), 66,000. The Bhuinhārs (agriculturists), 32,000, are important in the east of the District. The Bhars, who once held the land, and the Bhuinhārs and Kurmīs are most numerous in the east of the Provinces. The damp submontane tract is inhabited by a few Thārus, who seem fever-proof, and number 2,700. Among Muhammadans, the most numerous classes are Julāhās (weavers), 73,000; Shaikhs, 48,000; Pathāns, 39,000; and Behnās (cotton-carders), 29,000. The District is essentially agricultural, 72 per cent. of the population being supported by agriculture. More than half the land is held by Brāhmans, Bhuinhārs, and Rājputs, and the same three castes occupy about a fourth of the cultivated area.

The District contained 1,040 native Christians in 1901, of whom 731 belonged to the Anglican communion. The Church Missionary Society, which has laboured here since 1823, has three branches in the District. In 1890 a Zanāna Mission was established.

Agriculture.

The ordinary soils of the United Provinces are found, varying from sand and loam to clay. The loam is most prevalent in the south and west, and clay in the north. In the centre and east is found a peculiar calcareous soil, called *bhāt*, which is extremely fertile and very seldom requires irrigation owing to its power of retaining moisture. The clay tract in the north-west chiefly produces rice, while *kodon*, a small millet, is largely grown in the north-east. Along the chief rivers tracts of low-lying alluvial soil are found,

which are flooded during the rains, and for the most part produce spring crops.

At the last settlement 4,061 villages were held on *zamīndāri*, 4,552 on *pattīdāri*, and thirty-four on *bhaiyāchārā* tenures. There are also a few *talukas* which, as is usual in the Province of Agra, are settled with the under-proprietors or *birtiās*, who pay the Government demand plus a fee of 10 per cent. which is refunded to the *talukdār*. The main agricultural statistics for 1903–4 are shown in the following table, in square miles:—

Tahsīl.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Bānsgaon . .	614	429	199	53
Mahārājganj . .	1,239	740	173	175
Padraunā . . .	928	675	86	132
Hātā . . .	571	457	234	42
Deoriā . . .	583	456	243	37
Gorakhpur . .	652	480	197	78
Total	4,587	3,237	1,132	517

The principal food-crops, with the area under each in square miles, are: rice (1,358), or 42 per cent. of the net area cropped; barley (558); *kodon* and small millets (446); wheat (523); peas (462); gram (251); and maize (196). Oilseeds covered 336 square miles, sugar-cane 118, poppy 27, and indigo 15.

Attempts have been made from time to time to introduce new staples, such as hemp, cotton, and various kinds of rice, but without success. Indigo was started about 1830 by European planters, and a better class of dye is produced here than in any other part of the United Provinces. The relief afforded by a settled government and freedom from war had marked effects in the reclamation of waste land and the introduction of the valuable crops, sugar-cane and poppy. Since 1870 the net area cultivated has increased by about 16 per cent., while the area bearing two crops in a year has nearly doubled. Maize is much more largely grown than formerly, and occupies twice as large an area as it did twenty years ago. Very few advances are taken under the Agriculturists' Loans or Land Improvement Acts. Out of a total of 2·3 lakhs advanced during the ten years ending 1900, as much as 1·9 lakhs was advanced in the famine year 1896–7, chiefly for the construction of temporary wells. There have been practically no advances since 1900.

A few attempts have been made to improve the breed of cattle, but without any marked success. The north contains large grazing-grounds to which cattle are driven in the hot season. The ponies are very inferior; a stallion was kept for some years in the east, but no horse-breeding operations are carried on now. The richer landholders own elephants, of which about 400 are kept in the District. Sheep are bred

for wool and meat, and goats for milk, manure, and meat; but all are of a poor type.

In 1903–4, 1,132 square miles were irrigated, of which 475 were supplied from wells, 489 from tanks, and 168 from other sources. Well-irrigation is commonest in the south-east of the District, but it is increasing rapidly in the centre and north-east. Elsewhere tanks are more important. They include a large number of artificial excavations, which are, however, of small size. The large rivers have beds too low to supply irrigation except to the alluvial land on the border of their channels, and this is generally so moist as not to require watering. The small streams are, however, largely used, and in the north of the District they are dammed so as to flood the adjacent rice tracts. Regular channels for the distribution of water have been made on the estates of some European *zamīndārs*. The spring-level is so high that water is raised from wells over a large part of the District by means of a lever with an earthen pot attached. In the south bullocks work the wells. The commonest method of irrigation is, however, the swing-basket worked by men or women. Fields are not flooded as in the western Districts, but water is scattered over the land from small channels with a wooden shovel.

The District contains 173 square miles of 'reserved' forests, which extend along the Nepāl frontier and down the river Rohini to Gorakhpur city. The most valuable products are *sāl* timber (*Shorea robusta*) and fuel; but catechu is also extracted. In the north the 'reserved' land includes a large area under grass, which affords valuable grazing and also produces thatching-grass. In 1903–4 the total receipts were Rs. 88,000. The forests form the Gorakhpur division of the Oudh Circle, and are in charge of a Deputy-Conservator. About 100 square miles of jungle land are owned by private individuals, but in most of this area the valuable timber has been cut down.

Kankar or calcareous limestone is used for metalling roads and for making lime, but is scarce. The chief mineral product is saltpetre, extracted from saline efflorescences by Luniās.

Trade and communications.

The principal industry is sugar-refining, which is carried on in all parts of the District, especially in the centre and south-east. The methods usually adopted are those of the country, but a large sugar refinery, worked on European lines, was opened in 1903. The manufacture of indigo still survives, especially in the Padraunā *tahsīl*, where a number of factories are owned and managed by Europeans. A little coarse cotton cloth is woven for local use, and a peculiar cloth of mixed wool and cotton is also produced.

The most important export trade is that in agricultural produce, especially rice, barley, wheat, and sugar. Coarse rice is exported to

Districts south of the Gogra, while the finer kinds and wheat are sent to the western Districts and the Punjab. Sugar is exported to Cawnpore for distribution to Central India and Rājputāna, and the trade with Eastern Bengal is growing. Timber is supplied to the neighbouring Districts, and oilseeds are exported to Calcutta. The chief imports are piece-goods, obtained from Calcutta and Cawnpore; and salt, metals, and kerosene oil, from Calcutta. Traffic is now largely carried by rail; but the commerce of the Gogra still survives, and in particular rice and wood are carried by rail to Barhaj and Turtīpār, and then distributed by boat. Within the last few years a steamer service from Patna has been revived. There is a considerable trade with Nepāl across the frontier. Grain—especially rice—*ghī*, and spices are imported, and salt and piece-goods exported. There are no large commercial centres, and the trade of the District is carried on at numerous small towns and markets, among which BARHAJ is the most important.

The main line of the Bengal and North-Western Railway crosses the southern portion of the District, and a branch leaves Gorakhpur city and passes north. Another branch from Bhatnī gives through communication with Benares, and has a short line from Salempur to Barhaj. A branch has been sanctioned which will connect Gorakhpur city through the north of the District with Bettia. The roads are not good. Only 93 miles are metalled, while 923 are unmetalled. The former are in charge of the Public Works department, but the cost of all but 51 miles of metalled roads is charged to Local funds. Avenues of trees are maintained on 100 miles. The chief lines of road are those from Gorakhpur city to Ghāzīpur and Fyzābād, and the road from Barhaj to Padraunā, which is to be metalled throughout. The scarcity of *kankar* and the absence of stone render the metalling of roads difficult and expensive.

Famine.

Gorakhpur has usually escaped severe famine. Tradition tells of a great dearth in the reign of Aurangzeb, and of another in the eighteenth century, when tigers could find no other prey and killed 400 of the inhabitants of a town named Bhauāpār.

Droughts caused slight scarcity in 1803, 1809, and 1814; but even in 1837 the District escaped lightly. In 1860 there was an increase in crime; but both in that year and in 1868–9 distress was not severe. The effects of the drought of 1873–4 were aggravated by a rise in prices due to immense exports of grain to Bengal, and relief works were opened, but were only resorted to by labourers. In 1896 the rains ceased prematurely and the autumn crops suffered. Advances were freely given for seed and for the construction of wells. Relief works were opened in January, 1897, and in February more than 30,000 workers were employed on roads and tanks. The spring harvest was

good and works were closed when the rains fell, after a total expenditure of 2·9 lakhs on this form of relief.

The Padraunā *tahsīl* forms a separate subdivision in charge of a member of the Indian Civil Service stationed at Kasiā. The Deoriā and Hātā *tahsīls* form another subdivision in charge of a Deputy-Collector, whose head-quarters have recently been transferred from Majhaulī to Deoriā. The posting of a Civilian to Deoriā has recently been sanctioned. The remaining officers of the District staff, including two members of the Indian Civil Service and four Deputy-Collectors, reside at Gorakhpur city. Besides the ordinary District officials, two officers of the Opium department, one of the Salt department, and a Deputy-Conservator of Forests are stationed at Gorakhpur. There is a *tahsīldār* at the head-quarters of each *tahsīl*.

Administration.

There are three District Munsifs and a Subordinate Judge. The District and Sessions Judge has civil jurisdiction throughout both Gorakhpur and Bastī, but hears Sessions cases in the former only. Crime is distinctly heavier in the south than in the north, but is chiefly confined to thefts and burglaries, dacoity being very rare. Cattle-poisoning and arson are more common than usual.

The District of Gorakhpur, as formed at the cession in 1801, included the present District and also Bastī, Azamgarh, parts of Gondā, and the lowlands of Nepāl. The last two tracts were made over to the Nawāb of Oudh and to the Nepālese respectively in 1816. The Azamgarh *parganas* were removed in 1820, and after the Mutiny a further cession to Nepāl took place. Bastī was formed into a separate District in 1865. The early revenue administration was difficult. A long period of misrule had made the large landholders independent and the peasantry timid. The demand fixed was only 3·5 lakhs on the present area; and although this was a reduction on the nominal demand of the Oudh Government, it was collected with difficulty. Short-term settlements were made as usual, and the revenue rose a little. In 1882 a survey was commenced, and more detailed inquiries into the agricultural capabilities of the District and the rights of the people became possible. Regulation VII of 1822, however, laid down a procedure which could not be carried out with the existing staff. In 1830 the first jungle grant was made to a European, and this was followed by other grants. The first regular settlement under Regulation IX of 1833 was carried out between 1834 and 1839, and the revenue had then risen to 10·9 lakhs. This settlement was based on a valuation of crops; and it was further marked by the setting aside of the *talukdārs*, who now became merely pensioners in respect of the villages held by under-proprietors. Preparations for the next settlement were interrupted by the Mutiny, but were resumed in 1859 and completed in 1867. The

operations were carried out by several successive Collectors and their Assistants. Rent rates were assumed on various principles and applied to the areas ascertained at survey. The revenue was fixed at half the rental 'assets' so obtained, and amounted to 15·5 lakhs, rising to 17·3. The last revision was carried out between 1883 and 1890. In two *tahsīls* it was based on rent rates found to be prevalent, while in the remainder the actual rent-rolls were the basis of the assessment. The demand fixed was 23·1 lakhs, rising to 24·4, which amounted to 48 per cent. of the rental 'assets.' The demand in 1903–4 was 25·1 lakhs, the incidence being R. 0·9 per acre, varying from R. 0·3 to Rs. 1·2 in different *parganas*.

Collections on account of land revenue and revenue from all sources have been, in thousands of rupees:—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	17,02	23,02	26,43	25,23
Total revenue . .	21,12	34,92	39,50	39,93

In 1904 the revenue demand was reduced by Rs. 18,000, owing to the transfer of 115 villages from the Bānsgaon *tahsīl* to Azamgarh.

GORAKHPUR CITY is the only municipality, but twelve towns are administered under Act XX of 1856. Outside of these, local affairs are managed by the District board, which had an income of 3·3 lakhs in 1903–4, chiefly derived from local rates. The expenditure was 3·2 lakhs, including 2·3 lakhs spent on roads and buildings.

The District Superintendent of police has 2 Assistants and 5 inspectors, besides a force of 147 subordinate officers, 748 constables, 192 municipal and town police, and 2,340 rural and road police. There are 34 police stations. The District jail contained a daily average of 408 prisoners in 1903, and the small jail at Kasīa 23 more. The latter is only used for prisoners under trial or sentenced to short terms.

The District is backward as regards education, only 2·8 per cent. of the population (5·5 males and 0·1 females) being able to read and write in 1901. Hindus (2·8) are more advanced than Muhammadans (2·3). There has, however, been a considerable improvement in recent years, and the number of public schools increased from 222 with 8,592 pupils in 1880–1 to 334 with 23,574 pupils in 1900–1. In 1903–4 there were 339 public institutions with 18,023 pupils, of whom 463 were girls, besides 70 private schools with 1,042 pupils. A normal school and college are situated at Gorakhpur city, and sixteen of the public schools are classed as secondary; but the great majority of the pupils are in primary schools. Three schools are managed by Government, and 171 are under the District or municipal boards. Out of

a total expenditure on education of Rs. 84,000, Local funds supplied Rs. 59,000, and the receipts from fees were Rs. 14,000.

There are 13 hospitals and dispensaries, with accommodation for 98 in-patients. In 1903 the number of cases treated was 143,000, including 1,300 in-patients, and 7,473 operations were performed. The expenditure in the same year was Rs. 20,000, chiefly met from Local funds.

About 87,000 persons were successfully vaccinated in 1903–4, giving an average of 29 per 1,000 of population, which is below the Provincial average. Vaccination is compulsory only in the municipality of Gorakhpur.

[*District Gazetteer* (1881, under revision); A. W. Cruickshank, *Settlement Report* (1891).]

Gorakhpur Tahsīl.—Head-quarters *tahsīl* of Gorakhpur District, United Provinces, comprising the *parganas* of Bhauāpār, Havelī, and Maghar, and lying between 26° 29′ and 27° N. and 83° 12′ and 83° 38′ E., with an area of 652 square miles. Population increased from 477,588 in 1891 to 496,011 in 1901, this being the only *tahsīl* which did not show a decrease. There are 1,090 villages and two towns, including GORAKHPUR CITY (population, 64,148), the District and *tahsīl* head-quarters. The demand for land revenue in 1903–4 was Rs. 3,94,000, and for cesses Rs. 65,000. The density of population, 761 persons per square mile, is considerably above the District average. The *tahsīl* is divided unequally by the winding course of the Rāptī, and is also crossed by its tributaries, the Amī and Rohini, and by several smaller streams. After heavy rain a large area in the south-west becomes a continuous sheet of water. *Sāl* forests clothe the left bank of the Rohini and extend to the neighbourhood of Gorakhpur city, but most of the rest is highly cultivated. The area under cultivation in 1903–4 was 480 square miles, of which 197 were irrigated. Wells supply about one-third of the irrigated area, and small streams, tanks, and swamps the remainder.

Gorakhpur City.—Head-quarters of the District and *tahsīl* of the same name, United Provinces, situated in 26° 45′ N. and 83° 22′ E., on the Bengal and North-Western Railway, 506 miles by rail from Calcutta and 1,056 from Bombay. The city lies near the left bank of the Rāptī, and at the junction of roads to Ghāzīpur and Fyzābād. Population is increasing. The numbers at the four enumerations were: (1872) 51,117, (1881) 59,908, (1891) 63,620, and (1901) 64,148. These figures include a small area with a population of 771, which was administered as a cantonment up to 1904, and is now a 'notified area.' Of the total in 1901, 41,451 were Hindus and 21,829 Musalmāns. The town is believed to have been founded about 1400 by a branch of the Satāsī family, and takes its name from a shrine of

Gorakhnāth. During the reign of Akbar it became the head-quarters of a *sarkār* in the *Sūbah* of Oudh. In 1610 the Muhammadan garrison was driven away, and the place was held by the Hindus till 1680. A few years later prince Muazzam visited Gorakhpur, which was thenceforward called Muazzamābād in official documents. In the eighteenth century the city and District were included in Oudh, and the later history has been given in that of GORAKHPUR DISTRICT.

The city consists of a number of village sites clustered together, and often divided by considerable areas of garden or cultivated land. The drainage is very defective, and the place has a mean appearance. East of the native quarters is a spacious civil station and the old cantonment, and a large area occupied by the head-quarters of the Bengal and North-Western Railway. The most imposing public building is the town hall built recently and called Campier Hall, after a European *zamīndār*, who left money for its construction. It is surrounded by a fine park laid out in 1903, as a memorial to the Queen-Empress. Gorakhpur is the head-quarters of the Commissioner of the Division, of an Executive Engineer, of the Bengal and North-Western Railway Volunteers, and of a squadron of Light Horse, besides the District staff. It also contains the principal station of the Church Missionary Society and Zanāna Mission in the District, and male and female dispensaries.

The municipality was constituted in 1873. During the ten years ending 1901 the income and expenditure averaged Rs. 68,000 and Rs. 67,000 respectively. In 1903-4 the income was Rs. 72,000, chiefly derived from octroi (Rs. 51,000) and rents and fees (Rs. 15,000). The expenditure was Rs. 77,000, including conservancy (Rs. 23,000). public safety (Rs. 12,000), administration and collection (Rs. 11,000), and education (Rs. 11,000). The small area which was formerly a cantonment had an income and expenditure of about Rs. 3,000. There has been no garrison for some years past, but in the cold season a dépôt is opened for the recruitment of Gurkhas. Gorakhpur has very little trade, and its inhabitants are largely agriculturists. It is noted for its carpenters and turners, but has no manufactures. A bank has recently been started by native enterprise. The municipality maintains 11 schools and aids 18 others, attended by 1,026 pupils. The Church Missionary Society carries on a useful educational work. St. Andrew's College, which teaches up to the First Arts examination, had 32 students in 1904. There is also a normal school under the Educational department.

Goramur.—Place of religious interest in Sibsāgar District, Eastern Bengal and Assam. *See* GARAMUR.

Goribidnūr.—North-western *tāluk* of Kolār District, Mysore, lying

between 13° 25′ and 13° 47′ N. and 77° 22′ and 77° 43′ E., with an area of 343 square miles. The population in 1901 was 83,296, compared with 71,990 in 1891. The *tāluk* contains one town, Goribidnūr (population, 2,441), the head-quarters; and 268 villages. The land revenue demand in 1903–4 was Rs. 1,60,000. The Penner flows through the *tāluk* from south-east to north, and is joined beyond the northern border by the Kumadvati or Kundār, running parallel with it through the west. The Penner is flanked by the Nandidroog range on the east, and by the hills from Mākali-durga on the west. The level of the *tāluk* is much lower than that of the neighbouring parts. The soil is loose and fertile, especially near the chief town. Shallow wells, which never fail, are found here, the sides being protected from falling in by wicker baskets. Sugar-cane, rice, turmeric, and ground-nuts are extensively grown, with coco-nut and areca-nut palms in the south-east. The wild custard-apple is abundant on the hills, where also iron ore is plentiful.

Gotardi.—Petty State in REWĀ KĀNTHA, Bombay.

Gothra.—Petty State in REWĀ KĀNTHA, Bombay.

Gour. Ruined city in Mālda District, Eastern Bengal and Assam. *See* GAUR.

Govardhangiri.—Fortified hill, 1,720 feet high, in the Sāgar *tāluk* of Shimoga District, Mysore, situated in 14° 10′ N. and 74° 40′ E., on the crest of the Ghāts overlooking the village of Gersoppa, which gives its name to the famous GERSOPPA FALLS. The original fort is said to have been erected in the eighth century by Jinadatta Rāya, who named it after the celebrated hill (*see* GIRI RĀJ) near the northern Muttra, whence he came. It is now quite deserted and overgrown with jungle. In front of a Jain temple is a metal pillar, with a long inscription of the sixteenth century, giving an account of the merchants of Gersoppa who erected it.

Govindgarh (or Bhatinda).—Western *tahsīl* of the Anāhadgarh *nizāmat*, Patiāla State, Punjab, lying between 29° 33′ and 30° 30′ N. and 74° 41′ and 75° 31′ E., with an area of 868 square miles. The population in 1901 was 142,413, compared with 123,592 in 1891. The *tahsīl* contains the town of BHATINDA (population, 13,185), the head-quarters; and 196 villages. The land revenue and cesses in 1903–4 amounted to 2·7 lakhs.

Govindgarh Town (1).—Town in the Huzūr *tahsīl* of Rewah State, Central India, situated in 24° 23′ N. and 81° 18′ E., on the edge of the Kaimur scarp, 1,200 feet above sea-level. Population (1901), 5,022. Govindgarh is a favourite resort, on account both of its fine position on the edge of the range, affording a magnificent view over the forest-clad region below, and of the sport to be had in the adjoining forest Reserve. The chief has a palace in the town. It contains a post office, a school, and a dispensary.

Govindgarh Town (2).—Head quarters of a *tahsīl* of the same name in the State of Alwar, Rājputāna, situated in 27° 30′ N. and 77° E., 25 miles east of Alwar city. Population (1901), 4,932. The fort, which is about half a mile to the north of the town, was built by Mahārao Rājā Bakhtāwar Singh in 1805, and is remarkable for the extent of its moat. The town possesses a well-paved bazar, a post office, and a vernacular school. The lighting and sanitary arrangements are in the hands of a municipal committee, the average income, chiefly derived from octroi, and expenditure being about Rs. 3,000 and Rs. 1,700 respectively. The Govindgarh *tahsīl* is the smallest in the State, and is situated in the east, forming a peninsula almost entirely surrounded by Bharatpur territory. In 1901 it contained the town and 50 villages, and had a population of 20,646, of whom nearly one-third were Meos. The *tahsīl* lies in MEWĀT, and was consequently, under Mughal rule, included in the *Sūbah* of Agra. At the beginning of the nineteenth century the Khānzādas were in possession; but in 1803 they were ousted by Mahārao Rājā Bakhtāwar Singh with the aid of the Marāthās, and the *tahsīl* has since belonged to Alwar.

Govindpur.—Subdivision and village in Mānbhūm District, Bengal. *See* GOBINDPUR.

Gowhātty.—Subdivision and town in Kāmrūp District, Eastern Bengal and Assam. *See* GAUHĀTI.

Grāma.—Village in the east of the Hassan *tāluk* of Hassan District, Mysore, situated in 12° 59′ N. and 76° 13′ E., 7 miles east of Hassan town. Population (1901), 1,936. The place was founded in the twelfth century by Sāntala Devī, queen of the Hoysala king Vishnuvardhana, and called at first Sāntigrāma. A municipality formed in 1893 was converted into a Union in 1904. The income and expenditure during the eight years ending 1901 averaged Rs. 800 and Rs. 700. In 1903–4 they were Rs. 800 and Rs. 2,000.

Grey Canals.—A system of inundation canals in the Punjab, taking off from the south bank of the Sutlej and irrigating the low-lying tracts of Ferozepore District. They take their name from Colonel L. J. H. Grey, under whose orders, as Deputy-Commissioner of the District, they were constructed. The work was begun in 1875–6, when 11 canals were made; the number was increased to 13 in 1883; and in 1885, after the incorporation of the Fāzilka *tahsīl* in Ferozepore District, two of the canals were remodelled and extended so as to irrigate that *tahsīl*. In addition to these, a new canal, named Kingwāh, has just been completed at a cost of 1·7 lakhs. The 14 canals as they now exist vary in length from 28 to 107 miles, in bed-width from 30 to 80 feet, and in discharge from 283 to 640 cubic feet per second. Their total length is 1,034 miles, and their aggregate discharge 6,340 cubic feet per second. Being inundation canals, they run only when the Sutlej is at a sufficient

height. Up to and including 1905–6 the total cost on original works has been 11·6 lakhs (exclusive of the 1·7 lakhs spent on the new Kingwāh Canal), and on repairs and establishment 23·4 lakhs. The average area irrigated during the five years ending 1905–6 was 277 square miles. The canals are remarkable as being constructed and maintained on the co-operative system without any direct aid from Government, except a small grant towards the cost of establishment in Fāzilka which has been stopped since the last settlement (1902). The excavation work was performed by the agriculturists whose lands the canal was to benefit, supervised by the ordinary revenue staff of the District. Since 1881 the special establishment required for their upkeep has been met by a charge of 3 to 4 annas per *ghumao* (five-sixths of an acre); and the annual silt clearance and other works have been carried out at the expense of the irrigators at the average rate of 8 to 10 annas per irrigated *ghumao*. In addition to these charges for maintenance, a royalty of 12 annas per *ghumao* of superior, and 6 annas per *ghumao* of inferior, crops is taken by Government.

Gubbi Tāluk.—Central *tāluk* of Tumkūr District, Mysore, lying between 13° 2′ and 13° 36′ N. and 76° 42′ and 77° 0′ E., with an area of 552 square miles. The population in 1901 was 87,468, compared with 73,570 in 1891. The *tāluk* contains two towns, GUBBI (population, 5,593), the head-quarters, and Kadaba (1,385); and 421 villages. The land revenue demand in 1903–4 was Rs. 1,92,000. The Shimsha flows south through the middle of the *tāluk*, forming the large Kadaba tank. In the north-west are the bare Hāgalvādi hills, part of the Chiknāyakanhalli auriferous band. The rest of the *tāluk* is generally open and well watered. The soil is mostly a red mould, shallow and gravelly.

Gubbi Town.—Head-quarters of the *tāluk* of the same name in Tumkūr District, Mysore, situated in 13° 18′ N. and 76° 57′ E., on the Southern Mahratta Railway, 13 miles west of Tumkūr town. Population (1901), 5,593. Gubbi is said to have been founded about the fifteenth century by the hereditary chief of the Nonaba Wokkaligas. It is an important trading place, inhabited by Komatis and Lingāyat Banajigas. It is the *entrepôt* of the areca-nut trade between the Nagar Malnād and Wālājāpet in North Arcot District. *Kopra*, or dried cocoanut, and areca-nuts produced in the surrounding country are largely sold at the fair, together with cotton cloths, blankets, grain, and a variety of other articles, even from distant places, for which a ready market is found. The Wesleyan Mission has a station here. The municipality dates from 1871. The receipts and expenditure during the ten years ending 1901 averaged Rs. 2,300. In 1903–4 they were Rs. 3,300 and Rs. 4,100.

Gūdalūr Tāluk.—Western *tāluk* of the Nīlgiri District, Madras,

lying between 11° 23′ and 11° 40′ N. and 76° 14′ and 76° 36′ E., at a much lower elevation than the rest of the District. It comprises the South-east Wynaad, which was transferred from Malabar in 1877, and the coffee-growing area called the OUCHTERLONY VALLEY. It now contains twelve revenue villages, including GŪDALŪR, the head-quarters; but most of the land is held on tenures similar to those in Malabar under the Tirumalpād of NILAMBŪR in that District. The inhabitants chiefly talk Malayālam or an admixture of that language and Tamil. The *tāluk* has lost its importance since the decline of the coffee and gold- and mica-mining industries, and is now rapidly reverting to jungle, except in a few areas like Nellakotta and Ouchterlony Valley, where coffee and tea still hold their own against the insidious *lantana*. Pandalūr and Cherumbādi, which, with DEVĀLA, were once important mining settlements, have now dwindled to a few native huts. The *tāluk* is most sparsely inhabited, containing on an area of 280 square miles a population (1901) of 21,139, or only 75 persons per square mile. In 1891 the population was 25,397, the decline being due to the restriction of the industrial enterprises above mentioned. The demand for land revenue in 1903–4 amounted to Rs. 53,000.

Gūdalūr Village.—Head-quarters of the *tāluk* of the same name in the Nīlgiri District, Madras, situated in 11° 30′ N. and 76° 30′ E., at the foot of the Gūdalūr *ghāt*, on the road from Ootacamund to Calicut and at the junction of the main roads from Mysore and Malabar. Population (1901), 2,558. Gūdalūr is the head-quarters of the deputy-*tahsīldār*, who is also a District Munsif, and of a *sheristadār* magistrate, who is also sub-registrar. When the coffee and gold-mining industries were flourishing the place was of considerable importance, but with their decline it has rapidly decayed. The weekly market is, however, well attended, most of the articles sold being imported from Mysore, and a good deal of traffic between Mysore and Ootacamund passes through it. The place contains Protestant and Roman Catholic churches, a hospital with a European ward, post and police offices, and two travellers' bungalows.

Guddguddāpur (or Devargud).—Town and place of pilgrimage in the Rānībennur *tāluka* of Dhārwār District, Bombay, situated in 14° 40′ N. and 75° 35′ E. Population (1901), 947. The fair held in October in honour of Mallāri or Siva is attended by between 5,000 and 10,000 pilgrims. There is a temple of Mallāri, who is reputed to have become incarnate as Bhairav and thus to have slain the demon Malla. His attendants, known as Vāggyas, are alleged to be descended from dogs incarnate as men. They receive the pilgrims dressed in tiger- or bear-skins, perform numerous antics, and receive gifts of a few pies from each pilgrim. In 1878 Guddguddāpur was constituted

a temporary municipality. The income, derived from a pilgrim and a shop tax, averaged Rs. 662 during the decade ending 1901. In 1903–4 the income was Rs. 174.

Gudiātham.—*Tāluk* and town in North Arcot District, Madras. *See* GUDIYĀTTAM.

Gudivāda.—Subdivision and *tāluk* of Kistna District, Madras, lying between 16° 16′ and 16° 47′ N. and 80° 55′ and 81° 23′ E., and comprising within its limits the greater part of that curious depression between the alluvial deposits of the Kistna and Godāvari rivers which is known as the COLAIR LAKE. It has an area of 595 square miles. The population in 1901 was 151,916, compared with 118,310 in 1891. The demand on account of land revenue and cesses in 1903–4 amounted to Rs. 10,19,000. Most of the *tāluk* is under cultivation, being irrigated from the canals of the Kistna system. GUDIVĀDA TOWN, the head-quarters, is a Union with a population of 6,719, and there are 212 villages. A deputy-*tahsīldār* is stationed at Kaikalūr on the southern edge of the Colair Lake.

Gudivāda Town.—Head-quarters of the *tāluk* of the same name in Kistna District, Madras, situated in 16° 27′ N. and 81° E. Population (1901), 6,719. It is a place of great antiquity. A ruined Buddhist *stūpa* is to be seen in the middle of it, in which four caskets are said to have been found. To the west is a fine Jain statue in good preservation. Farther west is a mound, the old site of the town. Here massive pottery, beads of all kinds in metals, stone, and glass, and Andhra lead coins have been found.

Gudiyāttam Tāluk.—*Tāluk* in the south of North Arcot District, Madras, lying between 12° 42′ and 13° 5′ N. and 78° 35′ and 79° 16′ E., with an area of 447 square miles. It contains one town, GUDIYĀTTAM (population, 21,335), the head-quarters: and 183 villages. Population rose from 176,709 in 1891 to 195,665 in 1901. The demand for land revenue and cesses in 1903–4 amounted to Rs. 3,27,500. The *tāluk* is a long strip of land lying on the northern bank of the Pālār, opposite to the Vellore *tāluk* on the other side of the river. The Eastern Ghāts throw many spurs into its western portion, which is thus mainly composed of hills interspersed with valleys. The soil is generally good, being a mixture of sand and red clay.

Gudiyāttam Town.—Head-quarters of the *tāluk* of the same name in North Arcot District, Madras, situated in 12° 58′ N. and 78° 53′ E., 3 miles north of the Pālār and about the same distance from the railway station, which is 96 miles from Madras and 318 from Calicut. Population (1901), 21,335. Gudiyāttam was constituted a municipality in 1885. The municipal receipts and expenditure during the ten years ending 1902–3 averaged Rs. 16,600 and Rs. 16,000 respectively. In 1903–4 the income was Rs. 21,200, the chief source being the house

and land taxes; and the expenditure was Rs. 21,400. A scheme for providing a water-supply is under consideration. Gudiyāttam is a clean, well-arranged town, most of the houses being tiled and the streets well laid out. The chief industry is weaving; but Labbais and Kanarese merchants carry on a brisk trade, the former in jaggery, hides, tamarinds, tobacco, and *ghī*, and the latter in petty shopkeeping and money-lending. Every Tuesday a large cattle fair takes place which rivals that of Rānipet. Some 500 head of cattle are usually exposed for sale, besides the goods found in all ordinary markets.

Gūdūr Subdivision.—Subdivision of Nellore District, Madras, consisting of the *tāluks* of GŪDŪR and RĀPŪR and the *zamīndāri tahsīls* of VENKATAGIRI and POLŪR.

Gūdūr Tāluk.—*Tāluk* of Nellore District, Madras, lying between 13° 29′ and 14° 25′ N. and 79° 43′ and 80° 16′ E., with an area of 910 square miles. The population in 1901 was 144,209, compared with 136,009 in 1891. It contains one town, GŪDŪR (population, 17,251), the head-quarters; and 144 villages. The demand on account of land revenue and cesses in 1903–4 amounted to Rs. 4,39,000. Included in it is SRĪHARIKOTI ISLAND, formerly part of Madras District. On the shore stands ARMAGON, the site of one of the earliest English settlements on the Coromandel coast. The *tāluk* is low-lying, being nowhere more than 400 feet above the sea. The coast villages contain many palmyra trees, large casuarina plantations, and wide areas of swampy land. In the west, towards Rāpūr and Venkatagiri, the soil becomes hard and rocky; but in the east, along the shore, it consists of a sandy subsoil, with either clay or black soil at the surface. The Swarnamukhi, Kandleru, and Saidāpuram are the chief rivers. Indigo was manufactured to a considerable extent, but the industry has now greatly declined owing to the fall in the price of the natural dye.

Gūdūr Town.—Head-quarters of the subdivision and *tāluk* of the same name in Nellore District, Madras, situated in 14° 9′ N. and 79° 52′ E., at the junction of the Madras and South Indian Railways. The population, according to the Census of 1901, was 17,251; but the three villages (Chennūr, Vindūr, and Manubolu) then included in its Union have since been separated and Chillakūr included instead. The population of Gūdūr proper may be taken at about 9,000. Agriculture is the chief occupation of the people. Mats are made to a small extent in Vīrareddipalli, one of its hamlets. Rice and chillies are exported in small quantities.

Gugera Tahsīl.—*Tahsīl* of Montgomery District, Punjab, lying between 30° 39′ and 31° 33′ N. and 72° 59′ and 73° 45′ E., on both sides of the Rāvi, with an area of 824 square miles. The population in 1901 was 119,622, compared with 113,447 in 1891. It contains 341 villages, including Gugera, the *tahsīl* head-quarters, which was from

1852 to 1865 the head-quarters of the District. The land revenue and cesses in 1903–4 amounted to Rs. 1,33,000. On the south, the *tahsīl* includes portions of the Sutlej valley, rising abruptly into the desert plateau of the Ganji Bār, which lies between the old bank of the Beās on the south and that of the Rāvi on the north. Below the latter lies a strip of jungle, with patches of cultivation. Farther north come the riverain tracts on both sides of the Rāvi, which are scantily irrigated by inundation canals, and, beyond the river, rise gently towards the Sandal Bār. The Deg torrent flows in a deep bed close to the northern border of the *tahsīl*, and falls into the Rāvi near Gugera.

Guindy.—Village in Chingleput District, Madras. *See* MADRAS CITY.

Gujarāt.—This name, taken in its widest sense, signifies the whole country in which Gujarātī is spoken, including Cutch and Kāthiāwār, as well as the northern Districts and States of the Bombay Presidency from Pālanpur to Damān: that is, the country lying between 20° 9′ and 24° 43′ N. and 68° 25′ and 72° 22′ E. In a narrower and more correct sense, the name applies to the central plain north of the Narbadā and east of the Rann of Cutch and Kāthiāwār. Gujarāt, in this sense, lies between 23° 25′ and 24° 4′ N. and 71° 1′ and 74° 1′ E., and has an area of 29,071 square miles and a population (1901) of 4,798,504. Of this area less than one-fourth (7,168 square miles), chiefly in the centre and south, is British territory, belonging to the four Districts of AHMADĀBAD, KAIRA, PĀNCH MAHĀLS, and BROACH. About 4,902 square miles, chiefly in two blocks—one lying west of the Sābarmatī and the other between the Mahī and the Narbadā—belong to BARODA. The remainder belongs to the large and small States that have relations with the Bombay Government, and is distributed among the Agencies of PALANPUR in the north, MAHĪ KĀNTHA in the north-east, REWA KĀNTHA in the east, and CAMBAY at the mouth of the Sābarmatī.

The plain of Gujarāt is bounded on the north by the desert of Mārwār, and on the east by the hills of crystalline rock that run south-east from Abu to join the western outliers of the Vindhyas near Pāvāgarh. From these hills, in the neighbourhood of which the country is rough, rocky, and well wooded, it slopes in a south-westerly direction towards the Rann of Cutch, the Nal Lake, and the sea, unbroken by any rocky outcrop or rising ground. The central region is of recent alluvial formation and has one of the richest soils in India, though parts of it are liable to flooding in the rains, and it suffered much in the famine of 1899–1902. Towards the Rann, the Nal Lake, and the sea-coast, the plain passes into salt or sandy waste, where the subsoil water is brackish and lies deep below the surface. The grazing lands of Pālanpur in the north are watered by the Banās and Saraswatī, which flow from the Arāvalli mountains into the Little Rann. The Sābarmatī, rising near the source of the Banās, flows into the Gulf

of Cambay. Farther east, the Mahī, rising far away in Mālwā, flows into the same gulf, which finally receives also the waters of the Narbadā, the lower course of which passes between Central Baroda and Rājpīpla and through the British District of Broach. The central and coast tracts are stoneless, and have fine groves of field trees, while the eastern hills are covered with forest. The spread of cultivation has driven the tiger, leopard, and bear into the eastern hills, and greatly reduced the numbers of wild hog; but antelope and *nīlgai* are still common. Game-birds, both on land and water, abound.

The name Gujarāt is derived from the widespread Gūjar tribe, which is not, however, at the present day of much account in the province. According to some writers, the Gūjars were immigrants from Central Asia. There is no certain trace of them in India before the sixth century, by the end of which they were powerful in Rājputāna and had set up a kingdom at Broach, so they most likely entered India with the White Huns in the latter half of the fifth century. The Chinese traveller Hiuen Tsiang (A.D. 640) was acquainted with the kingdom of Broach, and also with a Gurjara kingdom farther north which he calls Kiu-chi-lo, having its capital at Pilo-mo-lo, which is plausibly identified with Bhilmāl in the Jodhpur State. In its earliest form (Gurjararātra), the name Gujarāt is applied in inscriptions of the ninth century to the country north of Ajmer and the Sāmbhar Lake, while from the tenth to the thirteenth century Gujarāt means the Solanki kingdom of Anhilvāda. In the Musalmān period the name was applied to the province that was governed first from Anhilvāda and then from Ahmadābād.

For the history of Gujarāt in the pre-Muhammadan period and its invasion by Mahmūd of Ghazni, *see* BOMBAY PRESIDENCY and ANHILVADA. By about 1233 the Solanki kingdom of Anhilvāda had broken up, and the most powerful rulers in Gujarāt were the Vāghela chiefs of DHOLKA.

'An inaccessible position, beyond the great desert and the hills connecting the Vindhyas with the Arāvalli range, long preserved Gujarāt from the Muhammadan yoke. Only by sea was it easily approached, and to the sea it owed its peculiar advantages, . . . its favouring climate and fertile soil. . . . The greater part of the Indian trade with Persia, Arabia, and the Red Sea passed through its harbours, besides a busy coasting trade. "The benefit of this trade overflowed upon the country, which became a garden, and enriched the treasury of the prince. The noble mosques, colleges, palaces, and tombs, the remains of which still adorn Ahmadābād and its other cities to this day, while they excite the admiration of the traveller, prove both the wealth and the taste of the founders[1]." Not till the reign of Alā-ud-dīn (of Delhi) at the close of the thirteenth century did it become a Muslim province, and a century later it became independent again under a dynasty of Muslim

[1] Erskine, *History of India*, vol. i, p. 21.

kings. . . . Fīroz Shāh in 1391 granted the fief of Gujarāt to Zafar Khān, the son of a converted Rājput, and five years later the fief-holder assumed the royal canopy. He soon enlarged his dominions, at first but a strip between hills and sea, by the annexation of Idar to the north and Diu in Kāthiāwār, plundered Jhālor, and even took possession of Mālwā for a short space in 1407, setting his brother on the throne in the place of Hoshang, the son of Dilāwar. His successor Ahmad I (1411–43) founded Ahmadābād, which has ever since been the chief city of Gujarāt, and recovered Bombay and Salsette from the Deccan kings. Mahmūd I (1458–1511) not only carried on the traditional wars of his dynasty with Mālwā on the east and Khāndesh on the south, but kept a large fleet to subdue the pirates of the islands.

'Nor were Asiatic pirates the only disturbers of his coast. The first of the three great waves of European invasion was already beating on the shores of Gujarāt. Vasco da Gama had reached the Malabar ports in 1498, and the effects of the new influence were soon felt farther north. The Portuguese had no more intention, at first, of founding an eastern empire than the later Dutch and English companies. The hostility of the Muslim traders compelled them to protect their agents, and a commercial policy was necessarily supported by military power. . . . The collision was brought about by the spirited action of the last Mamlūk Sultān of Egypt, Kānsūh-el-Ghūrī, who, realizing the imminent jeopardy of the great Indian trade which supplied so much of the wealth of Egypt, resolved to drive the Portuguese from the Arabian Sea. The Mamlūks had long maintained a fleet in the Red Sea, and Admiral Husain was dispatched in 1508 to Gujarāt with a well-equipped war squadron manned with sailors who had often fought with Christian fleets in the Mediterranean. He was joined by the fleet of Gujarāt, commanded by the governor of Diu, in spite of the efforts of the Portuguese captain, Lourenço de Almeida, to prevent their union; and the combined fleet was in every respect superior to the flotilla of Christian merchantmen which boldly sailed out of the port of Chaul to the attack. The Portuguese were defeated in a running fight which lasted two days, and the young captain, son of the famous viceroy, was killed. . . . He was avenged a few months later, when on February 2, 1509, his father, the viceroy Francisco de Almeida, utterly defeated the combined fleet of Egypt and Gujarāt off Diu. In the following year the king of Gujarāt offered Albuquerque, the conqueror of Goa, the port of Diu, and a Portuguese factory was there established in 1513, though the celebrated fortress of the Christian invaders was not built till 1535.

'Though unable to withstand the Portuguese—or perhaps not unwilling to see his powerful deputy at Diu humiliated—Bahādur (1526–37) was one of the most brilliant figures among the warrior kings of Gujarāt. The Rājputs of the hills and the kings of the Deccan owned his superiority, and in 1531 he annexed Mālwā. A Rājput rising and the advance of the Mughals under Humāyūn the son of Bābar for a time destroyed his authority (1535), but he recovered it bravely (1536), only to fall at last, drowned in a scuffle with the Portuguese whom he had admitted to his coast'.[1]

[1] S. Lane-Poole, *Mediaeval India* ('Story of the Nations'), chap. vii.

In 1572 Akbar annexed Gujarāt to the Mughal empire, of which it became a *Sūbah*. At its best period the independent Muhammadan kingdom of Gujarāt comprised Northern Gujarāt from Abu to the Narbadā; Kāthiāwār, which became a Musalmān province through the occupation of Diu (1402) and Girnār (1471), and the sack of Dwārka Bet (1473); the Tāpti valley as far east as Thālner; and the tract between the Ghāts and the sea from Surat to Bombay.

The Mughal viceroys of Gujarāt were, up to the death of Aurangzeb (1707), on the whole successful in maintaining order and prosperity, in spite of the turbulence of the Kolīs and Rājputs in the north, of famines in 1596, 1631, 1681, 1684, and 1697–8, and of the Deccani attacks on Surat, which was sacked once by Malik Ambar (1609) and twice by Sivajī (1664 and 1670). Throughout the Mughal period the province generally yielded a revenue of nearly 2 crores, and a large foreign trade was carried on at the ports of Cambay, Broach, and Surat. The decline of Mughal rule began with a Marāthā raid across the Narbadā in 1705. From 1711 these invasions became annual, and the Marāthās established themselves successively at Songarh (1719), Chāmpāner (1723), and Baroda (1734). The beginning of the end came during the governorship of Sarbuland Khān (1723–30), who farmed out the revenues and admitted the Marāthā claims to *chauth* and *sardeshmukhi*. Henceforward, although the Delhi court continued to appoint viceroys until 1748, absolute anarchy reigned in the province, which was ravaged impartially by the hostile leaders of the Peshwā's and the Gaikwār's armies, by the Rājās of Jodhpur, by the agents of the Nizām-ul-mulk, and by local Moslem chiefs, such as the Bābis, who established themselves at Junāgarh (1738) and Bālāsinor (1761), the Jhāloris, who settled at Pālanpur (1715), and Momin Khān, who began to scheme for the independence of Cambay about 1736. Famines in 1719, 1732, and 1747 added to the misery of the people. In 1737 the Gaikwār was admitted to a full half-share in the revenues of the province and occupied Ahmadābād jointly with the viceroy's troops (1738). Broach from 1731 to 1752 was held by a deputy of the Nizām, but had to give up a share of its customs to the Gaikwār. Surat suffered chiefly from the violence of rival candidates for the governorship.

Gujarāt was now parcelled out among a number of local chiefs who carried on ceaseless petty wars, which the Marāthās had no wish to suppress so long as they could secure their share of the plunder of the province. The Peshwā's seizure of half the Gaikwār's share in 1751 only added another claimant of blackmail. After the battle of Pānīpat the Musalmāns tried but failed to drive out the Gaikwār (1761), and the last chance of a strong native government growing up was ruined by the disputed succession at Baroda in 1768. The

local troubles at Surat lasted until the castle was taken by the British in 1759.

The Marāthā confederacy now began to break up, and the Gaikwār was detached by his acceptance of British protection (1782). In Gujarāt there was little improvement in the government during this period, though, in spite of disputes in the Gaikwār's family and intrigues at the Poona court, a semblance of order was preserved by British influence from 1782 to 1799, when the Gaikwār took Ahmadābād and imprisoned the Peshwā's agent. Further disturbances then took place, which were put down by a British force (1803). In 1799 the Peshwā had farmed his rights to the Gaikwār, who was already in subsidiary alliance with the British. Negotiations followed between the British, the Peshwā, and the Gaikwār, which ended in the cession to the first named of certain districts and rights in Gujarāt. The British Government had annexed Surat in 1800 on the death of the Nawāb, whose family were pensioned off, and had conquered Broach from Sindhia in the war of 1803.

After the overthrow of the Peshwā in 1818 territorial arrangements in Gujarāt settled down into their present form, the country being divided between the British Districts of AHMADĀBĀD, BROACH, KAIRA, PĀNCH MAHĀLS, and SURAT, the State of BARODA, and a number of small Native States. Gujarāt suffered very severely from famine in 1899–1902, a period which was marked by great mortality both of men and cattle. The blow fell more severely from the fact that it came after a long period of prosperity, so that the people and the officials were alike unprepared for the calamities that followed.

[*See* MAHĪ KĀNTHA, PĀLANPUR, REWĀ KĀNTHA, and CAMBAY. See also Sir J. Campbell, *History of Gujarāt*, vol. i, part i (1896), *Bombay Gazetteer* series; and Rev. G. P. Taylor, 'The Coins of Ahmadābād,' *Journal, Royal Asiatic Society, Bombay Branch*, vol. xx.]

Gujar Khān.—Southern *tahsīl* of Rāwalpindi District, Punjab, lying between 33° 4′ and 33° 26′ N. and 72° 56′ and 73° 37′ E., with an area of 567 square miles. It is bounded on the east by the Jhelum river, which cuts it off from Kashmīr territory. Except for a low ridge of sandstone hills along the Jhelum, the *tahsīl* consists of a plain intersected by numerous ravines. The population in 1901 was 150,566, compared with 152,455 in 1891. It contains 381 villages, of which Gūjar Khān is the head-quarters. The land revenue and cesses in 1903–4 amounted to 2·7 lakhs.

Gujrānwāla District.—District in the Lāhore Division of the Punjab, lying in the Rechna Doāb, between 31° 31′ and 32° 31′ N. and 73° 10′ and 74° 24′ E., with an area of 3,198 square miles. From the Chenāb, which borders it for 80 miles on the north-west and separates it from the Districts of Gujrāt and Shāhpur, the District

stretches in a rough rectangle towards the Rāvi, the north-west part of Lahore District separating it from that river. On the east it is bounded by Siālkot, and on the west by Jhang. Excepting its south-eastern corner, which is traversed by the Degh stream, it is a flat stretch of country, unrelieved by hill or ravine, and absolutely featureless. The District naturally falls into two main divisions: the low-lying alluvial lands fringing the Chenāb and Degh, and the upland between them. Geographically and physically, it lies between the fertile submontane District of Siālkot and the desert of Jhang; and the upland decreases in natural fertility as the distance from the Himālayas increases, until in the south-west it merges in the Bār tract, which in its natural aspect is a level prairie thickly covered with a stunted undergrowth. The Chenāb Canal, which irrigates the Hāfizābād and Khāngāh Dogrān *tahsīls* in this District, has, however, changed the desert into a garden, and the immigrant population bids fair to outnumber the original inhabitants.

Physical aspects.

There is nothing of geological interest in the District, which is situated entirely on the alluvium. Most of it was waste until the recent extension of the canal system, and possessed the marked, if scanty, features of the arid Western Punjab Bār flora, trees being represented solely by the *van* (*Salvadora*), *jand* (*Prosopis*), and the large tamarisk, with *kari* (*Capparis aphylla*) and *malhā* (*Zizyphus nummularia*) as bushes. This is now disappearing, but the field annuals maintain a closer relationship with the Western Punjab than with the flora of the upper Gangetic plain or the submontane tract. The *ber* (*Zizyphus Jujuba*) is found in groves and gardens, in the eastern part especially, but has usually been planted.

Antelope are to be found near Shekhūpura and hog deer occasionally in all parts. Wild hog are plentiful in the forest Reserves near Wazīrābād.

The climate differs little from that of the Punjab plains, but the District is reputed healthy. The extremes of temperature are greatest in the Bār, where the rainfall is scanty and the heat in the summer months excessive. The natives of this tract are an exceptionally strong and healthy race; but to strangers the hot months are most trying, ophthalmia, blindness, and diseases of the skin commonly resulting from exposure to the glaring sun and extreme heat.

The annual rainfall averages about 18 inches, with a maximum of 32 inches in 1890–1 and a minimum of 9 inches in 1891–2. The fall diminishes rapidly as the hills are left behind, varying from over 20 inches on the Siālkot border to only 10 or 12 inches in the Bār.

General Cunningham's theory as to the identity of SĀNGLA with the Sangala captured by Alexander is referred to in the article on that

place. The village of ASARŪR has been identified as the site of the town of Tse-kie or Tāki, visited by Hiuen Tsiang about A.D. 630, and described by him as the capital of the Punjab. Here immense ruins of Buddhist origin are still to be seen, and their date is marked by the discovery of coins as well as by the great size of the bricks, which is characteristic of the period when they were constructed. After the time of Hiuen Tsiang, we know little of Gujrānwāla, until the Muhammadan invasions bring back regular chronological history. Meanwhile, however, Tāki had fallen into oblivion, and Lahore had become the chief city of the Punjab.

History.

Under Muhammadan rule the District flourished. From the days of Akbar to those of Aurangzeb, wells were scattered over the whole country, and villages lay thickly dotted about the southern plateau, now a barren waste of grass land and scrub jungle. Their remains may still be found in the wildest and most solitary reaches of the Bār. EMINĀBĀD and HĀFIZĀBĀD were the chief towns, while the country was divided into six well-tilled *parganas*. The principal architectural remains of the Mughal period are described in the article on SHEKHŪPURA. But before the close of the Muhammadan period the tract was mysteriously depopulated. The tribes at present occupying the District are all immigrants of recent date, and before their advent the whole region seems for a time to have been almost entirely abandoned. The only plausible conjecture to account for this sudden and disastrous change is that it resulted from the constant wars by which the Punjab was convulsed during the last years of Muhammadan supremacy. On the rise of Sikh power, the waste plains of Gujrānwāla were seized by the military adventurers who then sprang up. Charat Singh, the grandfather of Mahārājā Ranjit Singh, took possession of the village of Gujrānwāla, then an inconsiderable hamlet, and made it the headquarters of himself and of his son and grandson. Minor Sikh chieftains settled at WAZĪRĀBĀD, SHEKHŪPURA, and other towns; while in the western portion of the District the Rājput Bhattīs and Chathās maintained a sturdy independence. In the end, however, Ranjīt Singh succeeded in bringing all the scattered portions of the District under his own power. The great Mahārājā was himself born at Gujrānwāla, and the town continued to be his capital up to his occupation of Lahore. The mausoleum of his father is still to be seen there, and a lofty cupola close by covers a portion of the ashes of Ranjīt Singh himself. The Sikh rule, which was elsewhere so disastrous, appears to have been an unmitigated benefit to Gujrānwāla. Ranjīt Singh settled large colonies in the various villages, and was very successful in encouraging cultivation throughout the depopulated plain of the Bār. In the Degh valley, especially, he planted a body of hard-working Hindus, the Labānās, to whom he granted the land at a nominal rent,

on condition that each cultivator should bring under tillage the ground allotted to him.

In 1847 the District came under British influence, in connexion with the regency at Lahore; and two years later, in 1849, it was included in the territory annexed after the second Sikh War. A cantonment was established at Wazīrābād, which was abolished in 1855. The District formed a part originally of the extensive District of Wazīrābād, which comprised the whole upper portion of the Rechna Doāb. In 1852 this unwieldy territory was divided between Gujrānwāla and Siālkot. The District, as then constituted, stretched across the entire plateau, from the Chenāb to the Rāvi; but in 1853 the south-eastern fringe, consisting of 303 villages, was transferred to Lahore, and three years later a second batch of 324 villages was handed over to the same District. There was no outbreak during the Mutiny, and the Sikh Sardārs and people rallied to the side of Government with the greatest enthusiasm.

Population.

The District contains 8 towns and 1,331 villages. Its population at the last three enumerations was: (1881) 616,892, (1891) 690,169, and (1901) 890,577. During the last decade it increased by 29 per cent., the increase being greatest in the Hāfizābād and Khāngāh Dogrān *tahsīls*, owing to the extension of canal-irrigation and the colonization of the Bār. It is divided into four *tahsīls*—GUJRĀNWĀLA, WAZĪRĀBĀD, HĀFIZĀBĀD, and KHĀNGĀH DOGRĀN—the head-quarters of each being at the place from which it is named. The chief towns are the municipalities of GUJRĀNWĀLA, the head-quarters of the District, WAZĪRĀBĀD, RĀMNAGAR, AKĀLGARH, EMINĀBĀD, KILA DĪDĀR SINGH, and the 'notified area' of SODHRA.

The following table shows the chief statistics of population in 1901:—

Tahsīl.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Gujrānwāla	756	3	445	252,863	334·5	− 6·1	11,605
Wazīrābād	457	4	254	183,205	400·9	− 0·2	8,158
Khāngāh Dogrān	873	...	239	237,843	272·4	+ 91·5	6,322
Hāfizābād	895	1	393	216,666	242·1		4,736
District total	3,198	8	1,331	890,577	278·5	+ 29	30,821

NOTE.—The figures for the areas of *tahsīls* are taken from revenue returns. The total area of the District is that given in the *Census Report*.

Muhammadans number 603,464, or 67 per cent. of the total; Hindus, 208,557, or 23 per cent.; and Sikhs, 71,950. The density

of population is 278 persons per square mile, as compared with the Provincial average of 209. The language usually spoken is Punjābi.

The most numerous tribes are the agricultural Jats, who number 246,000, or 27 per cent. of the total population. Next to them in numerical strength come the Arains (44,000), and after them the Rājputs (28,000). Saiyids number 9,000. Of the commercial and money-lending classes, the most numerous are the Aroras and Khattrīs, who number 41,000 and 26,000 respectively. The Khojas, a Muhammadan commercial class, number 6,000. The Brāhmans return 20,000. Of the artisan classes, the Kumhārs (potters, 36,000), Tarkhāns (carpenters, 36,000), Julāhās (weavers, 34,000), Mochīs (shoemakers and leather-workers, 31,000), Lohārs (blacksmiths, 18,000), Telis (oil-pressers, 15,000), and Sonārs (goldsmiths, 9,000) are the most important; and of the menials, the Chūhrās and Musallis (sweepers, 91,000), Māchhis (Muhammadan fishermen, bakers, and water-carriers, 24,000), Nais (barbers, 19,000), Chhīmbās and Dhobis (washermen, 11,000), and Jhīnwars (Hindu water-carriers, 6,000). Kashmīris number 26,000. Other castes worth mention are the Mīrāsīs (village minstrels, 15,000), Fakirs (mendicants, 11,000), and Barwālās (village watchmen and messengers, 7,000). The Ulamas, a Muhammadan priestly class, stronger here than in any other District of the Province, number 10,000. About 49 per cent. of the population are dependent on agriculture.

The Siālkot Mission of the Church of Scotland established a branch at Wazīrābād in 1863, and the United Presbyterian American Mission came to Gujrānwāla from Siālkot in the same year. The Roman Catholic missionaries have a station at the village of Maryābād, founded in 1892. The District contained 5,592 native Christians in 1901.

Agriculture.

The fertility of the soil and the rainfall decrease as the distance from the hills increases. The soil varies in quality from a stiff clay, found chiefly in the drainage channels on the Siālkot border, to a light sandy soil only fit for inferior autumn crops. The introduction of canal-irrigation has, however, to a large extent equalized the agricultural conditions in the various parts of the District, which is now one of the richest in the Punjab.

Except in the Chenāb Colony, the District is held chiefly on the *bhaiyāchārā* and *pattīdāri* tenures. *Zamīndāri* lands cover about 14 square miles, and lands leased from Government about 388 square miles, chiefly in the colony. The area for which details are available from the revenue records of 1903–4 is 2,978 square miles, as shown on the next page.

Wheat is the chief crop of the spring harvest, covering 604 square miles in 1903–4. Gram occupied 174 square miles, and barley 51.

Cotton is the chief staple of the autumn harvest (86 square miles), and great millet is the principal food-grain (95 square miles). Rice occupied 73 square miles, and maize, spiked millet, and pulses 57, 47, and 153 respectively. There were 31 square miles under sugar-cane in that year.

Tahsīl.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Gujrānwāla . .	756	490	314	214
Wazīrābād . .	455	266	219	113
Khāngāh Dogrān .	873	553	468	276
Hāfizābād . . .	894	500	425	333
Total	2,978	1,809	1,426	936

The cultivated area increased by 45 per cent. during the decade ending 1900, owing to the construction of the Chenāb Canal, which has totally changed the agricultural conditions of the tract irrigated by it. Nothing of importance has been done towards improving the quality of the crops grown; but, as usual in canal-irrigated tracts, the cultivators display a marked tendency to substitute the more valuable spring crops for those reaped in the autumn. Loans for the construction of wells are taken steadily, nearly Rs. 7,000 having been advanced during the five years ending 1903–4 under the Land Improvement Loans Act: but there is yet much room for a further increase in the number of wells.

Before the construction of the Chenāb Canal the south-western portion was chiefly inhabited by pastoral tribes; but the introduction of canal-irrigation and the consequent contraction of the area available for grazing has largely diminished the number of live-stock, though the cattle are still of good quality. An important fair is held at Shāhkot for the benefit of the colonists, and a cattle fair is also held at Eminābād. The indigenous breed of horses is not above the average; the Army Remount department maintains six horse and six donkey stallions, and the District board four pony stallions. An annual horse show is held at Gujrānwāla. Sheep and goats are kept, but not in large numbers, and there are but few camels.

Of the total area cultivated in 1903–4, 1,426 square miles, or 79 per cent., were classed as irrigated. Of this area, 663 square miles were irrigated from wells, 19 from wells and canals, 741 from canals, and 1,033 acres from tanks. In addition, 63 square miles, or nearly 4 per cent. of the cultivated area, were subject to inundation from the Chenāb. The CHENĀB CANAL takes off at the village of Khānkī and its main line runs through the District, giving off the Jhang, Miān Alī, and Gugera upper branches, and irrigating the Hāfizābād and Khāngāh Dogrān *tahsīls*. Most of the canal-irrigated area was formerly waste.

and is included within the limits of the Chenāb Colony. The District has 12,786 masonry wells, worked by cattle with Persian wheels, chiefly found in the tract bordering on Siālkot. It also possesses 277 water-lifts, unbricked wells, and lever wells, mostly in the riverain tracts. Cultivation on the land inundated by the river is precarious, and mainly confined to the spring harvest.

There are 2·2 square miles of 'reserved' and 6 of unclassed forests under the Deputy-Conservator of the Chenāb Forest division, and 7·1 square miles of unclassed forest and Government waste under the Deputy-Commissioner. With the exception of a few *shīsham* (*Dalbergia Sissoo*) plantations, these forests consist only of scrub and grass land, but form valuable fuel and fodder reserves. Avenues of *shīsham* have been planted along the roads and canal banks, but on the whole the District is not well wooded. In 1904 the forest revenue was 1·2 lakhs.

The sole mineral product is *kankar* or nodular limestone, which is found in considerable abundance.

Trade and communications.

The village of Nizāmābād enjoys a reputation for cutlery of various descriptions, and also for the manufacture of silver-headed walking-sticks. Silk is woven to a small extent, and the goldsmiths' work of the District has some celebrity. Brass vessels are made and ivory-turning carried on at Gujrānwāla. Cotton cloth is woven in considerable quantities. The District contains 12 steam mills and factories, which in 1904 employed 475 hands in all. Five of them are cotton-ginning and pressing factories, three are flour-mills, three combine flour-milling with cotton-ginning, and one is a combined flour-mill and oil-press. The principal centres of the mill industries are Gujrānwāla, Hāfizābād, and Sāngla.

A large and growing export trade is carried on in wheat and other grains, cotton, and oilseeds; brass vessels and *ghī* are also exported. The chief imports are iron, piece-goods, and sugar. Wazīrābād is the centre of a considerable trade in timber floated down the Chenāb from the Himālayas.

The main line of the North-Western Railway passes through the District inside its eastern border, and a branch from Wazīrābād down the Rechna Doāb runs through the heart of the District, tapping the wealth of the Chenāb Colony. The Wazīrābād-Siālkot branch also has a length of 6 miles in the District. The grand trunk road runs parallel to the main line of railway, and a metalled road to Siālkot parallel to the latter branch. The total length of metalled roads is 75 miles, and of unmetalled roads 1,309 miles. Of these, 56 miles of metalled and 40 of unmetalled roads are under the Public Works department, the rest being maintained from Local funds. The Chenāb, which is now little used for traffic, is crossed by eleven ferries.

Prior to the construction of the Chenāb Canal, agriculture over the

greater part of the District was very precarious, and the Bār was inhabited by nomad tribes who grew crops only in the most favourable seasons. All the famines, therefore, which visited the Punjab up to 1890 affected Gujrānwāla more or less seriously. The construction of the canal has, however, entirely altered the conditions of the District, which now exports food-grains even in famine years. The area of the crops matured in the famine year 1899–1900 amounted to 77 per cent. of the normal.

Administration.

The District is in charge of a Deputy-Commissioner, aided by three Assistant or Extra-Assistant Commissioners, of whom one is in charge of the treasury. It is divided into the four *tahsīls* of Gujrānwāla, Hāfizābād, Wazīrābād, and Khāngāh Dogrān, each under a *tahsīldār* assisted by a *naib-tahsīldār*. Two Executive Engineers of the Upper Chenāb Canal have their head-quarters at Gujrānwāla, and one of the Lower Chenāb Canal at Khānki. Wazīrābād is the head-quarters of an Extra-Deputy-Conservator of Forests.

The Deputy-Commissioner as District Magistrate is responsible for criminal justice, while civil judicial work is under a District Judge. Both officers are supervised by the Divisional Judge of the Siālkot Civil Division, who is also Sessions Judge. There are five Munsifs, two at head-quarters and one at each *tahsīl*; and six honorary magistrates. The predominant forms of crime are burglary and cattle-theft.

The Sikh exactions reached a height which is almost incredible, as in the richest portion of the District the ordinary rate was equivalent to an assessment of Rs. 5 per acre, while a yearly demand of Rs. 120 to Rs. 200 was imposed on the land watered by a good well. Consequently at annexation the people were impoverished and demoralized, the village communities weak and inclined to repudiate the principle of joint responsibility, and averse to a fixed system of money payments. The summary settlement made in 1847–8 was based on the cash value of the grain collections of the preceding five years, less a reduction of 10 per cent. The result was a demand of Rs. 6,70,000, which fell on the cultivation at the rate of Rs. 1–9–3 per acre. The assessment was not only rigid and unequal, but in itself severe. High prices enabled the people to pay it until annexation, when prices fell. In 1851 the regular settlement was begun, and the officer in charge was convinced of the necessity for large and general reductions. The result was a reduction of the previous demand by about 20 per cent. The new assessment had an incidence of Rs. 1–4–6 per cultivated acre. In spite of the large abatement, many villages and individuals refused to engage for a cash payment and were sold up in consequence. Thus a serious expropriation of the old proprietors in favour of capitalists was begun. The matter was eventually referred to Government, and it was decided that 'the refusal of a proffered assessment by the proprietors does not

make the compulsory sale of their land legal: all that they can be made to forfeit are the privileges of contracting for the payment of the Government revenue and of managing the estate.' That the assessment was in reality too high is shown by a comparison with the much lower rates of the present settlement, despite the rise of prices, and also by the fact that economic rents were practically unknown, the owners being only too glad to get tenants to cultivate on condition of paying the revenue with a nominal *mālikāna*. In 1858 a reduction of Rs. 21,000, or 4 per cent., was made, and thereafter the assessment, helped out by good seasons, worked satisfactorily. A revised settlement, completed in 1864–8, was directed chiefly to the correction of inequalities. Pasture lands were assessed where cultivation was backward, and lump rates were imposed on wells. The assessment was extremely moderate, the amount being only 6 lakhs, compared with $5\frac{1}{4}$ lakhs for the last year of the regular settlement, and an immediate revision was contemplated, but the settlement was eventually sanctioned for twenty years. Competition rents came into existence, and the District slowly recovered from the financial chaos into which a combination of circumstances had thrown it.

The current settlement was made between 1888 and 1894. Prices were found to have risen 27 per cent. in Wazīrābād and Gujrānwāla, where also cash-rents prevailed to an extent unusual in the Punjab. The third *tahsīl*, Hāfizābād, was in process of irrigation from the Chenāb Canal, and was therefore assessed for only ten years. The sanctioned assessment was nearly 9 lakhs, an increase of 37 per cent. The *tahsīl* of Hāfizābād, which has now been reconstituted and divided (with some additions and modifications) into the two *tahsīls* of Hāfizābād and Khāngāh Dogrān, again came under settlement in 1902. The previous assessment was $3\frac{1}{4}$ lakhs, and it is anticipated that the revision now being carried out will result in an increase of $2\frac{1}{4}$ lakhs, due to the extension of irrigation and colonization. The average assessment on 'dry' land is 10 annas (maximum 12 annas, minimum 8 annas), and on 'wet' land Rs. 1–2 (maximum Rs. 1–8, minimum 12 annas). The total demand, including cesses, for the whole District in 1903–4 was about 12·9 lakhs. The average size of a proprietary holding is 5·4 acres.

The collections of land revenue alone and of total revenue are shown in the table below, in thousands of rupees:—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	5,05	5,34	8,93	9,95
Total revenue . .	6,83	8,08	13,30	14,79

The District contains six municipalities: namely, GUJRĀNWĀLA, WAZĪRĀBĀD, RĀMNAGAR, AKALGARH, EMĪNĀBĀD, and KILA DĪDĀR

SINGH; and five 'notified areas,' HĀFIZĀBĀD, SODHRA, PINDI BHATTIĀN, KHĀNGĀH DOGRĀN, and SĀNGLA. Outside these, local affairs are managed by the District board, whose income, derived mainly from a local rate, amounted in 1903-4 to 1·5 lakhs. The expenditure in the same year was 1·3 lakhs, roads being the largest item.

The regular police force consists of 503 of all ranks, including 120 municipal police, in charge of a Superintendent, who usually has 4 inspectors under him. The village watchmen number 1,423. There are 14 police stations, 9 outposts, and 2 road-posts. The District jail at head-quarters has accommodation for 422 prisoners.

Gujrānwāla stands twenty-first among the twenty-eight Districts of the Province in respect of the literacy of its population. In 1901 the proportion of literate persons was 3·5 per cent. (6 males and 0·4 females). The number of pupils under instruction was 4,906 in 1880–1, 8,267 in 1890–1, 10,938 in 1900–1, and 10,664 in 1903–4. In the last year there were 14 secondary (public) schools, 119 primary, and one 'special,' besides 24 advanced and 144 elementary (private) schools, with 851 girls in the public and 520 in the private schools. The District possesses 6 Anglo-vernacular high schools for boys. The chief schools for girls are the mission vernacular high school and the municipal vernacular middle school at Gujrānwāla town. The District also has 19 schools, with 209 pupils, intended mainly for low-caste children. The expenditure on education in 1903–4 was 1·4 lakhs, of which municipalities paid Rs. 15,000, while fees realized Rs. 28,000. The rest was paid out of District funds, except the sum of Rs. 13,000 received from Government for the maintenance of primary schools, and Rs. 17,000 from subscriptions and endowments.

Besides the civil hospital and city branch dispensary, there are 11 outlying dispensaries, which in 1904 treated a total of 178,237 out-patients and 1,137 in-patients, while 10,080 operations were performed. The expenditure was Rs. 21,000, Local and municipal funds providing Rs. 10,000 each.

The number of successful vaccinations in 1903–4 was 24,039, representing 27 per 1,000 of the population. The Vaccination Act has been extended to the town of Gujrānwāla.

[M. F. O'Dwyer, *District Gazetteer* (1893–4), and *Settlement Report* (1894); Rev. T. G. Bailey, *Panjābi Grammar as spoken in the Wazīrābād District* (1904).]

Gujrānwāla Tahsīl.—*Tahsīl* of Gujrānwāla District, Punjab, lying between 31° 49′ and 32° 20′ N. and 73° 48′ and 74° 24′ E., with an area of 756 square miles. The population in 1901 was 252,863, compared with 269,166 in 1891. It contains the towns of GUJRĀNWĀLA (population, 29,224), the head-quarters, EMINĀBĀD (6,494), and KILA DĪDAR SINGH (2,705); and 445 villages. The land revenue and cesses

in 1903–4 amounted to Rs. 3,78,000. The eastern portion of the *tahsīl* is a rich and highly developed tract, with abundant well-irrigation. The rest lies in the level uplands, where the soil is lighter and better adapted for crops dependent on a scanty rainfall. The floods of the Degh irrigate a few villages in the south-east.

Gujrānwāla Town.—Head-quarters of Gujrānwāla District and *tahsīl*, Punjab, situated in 32° 9′ N. and 74° 11′ E., on the North-Western Railway and the grand trunk road; distant by rail from Calcutta 1,294 miles, from Bombay 1,322, and from Karāchi 828. Population (1901), 29,224, including 10,390 Hindus, 15,525 Muhammadans, and 2,181 Sikhs. Originally founded, as its name shows, by Gūjars, the town was renamed Khānpur by some Sānsi Jats of Amritsar who settled here; but its old name has survived. The town is of modern growth, and owes any importance it has entirely to the father and grandfather of Ranjit Singh. Ranjīt Singh himself was born here, but he made Lahore his capital in 1799. The town contains a mausoleum to Mahān Singh, father of Ranjīt Singh, and a lofty cupola covering a portion of the ashes of the great Mahārājā himself.

The municipality was created in 1867. The income during the ten years ending 1902–3 averaged Rs. 73,400, and the expenditure Rs. 73,600. In 1903–4 the income and expenditure were Rs. 83,100 and Rs. 67,900 respectively. The chief source of income was octroi (Rs. 59,700); while the main items of outlay were conservancy (Rs. 10,300), education (Rs. 17,300), medical (Rs. 10,100), public safety (Rs. 9,600), and administration (Rs. 12,800). The trade of the town, which is rapidly increasing, is chiefly in grain, cotton, and oil. Brass vessels and iron boxes are made, ivory bangles are turned, and some pottery and cotton cloth are manufactured. The factory industries include cotton-ginning, cotton-pressing, and the production of oil; and the three factories gave employment in 1904 to 120 persons. There are three Anglo-vernacular high schools for boys—the municipal, United Presbyterian American Mission, and Khālsa schools—and an aided vernacular high school for girls, also supported by the mission, besides a vernacular middle school for girls maintained by the municipal committee. The mission further maintains an industrial orphanage for boys. The town possesses a Government hospital with a branch dispensary.

Gujrāt District.—District in the Rāwalpindi Division of the Punjab, lying between 32° 10′ and 33° 1′ N. and 73° 17′ and 74° 29′ E., with an area of 2,051 square miles. In shape a narrow strip of sub-Himālayan plain country, it lies between the Chenāb and Jhelum rivers and marks the northern limit of the true Punjab plains. It is bounded on the north-east by Kashmīr; on the north-west by Jhelum District; on the south-west by Shāhpur; and on the south-east by Gujrānwāla

and Siālkot. The northern corner is crossed by the Pabbī Hills, a low range, pierced by the Jhelum at Mong Rāsul, which forms a continuation of the Salt Range. These hills consist of a friable Tertiary sandstone and conglomerate, presenting a chaos of rock, naked or clothed with rough scrub, and deeply scored with precipitous ravines. Their highest point has an elevation of 1,400 feet above sea-level, or about 600 feet above the surrounding plain. Immediately below and surrounding these hills, a high and undulating submontane plateau extends across the north of the District from the Jhelum eastwards, till it terminates in a precipitous bank 100 to 200 feet in height, which almost overhangs the waters of the Tawī and Chenāb. At the foot of the plateau a belt of upland crosses the District, ending in a high bank, beneath which lies a strip of lowland about 8 miles in width, which forms the wider valley of the Chenāb. A similar narrow belt of lowland fringes the Jhelum. The surface of the *doāb* thus descends in a series of steps towards the south and west, and a section of the line along the grand trunk road shows a rise of 111 feet from the Chenāb to the Jhelum in a distance of 34 miles. Besides the great boundary rivers, the Jhelum and Chenāb, the District is intersected by numerous hill torrents rising in the Outer Himālayas or the Pabbī Hills, the chief being the Bhimbar, Bhandar, Dalli, Dabūli, Doāra, and Bakāl. Most of these streams, although unmanageable torrents in the rains, either dry up entirely during the dry season, or find their way into the Chenāb by insignificant channels.

Physical aspects.

The greater part of the District lies on the Indo-Gangetic alluvium, but beds of Siwālik (Upper Tertiary) age are found in the Pabbī or Khāriān Hills, which are composed of an enormous accumulation of sandstones, sands, conglomerates, and clays. The sandstones are highly fossiliferous, and have yielded great numbers of mammalian bones and teeth, including species of *Equus*, *Bos*, *Elephas*, and *Cervus*.

None of the submontane Districts, except Siālkot, has a scantier flora than Gujrāt, but the low Pabbī range supports a few stunted trees and shrubs of kinds abundant in the neighbouring Salt Range and dry Outer Himālaya. In the broken country at the north-east corner, and on the bank of the Chenāb farther to the south, there is a good deal of scrub, chiefly *Acacia modesta* and reed jungle. The *dhāk* (*Butea frondosa*) is fairly common, while the *kīkar* (*Acacia arabica*) and horse-radish-tree (*Moringa pterygosperma*) occur also, the first being fully naturalized in the northern part.

Wolves are found in the Pabbī Hills and hyenas are occasionally met with; *nīlgai* and antelope are rare, but 'ravine deer' (Indian gazelle) are not at all uncommon on the hills. Wild hog are numerous

in the low-lying lands of the Chenāb, where they do a great deal of damage.

The climate is quite bearable, even in the hot season, owing to the nearness of the hills. The health of the people is unusually good; but malaria prevails along the Jhelum and Chenāb in the autumn months, and small-pox along the borders of Kashmīr, whence it is generally imported. Plague entered the District in 1902. The village of Malkowāl was in the same year the scene of an unfortunate accident whereby 19 villagers who had been inoculated against plague died of tetanus.

The rainfall is abundant, and the country people have a proverb that 'rain is always to be had for the asking.' It rapidly decreases with the distance from the Himālayas and the Pabbī range, the average annual fall varying from 28 inches at Khāriān to 20 at Phālia.

GUJRĀT TOWN itself is a place of some antiquity, and the District abounds in ancient sites, MONG being the most important. The District formed part of the kingdom of Porus, who was defeated by Alexander, probably in the Karri plain beyond the Jammu border, in July, 326 B.C.; but four years later it was conquered by Chandragupta Maurya in the national rising which took place on the death of Alexander. It remained under the Mauryas until shortly after the death of Asoka in 231, and about forty years later came under the sway of Demetrius the Graeco-Bactrian. The overthrow of the Bactrians by the Parthians in the latter half of the second century brought another change of rulers, and the coins of the Indo-Parthian Maues (*c.* 120 B.C.), who is known to local tradition as Rājā Moga, have been found at Mong. At the end of the first century A.D., the whole of the Punjab was conquered by the Yueh-chi. For several hundred years nothing is known of the history of the District, except that between 455 and 540 it must have been exposed to the ravages of the White Huns. Dr. Stein holds that the District formed part of the kingdom of Gurjjara, which, according to the *Rājatarangini*, was invaded between A.D. 883 and 902 by Sankara Varmān of Kashmīr, who defeated its king Alākhāna. This may be the Alī Khān to whom tradition ascribed the refounding of GUJRĀT. But authentic history commences only in the Lodī period, when Bahlolpur, 23 miles north-east of Gujrāt, was founded in the reign of Bahlol (1451–89). Khwās Khān, governor of Rohtās under Sher Shāh Sūri, founded Khwāspur near Gujrāt. The settlement of the tract was completed by Akbar, who built a fort and compelled the Gūjars, a pastoral tribe given to plunder, to settle in it. The tract was then named Gujrāt and formed into a separate district. Revenue records have been preserved in the families of the hereditary registrars (*kānungos*), and these exhibit Gujrāt as the capital of a district containing 2,592 villages, paying a revenue

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of 16 lakhs. In 1605 the famous Saiyid Abdul Kāsim received Gujrāt as a *tuyūl* or fief from Akbar. On the decay of the Mughal power Nādir Shāh ravaged the District and destroyed Gujrāt, after which it was overrun by the Gakhars of RAWALPINDI, who probably established themselves at Gujrāt in 1741. The country also suffered at the same time from the ravages of Ahmad Shāh Durrāni, whose armies frequently crossed and recrossed it.

Meanwhile the Sikh power had been asserting itself in the Eastern Punjab; and in 1765 Sardār Gūjar Singh, head of the Bhangī confederacy, crossed the Chenāb, defeated the Gakhar chief, Mukarrab Khān, and extended his dominions to the banks of the Jhelum. On Gūjar Singh's death in 1788, his son, Sāhib Singh, became involved in war with Mahān Singh, the chieftain of Gujrānwāla, and afterwards with his son, the celebrated Ranjīt Singh. After a few months of desultory warfare in 1798, the Gujrāt leader found it well to accept a position of dependence under the young ruler of Gujrānwāla. At length, in 1810, Ranjīt Singh, now master of the consolidated Sikh empire, determined to depose his tributary vassal. Sāhib Singh withdrew to the hills without opposition, and shortly afterwards accepted the Bajwāt territory in the present Siālkot District conferred on him in *jāgīr*. In 1846 Gujrāt came under the supervision of British officials, when a settlement of land revenue was effected under orders from the provisional government at Lahore. Two years later, the District was the scene of some of the battles which decided the event of the second Sikh War. While the siege of MULTĀN still dragged slowly on, Sher Singh established himself at Rāmnagar on the Gujrānwāla side of the Chenāb, 22 miles below Gujrāt, leaving the main body of his army on the northern bank. Here he awaited the attack of the British, who attempted unsuccessfully to drive him across the river, on November 22, 1848. Lord Gough withdrew from the assault with heavy loss; but sending round a strong detachment under Sir Joseph Thackwell by the Wazīrābād ferry, he turned the flank of the enemy, and won the battle of Sadullapur. Sher Singh retired northward, and took up a strong position between the Jhelum and the Pabbī Hills. The bloody battle of Chiliānwāla followed (January 13, 1849), a victory as costly as a defeat. On February 6 Sher Singh again eluded Lord Gough's vigilance, and marched southwards to make a dash upon Lahore; but the British pressed him close in the rear, and, on February 22, he turned to offer battle at Gujrāt. The decisive engagement which ensued broke irretrievably the power of the Sikhs. The Punjab lay at the feet of the conquerors, and passed by annexation under British rule.

At the first distribution of the Province, the whole wedge of land between the Chenāb and the Jhelum, from their junction to the hills,

formed a single jurisdiction; but a few months later, the south-western portion was made a separate charge, with its head-quarters at Shāhpur. Various interchanges of territory took place from time to time at later dates; and in 1857 the north-eastern corner of the original District, comprising the tongue of land between the Tawī and the Chenāb, was transferred to Siālkot. Gujrāt District then assumed its present form. At the time of the Mutiny the wing of native infantry stationed at Gujrāt was ordered to Siālkot, and the Jhelum mutineers, who tried to cross the river in order to join them, were defeated and dispersed by the Deputy-Commissioner with the police and local levies. A marauding tribe, the Chibs, from across the Jammu border, who had long been a source of annoyance, invaded the District and gave a good deal of trouble. But Deva, their stronghold, was destroyed in the following year by the Mahārājā of Jammu.

Excepting the mounds marking the ruins of ancient villages, the District contains no monuments of the Hindu period. At Khwāspur are the ruins of a *sarai* built in 1546 by Khwās Khān, the governor of Rohtās under Sher Shāh; and at Khāriān is a deep well with steps, built by Akbar in fulfilment of a promise made by Humāyūn. Another similar well built by Akbar exists at Gujrāt town, and there are the ruins of a hunting-box at Alamgarh. At Naurangābād are the remains of a *sarai* and at Khāriān a well with steps, both built by Aurangzeb. The tomb (rebuilt in 1867) of Shāh Daula at Gujrāt bears an inscription dated 1719.

The District contains 4 towns and 1,336 villages. Its population at each of the last four enumerations was: (1868) 616,509, (1881) 689,115, (1891) 760,875, and (1901) 750,548. It fell by 1·3 per cent. during the last decade, owing to emigration. The Chenāb Colony received more than 25,000 settlers, and the people readily emigrate even beyond India. The District is divided into the three *tahsīls* of GUJRĀT, KHĀRIĀN, and PHĀLIA, the head-quarters of each being at the place from which it is named. The towns are the municipalities of GUJRĀT, the head-quarters of the District, JALĀLPUR, KUNJĀH, and DINGA. The table on the next page shows the principal statistics of population in 1901.

Population

Muhammadans form as much as 87·4 per cent. of the population, Hindus 9·2, and Sikhs 3·3 per cent. The density, 366 persons per square mile, is about double the Provincial average, and is equal to the average for the sub-Himālayan Districts. The language of the District is Western Punjābi, sometimes known as Lahnda.

The most numerous caste is that of the agricultural Jats, who number 195,000, or 26 per cent. of the total population. Among Jats are included the Gondals, who in 1891 numbered 28,000. Next to them in importance are the Gūjars, who are far stronger here than in any

other Punjab District, and number 111,000, or 15 per cent. of the population. After them come the Rājputs (24,000), Arains (22,000), and Awāns (15,000). The Labānās (8,000), who were formerly carriers and traders, have now taken to agriculture and service in the army. Of the commercial and money-lending classes, the most numerous are the Arorās (29,000) and Khattrīs (18,000). The Bhātiās number only 5,000. The Muhammadan priestly class, the Saiyids, return 19,000, and the Brāhmans, who are traders as well as priests, 7,000. Of the artisan classes, the Mochīs (shoemakers and leather-workers, 34,000), Tarkhāns (carpenters, 24,000), Julāhās (weavers, 23,000), Kumhārs (potters, 18,000), Lohārs (blacksmiths, 14,000), and Telis (oil-pressers, 9,000) are the most important. The Kashmīrīs, immigrants from Kashmīr, who live mainly by shawl-weaving, number 33,000. Of the menial classes the most important are the Chūhrās (sweepers, 34,000), Māchhis (fishermen, bakers, and water-carriers, 16,000), and Nais (barbers, 15,000). About 63 per cent. of the population are supported by agriculture.

Tahsīl.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Gujrāt . .	556	3	518	309,887	557·3	— 0·3	10,798
Khāriān . .	643	1	507	242,687	377·4	— 2·2	6,715
Phālia . .	721	...	311	197,974	274·5	— 2·9	7,300
District total	2,051	4	1,336	750,548	365·9	— 1·3	24,813

NOTE.—The figures for the areas of *tahsīls* are taken from revenue returns. The total District area is that given in the *Census Report*.

As early as 1862 the operations of the Church of Scotland Punjab Mission, which had its head-quarters at Siālkot, were extended to Gujrāt, and in 1865 a European missionary was permanently stationed there. The activity of the mission is especially noticeable in the sphere of education. A Ladies' Mission House was completed in 1892, and *zanāna* work combined with female education has made steady progress. The District contained 241 native Christians in 1901.

Agriculture.

The submontane tract east of the Bhimbar consists of plateaux of sandy soil, intersected by hill torrents. West of that stream the Pabbī submontane tract is equally sandy and still more broken. The soil of the central upland is stronger and better, but like the submontane tract devoid of water, the Pabbī Hills arresting the drainage from the Himālayas and percolation from the Jhelum, while the torrents which pass through both these tracts flow in such deep beds as to do harm rather than good. The

soil of the lowlands is generally a good loam fertilized to some extent by the hill torrents, while the riverain tracts along the Jhelum and Chenāb consist of a fertile loam moistened by the rivers, though liable to injury from floods.

The District is held almost entirely by communities of small peasant proprietors, large estates covering only about 1,000 acres. The area for which details are available from the revenue records of 1903–4 is 1,922 square miles, as shown in the table below:—

Tahsil.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Gujrāt . . .	554	442	125	25
Khāriān . .	646	434	19	53
Phālia . . .	722	456	198	161
Total	1,922	1,332	342	239

The area, in square miles, under each of the principal food-crops in 1903–4 was: wheat (507), spiked millet (235), great millet (103), gram (97), and barley (56). There were 10 square miles under sugar-cane, 22 under cotton, and 58 under oilseeds.

The cultivated area increased by 4 per cent. during the decade ending 1901; there is still room, however, for extension, especially by increased well-irrigation. Experiments made in the cultivation of Australian wheat appear to show that, while the out-turn and quality are excellent, the grain does not store well. Attempts have also been made to cultivate sweet potatoes and *Sorghum saccharatum*, so far without definite results. Loans are readily taken for the construction of wells, and nearly Rs. 39,000 was advanced under the Land Improvement Loans Act during the five years ending 1904.

The cattle are of the ordinary Punjab type, but have been improved by the introduction of Hissār bulls. The local breed of horses is good, and has been much improved by foreign sires. The Army Remount department maintains 5 horse stallions, and the District board 3 pony and 3 donkey stallions. A horse show is held every year at Gujrāt town. Sheep and goats are kept in considerable numbers, but only a few camels.

Of the total area cultivated in 1903–4, 342 square miles, or 26 per cent., were irrigated from wells. In addition, 87 square miles, or 7 per cent., are subject to inundation from the Jhelum, Chenāb, and minor streams. The District contains 10,435 masonry wells worked with Persian wheels by cattle, besides 541 unbricked wells, lever wells, and water-lifts. The Lower Jhelum Canal takes off at the village of Mong Rasūl, but does not irrigate any part of the District. The projected Upper Jhelum Canal will, however, supply nearly the whole of the Phālia *tahsīl*.

The District contains 83 square miles of 'reserved' and half a mile of unclassed forests under the Deputy-Conservator of the Chenāb Forest division, and 2 square miles of unclassed forest and Government waste under the Deputy-Commissioner. The most important Reserve is that comprising the greater part of the Pabbī Hills, which is covered with bush and scrub; a fair number of forest areas dotted about the central plateau are thinly covered with *jand* (*Prosopis spicigera*), *dhāk* (*Butea frondosa*), and the leafless caper; but much of the 'reserved' forest consists of grass lands on the Chenāb. In 1903–4 the income of the forests under the Forest department was Rs. 41,000, and of those under the Deputy-Commissioner Rs. 600.

Beds of *kankar* or nodular limestone are to be found, though the supply is very limited. Lime used to be burned in the Pabbī Hills, but the practice has been discontinued.

The most important industry is the manufacture of furniture at Gujrāt, of a quality unsurpassed in India outside the Presidency towns. The only other distinctive art is that of damascening iron with gold and silver, now applied chiefly to the decoration of such articles as caskets, vases, bracelets, trays, &c. Cotton cloth is made all over the District, and an imitation in cotton of English checks and tweeds has a wide sale. Hemp sacking is largely produced. Inferior shawls of *pashm* wool are made at JALĀLPUR, and there is a small manufacture of soap. Boots and shoes and brass vessels are made at Gujrāt town.

Trade and communications.

In ordinary years the District produces much more grain than is required for local consumption, and wheat, spiked millet, oilseeds, oil, *ghī*, wool, cotton (raw and woven), and hides are exported in large quantities by rail. The chief imports are piece-goods, iron, sugar, salt, rice, wool, brass vessels, spices, and dyes. Gujrāt town is the only place of any commercial importance.

The District is traversed by the main line and the Sind-Sāgar branch of the North-Western Railway, which meet at LĀLA MŪSA. The grand trunk road runs by the side of the main line, and an important unmetalled road leads from Gujrāt to Bhimbar in Jammu territory. The total length of metalled roads is 52 miles, and of unmetalled roads 611 miles. Of the metalled roads, 41 miles are under the Public Works department, and the rest are maintained by the District board. Both the Chenāb and Jhelum are navigable, but as trade routes they have lost their importance since the advent of the railway. The railway bridges across the two rivers have tracks for wheeled traffic, and there are thirteen ferries on the Chenāb and seven on the Jhelum.

The District was visited by famine in 1783 (the great *chālīsa* famine), 1815, 1831, and 1863; and scarcity was experienced in 1869 and in 1878. In 1896–7 severe scarcity occurred. Relief works were opened,

and the greatest daily average relieved in any week exceeded 55,000, while the total expenditure was Rs. 4,84,000. There was scarcity again in 1899–1900, but only test works were opened, and the daily average number of persons relieved in any week never rose above 1,800. The total expenditure was a little over Rs. 10,000.

Famine.

The District is divided into the three *tahsīls* of GUJRAT, PHĀLIA, and KHĀRIAN, each under a *tahsīldār* and *naib-tahsīldār*. It is in charge of a Deputy-Commissioner, aided by three Assistant or Extra-Assistant Commissioners, of whom one is in charge of the District treasury. Two Executive Engineers of the Upper and Lower Jhelum Canals are stationed in the District.

Administration.

The Deputy-Commissioner as District Magistrate is responsible for criminal justice. Civil judicial work is under a District Judge, and both officers are subordinate to the Divisional Judge of the Jhelum Civil Division, who is also Sessions Judge. There are three Munsifs, one at head-quarters and one at each outlying *tahsil*. The predominant forms of crime are cattle-theft and burglary.

Under Sikh rule the revenue was paid almost universally in grain, the demand being a certain share of either the actual or the estimated produce. Ranjīt Singh divided the District among his Sardārs, who took what they could without much regard to the recognized share. In 1846 a summary settlement was made of the greater part of the District, the assessments being based mainly on the average realizations of the preceding three years. In 1849 a second summary settlement was effected; but the proprietors could only be induced to take up leases with great difficulty, as this settlement, though it reduced the previous demand, was unequal and in many estates too high. Sir Henry Lawrence visited the District in 1852 and found startling inequalities in the rates, which varied from an anna to Rs. 2 per *bigha*. He ordered a prompt reassessment, which was carried out by the Deputy-Commissioner in three months, the result being a reduction of 5·9 per cent. in the demand, and an average rate of Rs. 1–10 5 per acre of cultivation.

The first regular settlement was made between 1852 and 1859, and resulted in a reduction of 8 per cent. on the previous assessment. A revised assessment was carried out in 1865–8. An immediate increase of 5·8 per cent. was taken, giving a rate of R. 0–15–5 per acre of cultivation, while, after fifteen years, progressive assessments were to bring in an increase of 12·8 per cent. on the demand of the regular settlement. A second revision was undertaken between 1888 and 1893. Prices were found to have risen by at least 25 per cent. and cultivation by 27 per cent. The new assessment, including various deferred payments, was fixed at 8·5 lakhs, at which sum it stood in 1903–4, being an increase

of 3·1 per cent. on the last payment under the first revised settlement. The average assessment on 'dry' land is 14 annas (maximum Rs. 1–4, minimum 8 annas), and on 'wet' land Rs. 1–13 (maximum Rs. 2–8, minimum Rs. 1–2). The average size of a proprietary holding is 3·6 acres.

The collections of land revenue alone and of total revenue are shown below, in thousands of rupees :—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	5,91	6,10	7,76	8,53
Total revenue . .	7,51	8,11	10,60	11,85

The District contains four municipalities, GUJRĀT, JALĀLPUR, KUNJĀH, and DINGA. Outside these, local affairs are managed by the District board, whose income, mainly derived from a local rate, amounted in 1903–4 to Rs. 91,400. The expenditure was Rs. 94,000, of which public works formed the largest item.

The regular police force consists of 338 of all ranks, including 38 municipal police, under a Superintendent, who is usually assisted by 2 inspectors. The village watchmen number 907. There are eleven police stations. The District jail at head-quarters has accommodation for 118 prisoners.

Gujrāt stands twenty-second among the twenty-eight Districts of the Province in regard to the literacy of its population, of whom 3·3 per cent. (6·1 males and 3 females) could read and write in 1901. The proportion is highest in the Phālia *tahsīl*. The number of pupils under instruction was 3,764 in 1880–1, 9,553 in 1890–1, 9,725 in 1900–1, and 11,218 in 1903–4. In the last year the District possessed 6 secondary and 74 primary (public) schools, and 3 advanced and 256 elementary (private) schools, with 378 girls in the public, and 733 in the private schools. Gujrāt town has two Anglo-vernacular high schools, one kept up by Government as a model school, and one by the Scottish Mission. The mission also has schools for low-caste children at Gujrāt, Lāla Mūsa, Shādiwāl, and Jalālpur. The total expenditure on education in 1903–4 was Rs. 60,000, of which Provincial funds contributed Rs. 6,000, municipalities Rs. 8,000, and the District fund Rs. 19,000. Fees brought in Rs. 19,000.

Besides the civil hospital at Gujrāt, the District contains ten outlying dispensaries. In 1904 the number of cases treated was 152,575, of whom 548 were in-patients, and 6,645 operations were performed. The expenditure was Rs. 16,000, the greater part of which was contributed by the District fund. The Scottish Mission maintains two hospitals: the Dow Memorial Hospital for females at Gujrāt, with a

branch at Daulatnagar; and the other at Jalālpur, with a branch at Lāla Mūsa.

The Vaccination Act is in force only in Gujrāt and Jalālpur towns. The number of persons successfully vaccinated in 1903–4 was 23,770, representing 31·7 per 1,000 of the population.

[Captain H. S. P. Davies, *District Gazetteer* (1892–3); *Settlement Report* (1893); and *Customary Law of the Gujrāt District* (1892).]

Gujrāt Tahsīl.—*Tahsīl* of Gujrāt District, Punjab, lying between 32° 24′ and 32° 53′ N. and 73° 47′ and 74° 29′ E., with an area of 554 square miles. Its south-east border rests on the Chenāb. The northern portion consists of an undulating plateau, scored by hill torrents. The plateau sinks into the plain about the latitude of Gujrāt town, and is bordered by a narrow strip of low-lying alluvial land along the Chenāb. The population in 1901 was 309,887, compared with 308,861 in 1891. The *tahsīl* contains the towns of GUJRĀT (population, 19,410), the head-quarters, JALĀLPUR (10,640), and KUNJĀH (6,431); and 518 villages. The land revenue and cesses amounted in 1903–4 to 4·4 lakhs.

Gujrāt Town.—Head-quarters of the District and *tahsīl* of Gujrāt, Punjab, situated in 32° 34′ N. and 74° 5′ E., on the main line of the North-Western Railway, about 5 miles north of the present bed of the Chenāb. It is distant by rail 1,335 miles from Calcutta, 1,362 miles from Bombay, and 817 miles from Karāchi. Population (1901), 19,410. Tradition ascribes the foundation of the town, under the name of Udanāgri, to Bachan Pāl, a Rājput, in the fifth century B.C., and avers that it was refounded about A.D. 120 by Rānī Gujrān, a daughter-in-law of the famous Rājā Rasālu of Siālkot. Another tradition declares it to have been refounded by one Alī Khān, who may be the Alākhāna who was overthrown between A.D. 883 and 902 by Sankara Varman of Kashmīr.

The town stands on an ancient site, formerly occupied by two successive cities, the second of which Sir Alexander Cunningham supposed to have been destroyed in 1303 by the Mongols, in one of their incursions during the reign of Alā-ud-dīn Khiljī. More than 200 years later, Sher Shāh turned his attention to the surrounding country, but it was probably Akbar who founded the existing town. Though standing in the midst of a Jat neighbourhood, the fort was first garrisoned by Gūjars, and took the name of Gujrāt Akbarābād. Remains of the Mughal period still exist. During the reign of Shāh Jahān, Gujrāt became the residence of a famous saint, Pīr Shāh Daula, and the wealth derived from the offerings of disciples was freely spent on the adornment of the town. The viaduct he built over a torrent bed close to the town is still in a good state of preservation. The Gakhar chief, Mukarrab Khān of Rāwalpindi, held Gujrāt for twenty-five years, until his expulsion in 1765 by the Sikhs under Sardār Gūjar Singh Bhangī. Gujrāt

was the scene of the final struggle between the Sikhs and the British, when Lord Gough's victory over Sher Singh on February 22, 1849, finally broke the Sikh power. In the middle of the town is the old fort, built, together with the bath-house, by Akbar. The shrine of Shāh Daula, to the north of the town, is famous throughout and beyond the Province. It is the home of a number of human monstrosities with narrow heads and weak intellects, known as Shāh Daula's rats. They are brought from great distances, and it has been supposed that parents sometimes compress the heads of their infants in order to fit them for this asylum.

The municipality was created in 1867. The income during the ten years ending 1902–3 averaged Rs. 31,900, and the expenditure Rs. 31,600. In 1903–4 the income was Rs. 36,100, derived chiefly from octroi and school fees; and the expenditure was Rs. 36,500. The town is the trading centre of the District, and collects all the surplus agricultural produce, in return for which European goods, raw iron, &c., are sold to the villagers. There is also a considerable traffic in dried fruits from Kashmīr. European furniture is made on a large scale, and the art of damascening iron with gold is practised. A good deal of cotton cloth is woven, including imitations of English checks and tweeds, but the old industry of shawl-weaving is practically extinct. Boots and shoes are made and supplied to many native regiments, and the Gujrāt brass vessels have some reputation. The town has a civil hospital and two Anglo-vernacular high schools, one maintained by the municipality but managed by the Educational department since 1904, the other by the Scottish Mission, which has a station here. The town also possesses the Dow Memorial Hospital for women, maintained by the mission.

Gula.—Sub-*tahsīl* of the Kaithal *tahsīl* of Karnāl District, Punjab. It has an area of 455 square miles, and contains 204 villages. The head-quarters are at the village of Gula. The land revenue and cesses amounted in 1903–4 to 1·2 lakhs.

Gulaothī.—Town in the District and *tahsīl* of Bulandshahr, United Provinces, situated in 28° 35′ N. and 77° 48′ E., 12 miles north of Bulandshahr town on the Meerut road. Population (1901), 7,208. The town is said to have been founded by Mewātīs or by Gahlot Rājputs. It is chiefly inhabited by Saiyids and Baniās. A prominent Saiyid, named Mihrbān Alī, who died a few years ago, did much to improve the town and its approaches. He built several houses, metalled the road to the Kālī Nadī, and built a bridge across it at a cost of Rs. 30,000, and also constructed a large mosque and established a school for teaching Arabic and Persian. The American Methodist Mission has a branch here. Gulaothī is administered under Act XX of 1856, with an income of about Rs. 1,800. It has a considerable

local trade and is thriving. There is a middle school with about 200 pupils.

Gulbarga Division.—Division in the south-western corner of the Hyderābād State, also known as the Southern Division. It lies between 15° 11′ and 18° 40′ N. and 75° 16′ and 77° 51′ E., and is bounded on the west and south by the Bombay and Madras Presidencies respectively. The head-quarters of the *Sūbahdār* or Commissioner are at GULBARGA CITY. The total population of the Division rose from 1,946,737 in 1881 to 2,430,999 in 1891, and to 2,462,834 in 1901. The area in the latest year was 16,585 square miles, and the density of population 149 persons per square mile, as compared with 135 for the whole State. In 1901 Hindus formed 88 per cent. and Musalmāns 11 per cent. of the total population, while other religions included Jains (6,163), Christians (1,059, of whom 903 were natives), Pārsīs (152), Sikhs (64), and Animists (209). In 1901 the Division included the four Districts of Gulbarga, Lingsugūr, Osmānābād, and Raichūr. Considerable changes have been made under the reconstitution of 1905. Lingsugūr District has been divided between Gulbarga and Raichūr, and the Yādgir *tāluk* has been transferred from Raichūr to Gulbarga. Bīdar District has been added to the Division, which is now constituted as follows:—

District.	Area in square miles.	Population, 1901.	Land revenue and cesses, 1901, in thousands of rupees.
Gulbarga . .	6,004	1,041,067	18,36
Osmānābād .	4,010	535,027	12,51
Raichūr . .	6,879	932,090	19,18
Bīdar . .	4,168	766,129	11,63
Total	21,061	3,274,313	61,68

The Division contains 32 towns, or about two-fifths of the total number in the State, and 5,652 villages. The largest towns are GULBARGA CITY (population, 29,228) and RAICHŪR (22,165). The chief places of commercial importance are GULBARGA, RAICHŪR, OSMĀNĀBĀD, LĀTŪR, LINGSUGŪR, TULJĀPUR, BĪDAR, and HOMNĀBĀD. Gulbarga, Raichūr, Bīdar, KALYANI, UDGIR, PARENDA, MUDGAL, Sūrāpur, Kohir, and ANEGUNDI are famous for their historical and archaeological associations.

Gulbarga District[1].—District in the Gulbarga Division, Hyderābād State, adjoining Osmānābād and Bīdar on the north; Atrāf-i-balda and Mahbūbnagar on the east; Mahbūbnagar, Raichūr, and Lingsugūr on the south; and part of Osmānābād and the District of Bijāpur and the

[1] For the alterations made in 1905 see section on Population. Except where otherwise stated, the article describes the District as it stood before these were effected.

Akalkot State of Bombay on the west. It lies between 16° 40′ and 17° 44′ N. and 76° 22′ and 78° 20′ E., and had a total area of 4,092 square miles in 1901, including *paigāh* and *jāgīrs*; while the area of the *khālsa* and *sarf-i-khās* lands was 2,428 square miles. A range of hills enters the north of the District from Osmānābād on the west, and continues in a south-easterly direction for about 60 miles through the Mahāgaon and Chincholi *tāluks*, which are hilly. The remaining *tāluks* are almost flat, the slope of the country being from north to south and south-east.

Physical aspects.

The principal river is the Bhīma, a tributary of the Kistna, which rises near Poona in British territory, and, entering the District near Afzalpur in the west, traverses the *tāluks* of Gulbarga and Andola for a distance of 150 miles. The other rivers are the Kāgnā, and its tributaries the Benithora, Mullāmāri, and Kāmāluti. The Kāgnā is itself a tributary of the Bhīma, as is also the Awarja.

The geological formations are the Archaean gneiss eastward, the Bhīma series about the centre, and the Deccan trap the north and west. The region has been fully described by Mr. R. B. Foote (*Memoirs, Geological Survey of India*, vol. xii, pt. i).

Generally speaking, the District is devoid of forests, except in the hilly portions of the Mahāgaon and Chincholi *tāluks*, which contain teak (*Tectona grandis*), *eppa* (*Hardwickia binata*), *tirman* (*Anogeissus latifolia*), *sandra* (*Acacia Catechu*), *babūl* (*Acacia arabica*), *tarvar* (*Cassia auriculata*), *bijāsāl* (*Pterocarpus Marsupium*), *mallāmaddi* (*Terminalia tomentosa*), *nīm*, tamarind, mango, and several species of fig.

In the hills and jungles in the northern portion of the District tigers, bears, leopards, *nīlgai*, and wild hog are found; and in the plains, hare and antelope.

The climate differs materially in the several geological divisions. The Carnatic or trappean portion is hot and dry during the summer, whereas the Telingāna or granitic portion, which has wooded hills and tanks, is damp, and not so hot in the dry season. Fever prevails from July to October, and during recent years plague has been prevalent in some *tāluks*.

The rainfall is very capricious, causing occasional droughts. Its average amount for the twenty-one years ending 1901 was 29 inches. The great famine of 1900 was the result of the abnormally scanty rainfall (14·7 inches) of 1899.

Prior to the Muhammadan conquest the District was included in the territory of the Kākatīyas of Warangal. In the early part of the fourteenth century Ulūgh Khān, afterwards Muhammad bin Tughlak, annexed it to the kingdom of Delhi, since which time it has continued under Muhammadan rule. After the death of Muhammad bin Tughlak it fell to the Bahmani kingdom,

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and after the break-up of that power, to Bijāpur. On the conquest of the Deccan by Aurangzeb it was again included in the empire of Delhi, but was separated from it on the establishment of the Hyderābād State by Asaf Jāh.

The fort of Gulbarga, originally built by Rājā Gulchand, and afterwards strengthened by Alā-ud-dīn Bahmani, is a remarkable building, containing 15 towers and 26 guns, one of which is 25 feet long. A large mosque, 216 by 176 feet, in the fort, is constructed on the model of the mosque of Cordova in Spain, and is the only one of its kind in India. In the eastern quarter of the city are the tombs of the kings of Gulbarga, huge square buildings surmounted by domes. Near the tomb of Khwāja Banda Nawāz are a mosque, a *sarai*, and a college, all built by Aurangzeb in 1687. The forts of Fīrozābād, on the Bhīma river, and of Chincholi and Chitāpur are worthy of note, especially the last, where the Portuguese from Goa constructed a curious church, which has now been renovated.

Population.

The number of towns and villages, including the *paigāh* and *jāgīrs*, is 1,109. The population at the last three enumerations was: (1881) 523,838, (1891) 649,258, and (1901) 742,745. The towns now are GULBARGA, ALAND, SŪRĀPUR, KOSGI, YĀDGĪR, SERAM, SHĀHĀBĀD, and KODANGAL. About 81 per cent. of the population in 1901 were Hindus and 15 per cent. Musalmāns. Though the District is in the Carnatic division, Kanarese was spoken by only 53 per cent. of the population, Telugu being the language of 25, Urdū of 14, and Marāthī of 6 per cent. The subjoined table exhibits the details of area, towns, villages, and population, according to the Census of 1901:—

Tāluk.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Gulbarga . .	524	1	108	75,512	144	− 11·0	Not available.
Mahāgaon . .	307	...	81	43,090	140	− 3·6	
Chincholi . .	277	...	69	37,671	136	+ 16·0	
Kodangal . .	141	1	60	31,182	221	− 8·7	
Seram . .	267	1	72	50,043	187	+ 53·2	
Gurmatkāl . .	304	...	86	51,424	169	+ 8·5	
Andola . .	608	...	117	73,854	121	+ 24·1	
Jāgīrs, &c. . .	1,664	4	509	379,969	228	+ 11·1	
Total	4,092	7	1,102	742,745	181	+ 14·4	14,880

In 1905 the Gurmatkāl and Mahāgaon *tāluks* were divided between Seram, Kodangal, Gulbarga, and Yādgīr, the last being transferred from Raichūr District. Shāhpur and Sūrāpur have also been added from the recently abolished Lingsugūr District, besides 73 villages from Mahbūbnagar District, included in the Kodangal and Yādgīr *tāluks*.

In its present form, the District consists of eight *tāluks*—Gulbarga, Andola, Chincholi, Kodangal, Seram, Yādgīr, Shāhpur, and Sūrāpur; five *paigāh ilākās*, Aland, Fīrozābād, Afzalpur, Kālgi, and Chītāpur; and two *jāgīrs*, Tāndūr and Kosgi. The area of the *paigāh* and *jāgīrs* is approximately 976 square miles, and the population 253,349.

The most numerous agricultural caste is that of the Kunbīs, 231,000, of whom 81,000 are Lingāyat or Banjāra Kāpus and 77,500 Kolīs. Next in point of numbers are the Mahārs or village menials (67,600), the Māngs or leather-workers (39,100), the Vānīs or trading caste (30,000), and the Brāhmans (18,000). The Mahārs and Māngs also work as field-labourers. The number engaged in and supported by agriculture in 1901 was 432,814, or 58 per cent. of the total population.

An American Methodist Mission was established at Gulbarga in 1883, with a branch at Karni. A school connected with it has 200 pupils. The District contained 187 native Christians in 1901, of whom 113 were Roman Catholics and 62 Anglicans.

Agriculture.

Gulbarga falls into two natural divisions, the Carnatic and the Telingāna. In the former the *regar* or black cotton soil predominates, which is interspersed with *masab* or *chalka*; in the latter the *masab* and *kharab* or sandy soils predominate, though *regar* is not wanting. In the Carnatic portion *rabi* crops, such as white *jowār*, wheat, gram, cotton, and linseed, are extensively grown, while in the latter yellow *jowār*, *bājra*, castor seed, rice, linseed, and hemp are the common *kharīf* crops. In the two Telingāna *tāluks* of Kodangal and Gurmatkāl rice is largely raised with tank-irrigation. The soils of Chincholi and Mahāgaon are lateritic, and are next to the *regar* in fertility.

The tenure of lands is mainly *ryotwāri*. In 1901, out of an area of 2,428 square miles of *khālsa*, crown lands, and *ināms*, 1,955 were cultivated, 43 being irrigated; 138 square miles were cultivable waste and fallows, 126 were occupied by forests, and 209 were not available for cultivation. The staple food-crop is *jowār*, covering 64 per cent. of the net area cropped. *Bājra*, rice, and wheat are next in importance, the area under each being 206, 32, and 22 square miles. Cotton and oilseeds were grown in 50 and 103 square miles.

On the completion of the settlement of the District in 1893, the whole of the available lands were taken up by the ryots, hence no extension of holdings has been possible. The cultivators have shown no disposition to adopt improved agricultural implements or new varieties of seed.

There is no particular breed of cattle, but those ordinarily reared are strong and suitable for ploughing the stiff *regar* and heavy loamy soils. Sheep and goats are of the ordinary type. Ponies are to be had everywhere for from Rs. 25 to Rs. 30, but those of the Andola *tāluk* command

as much as Rs. 100. Two Arab stallions are kept by the State at Gulbarga and Kodangal for the purpose of improving the breed of horses.

The total area of irrigated land in 1900–1 was 43 square miles, or about 2·2 per cent. of the cultivated area. The different sources of irrigation and the areas under each are as follows: canals and channels 4·5 square miles, and tanks and wells 38·5. Kodangal and Gurmatkāl are the only *tāluks* where tank-irrigation is carried on. There are altogether 107 large and 119 small tanks, 5,255 wells, and 196 other sources of irrigation, such as anicuts and channels, all in good repair.

In the Chincholi *tāluk* 51 square miles of land were formed into a 'reserved' forest in 1896, which contains teak and other valuable timber. The *tāluks* of Seram, Kodangal, Gurmatkāl, and Mahāgaon also contain some scrubby jungle and open forests. The total area of protected and unprotected forests is 126 square miles.

The most important mineral found and worked extensively in the District is laminated limestone, which occurs at Shāhābād on the Great Indian Peninsula Railway, Chītāpur on the Nizām's Guaranteed State Railway, and also in the Gulbarga and Seram *tāluks*. The stone is known as Shāhābād stone, from the name of the place where it was first quarried, and is employed largely in roofing and flooring.

Among hand industries are the weaving of cotton and silk *sārīs* and cloth of gold, ordinary cotton cloth, and cotton tweeds. In the Andola and Chincholi *tāluks* the shepherds make blankets of very superior quality valued at from Rs. 10 to Rs. 50, which are durable and waterproof. A large spinning and weaving mill, 2 miles west of Gulbarga, began working in 1886, with a capital of 12 lakhs. It contains 21,036 spindles and 224 looms, and gives occupation to 970 persons. There is one ginning factory in the Seram *tāluk*.

Trade and communications.

The exports consist of *jowār*, *bājra*, and other cereals and pulses, hides, cotton, jaggery, oilseeds, tobacco, and *tarvar* bark used in tanning. The chief imports are salt, salted fish, opium, spices, silver and gold, refined sugar, sulphur, yarn, raw silk, iron, brass, cotton and woollen stuffs, matches, kerosene oil, and hardware. The city of Gulbarga is the chief centre of trade, to which everything is brought by the Great Indian Peninsula Railway, and thence distributed to all parts of the District. The other centres are Tāndūr and Sulhpet. The trading castes are Lingāyat Vānīs and Komatis, besides Momins, Mārwāris, and Bhātias. The Bhātias, who come from Bombay, are engaged in the export of grain and oilseeds.

The Great Indian Peninsula Railway line enters the District at Dudneh in the west and leaves it near Wādi junction, with a length of 50 miles. The Nizām's Guaranteed State Railway, starting from Wādi junction, goes north-east and east for 115 miles.

The total length of roads is only 79 miles. These run from Gulbarga to Homnābād (37½ miles), Tāndūr station to Kosgi (26 miles), Nāwandgi station to Dichkanpalli (11½ miles), and the Malkhaid road (4 miles).

Famine.

Altogether eight famines were recorded during the last century, in 1804, 1819, 1833, 1854, 1873, 1877–8, 1897, and 1899–1900. The famine of 1804 was partly due to struggles with the Marāthās, and partly to excessive rain, which prevented sowings; and that of 1873 was caused by the influx of people from the adjoining famine-stricken districts; all the others were the result of local drought and the failure of crops. The rainfall in 1899 was less than half the average, causing the failure of both the *kharīf* and *rabi* crops, which resulted in the famine of 1900. The distress was intense, and relief measures were carried out at a cost to the State of 3¾ lakhs. The loss of cattle was computed at 28 per cent.

Administration.

The District is divided into three subdivisions: the first comprising the *tāluks* of Seram, Kodangal, and Yādgīr, under a Second Tālukdār; the second comprising the *tāluks* of Chincholi and Gulbarga, under a Third Tālukdār; and the third comprising the *tāluks* of Andola, Shāhpur, and Sūrāpur, under the head-quarters Second Tālukdār. There is a *tahsīldār* in each *tāluk*.

The District civil court is under a Judge called the *Nāzim-i-Dīwāni*, and each *tahsīldār* sits as a subordinate civil court. The First Tālukdār is the chief magistrate of the District, and the *Nāzim-i-Dīwāni* is a Joint-Magistrate, who exercises magisterial powers during the absence of the First Tālukdār from head-quarters. The Second and Third Tālukdārs and the *tahsīldārs* exercise second and third-class magisterial powers. As Gulbarga city is the head-quarters of the Division, the *Sūbahdār* and the *Nāzim-i-Sūbah* or Divisional Civil and Criminal Judge also hold their courts here. Serious crime in ordinary years is light, but cattle-thefts and dacoities increase in adverse seasons.

The District was formed in 1873, and then consisted of only six *tāluks*, but on the breaking-up of the Sūrāpur District in 1883 the Andola *tāluk* was transferred to Gulbarga. Prior to 1866, *tāluks* were made over to revenue farmers who received 10 per cent. on the collections; but in 1866 regular officials were appointed for revenue and judicial work. The first regular settlement was completed in 1893 and the assessment was fixed for fifteen years, resulting in an increase of Rs. 1,76,970, or nearly 18 per cent. The average assessment on 'dry' land is Rs. 1–2 (maximum Rs. 2–2, minimum R. 1), and on 'wet' land Rs. 11 (maximum Rs. 14, minimum Rs. 5). The land revenue and the total revenue of the District are shown on the next page, in thousands of rupees.

Owing to changes in area effected in 1905, the land revenue demand is now about 17·4 lakhs.

	1881.	1891.	1901.	1903.
Land revenue . .	7,49	11,32	11,77	11,27
Total revenue . .	13,92	21,82	23,84	25,67

The levy of a local cess of one anna in the rupee on land revenue was commenced from 1890, five-twelfths of the total being set apart for roads and public purposes. Boards were constituted for every *tāluk*, except Gulbarga, where a District board was formed, which supervises the working of the *tāluk* boards and municipalities of Gulbarga and all *tāluk* head-quarters. The total income in 1901 was Rs. 66,300, and the expenditure Rs. 48,600.

The First Tālukdār is the head of the District police, the *Mohtamim* or Superintendent being his executive deputy. Under him are an assistant, 9 inspectors, 96 subordinate officers, 600 constables, and 30 mounted police, distributed among 34 *thānas*. The Central jail at Gulbarga is capable of accommodating 1,000 prisoners. Convicts with sentences exceeding six months from Osmānābād, Raichūr, and Lingsugūr are sent here. The six outlying *tāluk* offices have lock-ups for temporary confinement. The prisoners in the Central jail are taught various industries; and carpets, *shatranjis*, counterpanes, towels of sorts, cotton tweeds and other cloths, tents, and furniture of all descriptions are made, most of which are sold locally.

Gulbarga District takes a low place as regards the literacy of its population, of whom only 2 per cent. (3·8 males and 0·11 females) could read and write in 1901. The first State school was opened in 1866, and local board schools were established in 1890. The total number of pupils under instruction in 1881, 1891, 1901, and 1903 was 323, 2,130, 3,600, and 3,317 respectively. In 1903 there were 43 primary schools, one middle, and one high school, 273 girls being under instruction in that year. The total amount expended on education in 1901 was Rs. 26,750, of which 52 per cent. was devoted to primary schools.

The District possesses one hospital and four dispensaries, with accommodation for 24 in-patients. In 1901 the total number of cases treated in all these institutions was 34,438, of whom 204 were in-patients. The number of operations performed was 652. The total expenditure was Rs. 15,580, of which Rs. 12,555 was contributed by the State and Rs. 3,025 from the local cess. Besides these, there is a *Yūnāni* dispensary in Gulbarga city, at which the total number of patients treated in 1901 was 24,295. The expenditure was Rs. 2,088, met wholly from the local cess.

The number of persons successfully vaccinated in 1900–1 was 1,766, or 2·37 per 1,000 of the population. Compared with previous years, the proportion has risen.

Gulbarga Tāluk.—Central *tāluk* of Gulbarga District, Hyderābād State. In 1901 the area was 674 square miles, and the population 103,051, including *jāgīrs*. The population in 1891 was 115,699, the decrease being due to plague. The *tāluk* contains GULBARGA CITY (population, 29,228), the head-quarters of the Division, District, and *tāluk*: and 145 villages, of which 37 are *jāgīr*. The land revenue in 1901 was 2·8 lakhs. In 1905 the Mahāgaon *tāluk* was merged in Gulbarga. The Great Indian Peninsula Railway passes through the *tāluk*, which is composed of black cotton soil. The two *paigāh ilākās* of Afzalpur and Kālgi, with populations of 34,909 and 30,610, and 47 and 43 villages respectively, lie to the west and east of Gulbarga. Their areas are about 151 and 136 square miles.

Gulbarga City.—Ancient city and head-quarters of the Gulbarga Division and District, Hyderābād State, situated in 17° 21′ N. and 76° 51′ E. The population in 1901 was 29,228, compared with 28,200 in 1891 and 22,834 in 1881. Gulbarga was formerly a Hindu city of some importance, and before the Musalmān conquest formed part of the dominions of the Rājā of WARANGAL. Warangal, Gulbarga, and Bīdar were successively captured by Muhammad bin Tughlak early in the fourteenth century. About 1345 the Deccan governors rebelled against Muhammad bin Tughlak; and in the confusion that followed Zafar Khān assumed royal dignity and, proclaiming his independence, took possession of the Deccan provinces, including Daulatābād, Gulbarga, and Bīdar, and establishing his capital at Gulbarga commenced to reign in 1347 under the title of Alā-ud-dīn Hasan Shāh Gangū Bahmani, or according to some historians Alā-ud-dīn Bahman Shāh. Gulbarga remained the capital of the Bahmani kings from this date until the reign of Ahmad Shāh Wali, who removed his capital to Bīdar. Gulbarga then rapidly lost its importance. In 1504 it was occupied by the Bijāpur troops; and though recovered by Amīr Barīd in 1514, it was shortly after again taken by the Bijāpur troops, and remained in the possession of the Adil Shāhi kings until the Mughal invasion of the Deccan, when Mīr Jumla besieged and took it in 1657. From this period Gulbarga formed part of the Deccan possession of the Delhi rulers, till the surrender of Hyderābād to the first of the Nizāms. The old palaces and mosques which were erected by the Bahmani kings were suffered to fall into ruins and decay after the removal of the capital to Bīdar.

The city is situated on an undulating plain, presenting a somewhat dreary expanse of black soil It was made the head quarters of a Division about 1874, when a new era of prosperity commenced. It now contains the residence of the *Sūbahdār*, several large buildings for State offices and officials, a Central jail, a public garden, a large tank, an extensive market-place, schools, post office and other public

offices, cotton-spinning and weaving mills, and a Christian mission with a school attached to it. The south-eastern line of the Great Indian Peninsula Railway has a station 2 miles from the town. Gulbarga is a large centre of trade, and has of late years become a most prosperous town and a rival of Sholāpur. In the eastern quarter of the town are the tombs of the Bahmani kings. They are huge square buildings surmounted by domes, and are roughly but strongly built. Not far away is the shrine of Khwāja Banda Nawāz, a celebrated Musalmān saint, who came here during the reign of Fīroz Shāh Bahmani in 1413. To the north-west is the old fort of Gulbarga, the outer walls and gateways of which, together with most of the old buildings in it, are in a dilapidated condition. The *bālā hisār* or citadel is in a better state of preservation. One of the most remarkable buildings in this part of India is the unfinished mosque in the old fort, built in the reign of Fīroz Shāh and modelled after the great mosque of Cordova in Spain, measuring 216 feet east and west, and 176 feet north and south, and covering an area of 38,016 square feet. Its great peculiarity is that the whole area is covered in.

Guledgarh (*Guledgud*, or 'the emigration hill'). -Town in the Bādāmi *tāluka* of Bijāpur District, Bombay, situated in 16° 3′ N. and 75° 47′ E., 9 miles north-east of Bādāmi. Population (1901), 16,786, including suburb 672. There are local manufactures of cotton and silk cloth, which are exported to Sholāpur, Poona, the Konkan, and Bombay. Guledgarh is one of the stations of the Basel Mission. In its neighbourhood are valuable stone quarries. The municipality was established in 1887, and had an average income during the decade ending 1901 of Rs. 12,000. In 1903–4 the income was Rs. 13,000. The town contains a dispensary. The fort was built in 1580 in the reign of Ibrāhim Adil Shāh II. The present town was built in 1706 on the site of a dry lake. It was besieged and plundered by one of the officers of the Rāstiās in 1750. Tipū Sultān took it in 1787. It was again plundered by the Marāthās, when the town was deserted for a time. Repeopled by the Desai, it was again plundered and deserted in the disturbances caused by Narsingh. In 1818 General Munro, through the Desai, induced the inhabitants to return. In 1826 it fell to the British.

Gulf of Cambay.—Strip of sea separating the peninsula of Kāthiāwār from the northern Bombay coast. *See* CAMBAY, GULF OF.

Gulf of Manaar. Gulf between India and Ceylon. *See* MANAAR, GULF OF.

Gulshanābād. -State and town in Central India. *See* JAORĀ.

Gumal Pass (*Gomal*).—The route which leads along the valley of the Gumal river, through the Southern Wazīristān Agency, North-West Frontier Province, from Murtazā and Domandi, on the borders of Afghānistān and Baluchistān, to the Afghān plateau. The Gumal

is the oldest of all the trade routes in this quarter. Down it there pours yearly a succession of *kāfilas* or caravans led and followed by thousands of well-armed traders, called Powindas, from Afghānistān to India. These traders belong to the Ghilzai race, of which the chief tribes are the Dotannis, Sulaimān Khel, Nāsirs, Kharotis, Jandrān, &c.

Gumal River.—River on the north-west frontier of India, which rises near Sarwandi on the Koh Nāk range in Afghānistān, and flowing south-east enters British territory at Domandi, where it is joined by the Kundar. It runs thence eastwards till it reaches Murtaza in Dera Ismail Khān District. Between Domandi and Murtaza the Gumal receives the waters of the Wana Toi (north bank) at Toi Khula, and the Zhob (south bank) at Khajuri Kach. From Domandi to Khajuri it is the boundary between the North-West Frontier Province and Baluchistān (Zhob Agency). The channel of the Gumal passes to the Indus a few miles south of Dera Ismail Khān cantonment; but, except in times of flood, all the water is used for irrigation in Dera Ismail Khān District and does not reach the Indus.

Gumla Subdivision.—South-western subdivision of Rānchī District, Bengal, lying between 22° 21′ and 23° 38′ N. and 84° 0′ and 85° 6′ E., with an area of 3,622 square miles. The subdivision is part of the undulating elevated plateau of Chotā Nāgpur, but to the west and south the surface is more broken, the hills are steeper, and the valleys are replaced by ravines. The plateau falls away to the south, while the level of the country rises, and there is another and higher plateau to the west. The population in 1901 was 434,689, compared with 398,243 in 1891, the density being 120 persons per square mile. The subdivision contains one town, PĀLKOT (population, 3,246), and 1,157 villages, of which GUMLA is the head-quarters.

Gumla Village.—Head-quarters of the subdivision of the same name in Rānchī District, Bengal, situated in 23° 2′ N. and 84° 33′ E. Population (1901), 777. It is a flourishing trade centre.

Gummanāyakanpālya.—Village in the Bāgepalli *tāluk* of Kolār District, Mysore, situated in 13° 18′ N. and 77° 55′ E., 10 miles east of Bāgepalli town. Population (1901), 207. It is a small fortified circular rock in the midst of jungle, and was founded about 1350 by a Beda chief, after whom it is named. He and his brother maintained a band of freebooters from Cuddapah, on condition of receiving half the plunder they gained. Settlers were also encouraged by liberal terms. By 1412 an orderly government was introduced, and the robbers withdrew. In the next century the place became tributary to Vijayanagar, and it remained in the same family till taken by Haidar Alī.

Gūmsur.—Subdivision and *tāluk* of Ganjām District, Madras. *See* GOOMSUR.

Gumtī (*Gomatī*; possibly the *Sambos* of Arrian).—River of the

United Provinces, which rises (28° 35′ N., 80° 7′ E.) nearly 20 miles east of Pīlībhīt. For about twelve miles the river-bed is a mere depression, which dries up in the hot season. A small stream, the Gaihai, then joins it, and a shallow channel is formed, while after it has received the Joknai (35 miles from its source) it runs in a perennial stream. A few miles farther down the Pawāyān steam tramway crosses by a bridge 250 feet long, and the Shāhjahānpur-Kherī road by a bridge 210 feet long. The Gumtī then flows sluggishly through Shāhjahānpur and Kherī, with a winding course and a network of channels, choked with weeds and aquatic plants. Below Muhamdī it changes its character, and has a well-defined channel 100 to 200 feet wide, with banks increasing in height to 60 feet at Lucknow, 180 miles from its source. Two considerable affluents, the Kathnā (90 miles long) and Sarāyān (120 miles), join the Gumtī in Sītāpur. At Lucknow it is crossed by two railway bridges, and one stone, one brick, and two iron road-bridges. From Lucknow its course winds much through Bāra Bankī, Sultānpur, and Jaunpur Districts, the distance by river from Lucknow to Jaunpur being almost double the distance in a direct line. The breadth of the river increases from 120 to 200 feet in Lucknow and Bāra Bankī to 200 to 400 in Sultānpur, and 400 to 600 in Jaunpur. At Jaunpur it is crossed by a magnificent stone bridge, 654 feet long, built at the end of the sixteenth century, and also by a railway bridge. The Sai, a large river which runs parallel to the Gumtī for over 350 miles, joins it below Jaunpur. From this point the river flows through the Districts of Jaunpur and Benares, and joins the Ganges at Saidpur in Ghāzīpur District, after a total course of nearly 500 miles.

The Gumtī with its tributaries drains about 7,500 square miles, and is especially liable to severe floods, causing much damage. A careful survey of the river was made after the flood of 1894. It then appeared that the floods are entirely due to excessive rainfall in the catchment area, and not to spill from other rivers. At Lucknow the fall is only 9 inches per mile, and at Jaunpur only 6 inches, so that flood-water cannot be carried off fast enough. After heavy rain in September, 1894, the river rose at Lucknow to a height of 22 feet above the ordinary low-water level. There is a tradition that in 1774 the Gumtī rose so high at Jaunpur that boats sailed over the bridge, the parapet of which is 27 feet above low-water level. In 1871 the water rose there to a height of 9 feet above the parapet; 4,000 houses were destroyed in the city, and nearly 9,000 in the villages of the District. In September, 1894, the river again rose 27 feet above low-water level, and 1,378 houses in the city were partly or completely destroyed. The Gumtī is navigable as high as Muhamdī, but traffic is not very considerable. Grain, fuel, and thatching-grass are carried down stream, and stone is taken up. It is not used for irrigation.

Guna.—Town and British military station in the Isāgarh district of Gwalior State, Central India, situated in 24° 39′ N. and 77° 19′ E., on the Agra-Bombay road, and on the Bīna-Bāran branch of the Great Indian Peninsula Railway. Population (1901), 11,452, including military station. Originally a small village, the place rose in importance after 1844, when it became a station for a regiment of Gwalior Contingent Cavalry. The opening of the railway from Guna to Bāran in 1899 at once increased its importance as a trading centre, and it has continued to develop rapidly. The town, which has a population (1901) of 5,415, contains a charitable dispensary, a State post office, a *sarai*, and a school.

The military station lies on a picturesquely wooded site about a mile east of the town, and has a population (1901) of 6,037. After the Gwalior Contingent revolted in 1857, the station was for a time occupied by British troops, but since 1860 it has been garrisoned by the Central India Horse. Up to 1896 the officer commanding was also in political charge of the surrounding minor States, now included in the GWALIOR RESIDENCY. He is still an *ex-officio* Assistant to the Resident at Gwalior, and exercises the powers of a second-class magistrate for Guna station. Besides the regular military hospital, a civil dispensary, a school, and an inspection bungalow are situated here. The local funds, raised chiefly from octroi, bring in an income of about Rs. 6,500 a year.

Gundak.—River of Nepāl and Bengal. *See* GANDAK.

Gundalpet.—Southern *tāluk* of Mysore District, Mysore State, lying between 11° 36′ and 12° 1′ N. and 76° 24′ and 76° 52′ E., with an area of 535 square miles. The population in 1901 was 74,897, compared with 63,036 in 1891. The *tāluk* contains one town, Gundalpet (population, 4,065), the head-quarters; and 155 villages. The land revenue demand in 1903–4 was Rs. 91,000. The west and south are occupied by extensive forests, separated from the inhabited portions by ranges of hills running parallel with these boundaries and culminating in the GOPĀLSWĀMI BETTA, situated at the angle where they diverge. The Gundal river flows through the *tāluk* from south to north and has a dam for irrigation. The Moyār runs along the south boundary, but in a very sunken bed. *Jola* is the staple 'dry crop,' and *rāgī* is also grown. The area under 'wet crops' is small, but a superior rice is raised under the Vijayapur tank, and betel-leaf of a special quality and value is largely grown. Wild date groves abound on the banks of the Gundal and its feeders.

Gundiāli.—Petty State in KĀTHIĀWĀR, Bombay.

Gundlakamma.—River of Southern India, which rises in the Nallamalai hills in Kurnool District, Madras, in 15° 48′ N. and 78° 51′ E. Shortly afterwards it is joined by two mountain streams, the

Zampaleru and the Enumaleru, and then enters the plains through the Cumbum *ghāt*. An enormous reservoir, known as the Cumbum tank, has been formed for irrigation purposes by throwing a dam across the gap at this point. After issuing from this tank, the river turns to the north and runs under the Velikonda hills in a meandering course through a corner of Kurnool District. It next enters the south of Guntūr District, then turns first east and later south-east, flowing part of this distance through Nellore District, and at last falls into the sea in 15° 34′ N. and 80° 10′ E., near Pedda Devarampād, about 12 miles north of Ongole. The river comes down in freshes in September, October, and November; and during high tides it is navigable for two miles inland from its mouth.

Various projects have been put forward for utilizing its waters for irrigation on a large scale. One scheme is to build a masonry dam across it at Tangirāla, about 12 miles south-west of Vinukonda in Guntūr District. This would intercept the drainage from an area of 1,771 square miles, and form a reservoir 15 square miles in extent, capable of storing water sufficient to irrigate about 130,000 acres. The supply in the reservoir would be taken down the bed of the river for 23 miles to a point where a dam could be built to turn it into a channel on the left bank, which would distribute it over the Ongole *tāluk*. The estimated cost of this project is about 60 lakhs, and it is expected to yield a return of from 2 to 3 per cent. on the capital outlay.

Gundlupet.—*Tāluk* of Mysore District, Mysore. *See* GUNDALPET.

Guni.—*Tāluka* in Hyderābād District, Sind, Bombay, lying between 24° 30′ and 25° 10′ N. and 68° 20′ and 68° 50′ E., with an area of 986 square miles. The population in 1901 was 91,506, compared with 79,940 in 1891. The density, 93 persons per square mile, is below the District average. The *tāluka* contains one town, TANDO MUHAMMAD KHĀN (population, 4,635), the head-quarters; and 158 villages. The land revenue and cesses in 1903–4 amounted to more than 2¼ lakhs. The *tāluka* consists of a level plain, of which the monotony is broken only by two small hills. Considerable irrigation works have been constructed, and others are in contemplation. The principal crops are rice, *bājra*, wheat, barley, and sugar-cane.

Gunnaur Tahsīl.—North-western *tahsīl* of Budaun District, United Provinces, comprising the *parganas* of Asadpur and Rājpura, and lying between 28° 6′ and 28° 29′ N. and 78° 16′ and 78° 39′ E., with an area of 370 square miles. Population increased from 126,440 in 1891 to 162,291 in 1901. There are 313 villages and one town, GUNNAUR (population, 6,644), the *tahsīl* head-quarters. The demand for land revenue in 1903–4 was Rs. 2,16,000, and for cesses Rs. 26,000. The density of population, 439 persons per square mile, is below the District average, though the rate of increase between 1891 and 1901 was higher

than in any other *tahsīl*. Gunnaur lies almost entirely in the Ganges *khādar*, the high sandy tract characteristic of Budaun only crossing the south-east corner. It is thus liable to floods, but benefits by comparatively dry seasons. A considerable tract is still occupied by jungle. In 1903–4 the area under cultivation was 246 square miles, of which 40 were irrigated, wells being the chief source of supply.

Gunnaur Town.—Head-quarters of the *tahsīl* of the same name in Budaun District, United Provinces, situated in 28° 14′ N. and 78° 27′ E., 4 miles south of Babrālā station on the Oudh and Rohilkhand Railway. Population (1901), 6,644. The town was the head-quarters of a *mahāl* or *pargana* under Akbar, but its early history is legendary. It is chiefly composed of mud huts with a few brick houses, and contains a dispensary and a branch of the American Methodist Mission. Gunnaur is administered under Act XX of 1856, with an income of about Rs. 1,000. A good deal of trade passes through the place to Babrālā station. There are a middle school with 90 pupils and a girls' school with 15.

Guntakal.—Village in the Gooty *tāluk* of Anantapur District, Madras, situated in 15° 9′ N. and 72° 23′ E. Population (1901), 6,059. It is an important railway junction. Here the north-west line of the Madras Railway is joined by the three branches of the Southern Mahratta Railway which lead respectively to Bezwāda, Bangalore, and Bellary. The distance from Guntakal to Bombay is 518 miles, to Madras 276, to Bellary 30, to Bangalore 174, and to Bezwāda 279 miles. A steam cotton-press, known as Volkart's United Press, has been erected; but the existence of the junction has done little for the place, and it is not rapidly increasing. On the high ground to the south-west, one of the most dreary spots in all the Presidency, have been discovered several prehistoric implements, &c.

Guntok.—Capital of Sikkim State. *See* GANGTOK.

Guntupalli.—Hamlet in the Ellore *tāluk* of Kistna District, Madras, situated in 17° N. and 81° 8′ E., 24 miles north of Ellore town. Population (1901), 1,092. On the western side of a small ravine running up into a low group of hills are extensive rock-cut Buddhist remains. These consist of a *chaitya* cave, a circular chamber with a simple façade containing a *dāgaba* cut in the solid rock, and several sets of *vihāra* caves with entrance halls and chambers on each side. On the ridge shutting in the ravine are a series of cut stone *dāgabas*, and a brick *stūpa* in fair preservation. The date of these remains is placed at about 100 B.C. The *chaitya* cave is still resorted to as a place of pilgrimage. Local tradition asserts that there was formerly a town called Jainapuram on the site of Guntupalli.

Guntūr District.—A District in the Madras Presidency which has recently (1904) been constituted out of the Ongole *tāluk* of Nellore and

portions of Kistna District. Its head-quarters are at the town after which it is named, and it consists of the revenue subdivisions of Guntūr, Tenāli, Narasaraopet, and Ongole. Until 1859 there was an older District of the same name and with the same head-quarters. This was abolished in that year and divided between the Districts of Rājahmundry and Masulipatam, which were renamed Godāvari and Kistna. Subsequent to this change the construction and extension of the great irrigation systems which lead from the Godāvari and Kistna rivers, and the increase in work of all kinds which is necessarily the result of improvement in the methods of administration, rendered the task of efficiently controlling these two wealthy areas more than one Collector could compass. The Godāvari District has accordingly now been lightened by the transfer to Kistna of the *tāluks* of Yernagūdem, Ellore, Tanuku, Bhīmavaram, and Narasapur (excluding Nagaram Island), while Kistna has been relieved of the *tāluks* of Tenāli, Guntūr, Sattanapalle, Palnād, Bāpatla, Narasaraopet, and Vinukonda, which, with the Ongole *tāluk* of Nellore, have been formed into the new Guntūr District. Its area is 5,733 square miles, the population (1901) 1,490,635, and the land revenue demand 56½ lakhs.

Guntūr Subdivision.—Subdivision of Guntūr District, Madras, consisting of the GUNTŪR and SATTANAPALLE *tāluks*.

Guntūr Tāluk.—*Tāluk* of Guntūr District, Madras, lying between 16° 8′ and 16° 35′ N. and 80° 20′ and 80° 41′ E., with an area of 500 square miles. The population in 1901 was 200,557, compared with 266,817 in 1891. The *tāluk* contains two towns—GUNTŪR (population, 30,833), the head-quarters, and MANGALAGIRĪ (7,702) and 109 villages, of which UNDAVALLE is interesting for its archaeological remains. The demand on account of land revenue and cesses in 1903–4 amounted to Rs. 5,13,000. In the south of the *tāluk* the tract adjoining Bāpatla is a fertile expanse of black soil, a veritable garden when the rainfall is sufficient, but extremely desolate in dry weather. The centre of the *tāluk* is liable to be submerged by floods, which deposit a wealth of river mud on the land, making portions of it very fertile. The country is well supplied with good roads, and the Bank Canal passes through a portion of its north-eastern corner. The heat in April and May is excessive, but after the north-east monsoon breaks the weather becomes cool and pleasant.

Guntūr Town.—Former head-quarters of the Collector of the old Guntūr District, Madras, situated in 16° 18′ N. and 80° 28′ E. Since 1859 it was the station of the Sub-Collector of Kistna, and it has recently become the head-quarters of a new Guntūr District. It was constituted a municipality in 1866. The municipal income and expenditure during the ten years ending 1902–3 averaged Rs. 49,000 and Rs. 48,000 respectively. In 1903–4 the income amounted to

Rs. 1,58,000 and the expenditure to Rs. 1,55,000; of the former, Rs. 1,00,000 was contributed by Government, and the rest was principally derived from the house and land taxes and tolls. The population in 1901 numbered 30,833, of whom 22,843 were Hindus, 6,926 Musalmāns, and 1,060 Christians. The town is situated 6 miles to the east of the Kondavīd hills, which the rays of the evening sun light up with beautiful effect. It was apparently founded in the second half of the eighteenth century by the French, who preferred it to Kondavīd, the head-quarters of the *sarkār* then in their possession, on account of its greater coolness and better water-supply. The town indeed derives its name from the Telugu *gunta*, 'a tank.' Guntūr still enjoys the reputation of being one of the healthiest and best-conserved towns in the Presidency, but as compared with other places its water-supply can no longer be considered good. A partial scheme for improving it by tapping some springs in the neighbourhood has recently been completed at a cost of over 2 lakhs.

When the NORTHERN CIRCĀRS were ceded to the British in 1765, Guntūr was specially exempted from the cession during the life of Basālat Jang, whose *jāgīr* it was. In 1778 the Madras Government rented the place from Basālat Jang. It was restored to him in 1780, but again came into the hands of the British in 1788, the cession being finally confirmed in 1823.

Five lines of road converge on the town, the most important being the trunk road which runs from Sītānagaram, on the Kistna river near Bezwāda, to Madras. It is a great centre of the cotton trade, containing three steam and two hand presses, and five ginning factories. It possesses a second-grade college, managed by the American Evangelical Lutheran Mission. In former days, during the hot season when the canals were closed, the only means of egress was by a road journey of 60 miles to Masulipatam and thence by steamer to Madras. This inaccessibility has been removed since the opening of the East Coast and Southern Mahratta Railways, on the latter of which it has a station.

Gunupur.—Agency *tahsīl* in Vizagapatām District, Madras, lying on the Ganjām border, with an area of about 600 square miles. The population in 1901 was 113,682, compared with 113,822 in 1891, consisting of Khonds and Savaras, with a sprinkling of Oriyā Brāhmans and a considerable number of Telugus. The number of villages is 1,149, and the head-quarters are at Gunupur. The *tahsīl* lies entirely in the valley of the Vamsadhāra river, and is extensively cultivated with rice and 'dry grains.' The greater part of it is included in the Jeypore estate, but part belongs to the *zamīndar* of Kurupām.

Gurdāspur District.—District in the Lahore Division of the Punjab, lying between 31° 35′ and 32° 30′ N. and 74° 52′ and 75° 56′ E., with an area of 1,889 square miles. It is bounded on the

north by the Jammu province of Kashmīr; on the west by Siālkot District; on the south-west by Amritsar; on the south-east and east by the Beās, which separates it from the Kapūrthala State and Hoshiārpur District, and also by Kāngra District; and on the north-east by the Chamba State.

Physical aspects.

The District occupies the submontane portion of the Bāri Doāb, together with a triangular wedge of territory west of the Rāvi. It includes the hill stations of DALHOUSIE and BAKLOH, two isolated pieces of hill territory acquired from the Chamba State, together with a strip of territory on which the cart-road runs connecting these outlying stations with the main body of the District. Dalhousie crowns the westernmost shoulder of a magnificent snowy range, the Dhaola Dhār, between which and the plains two minor ranges intervene. The PATHĀNKOT *tahsīl* comprises 130 miles of hilly country between the Rāvi and the Chakki torrent, which divides it from Kāngra District. The central watershed of the Doāb consists of an elevated plain, contracted to an apex just below the hills, but rapidly spreading out like an open fan until it fills the whole space between the two river-beds. Well-defined banks terminate the plateau on either side, the country falling abruptly away to the present level of the rivers. The bank towards the Beās valley attains a considerable height, and is covered by a ridge of drifted sand; that towards the Rāvi is less marked. The plain, though apparently a dead level, has a sufficient westward slope to cause a rapid flow of water in definite drainage lines after heavy rain. Immediately below the hills the country is well wooded, undulating, and picturesque; and, being constantly kept cool and moist by the drainage of the hills, it wears an aspect of freshness very different from the arid monotony of the plains. West of the Rāvi is a small tract between that river and the Jammu hills, watered by numerous flowing streams and of great fertility; but the rest of the District west of the Rāvi is, with the exception of the riverain strips, an arid expanse of rolling downs intersected by sandy torrent beds.

The Chakki stream, after forming the eastern border of the Pathānkot *tahsīl*, falls into the Beās, which touches the boundary of the District at Mirthal, and thence, running south, divides it from Hoshiārpur District on the east. On the west, the Rāvi forms the border between Gurdāspur and the Jammu State for about 25 miles, after which it enters the District and meanders in a south-westerly course till it leaves Gurdāspur and forms the boundary between Siālkot and Amritsar Districts. Its chief tributary is the Ujh, which enters the Shakargarh *tahsīl* from Jammu. Several minor torrents traverse the District, and the drainage from the hills has formed large *jhīls* or swamps, of which the Kāhnūwān is the largest. Their area has, how-

ever, been much diminished by drainage during recent years. The Bāri Doāb Canal, which takes off from the Rāvi at Mādhopur, just south of the hills, runs for some miles through a deep cutting, but emerges on the level a little east of Gurdāspur town, and divides into four main branches.

With the exception of a narrow strip penetrating the hills between the Chakki and Rāvi rivers, the whole of the District lies on the alluvium. The north-east running up to Dalhousie includes representatives of the older rocks of the Central Himālayan zone, consisting of slates overlain by conglomerates and limestones. The slates are usually referred to the infra-Blaini series of Simla, and the conglomerates, with which are associated masses of trap, to the Blaini group, while the limestones are supposed to represent the Krol group. To the south-west of these, the outer hills are composed of sandstones and conglomerates of Upper Tertiary age, belonging to the Siwālik series.

The District includes portions of several different botanical areas. Its southern part is entirely in the Central Punjab plain, and the flora resembles that of Jullundur. Owing to dense cultivation, there are few wild plants, except the field weeds that come up with the spring and autumn crops; but on the rivers the *tāli* (*Dalbergia Sissoo*) occurs, and blocks of inferior soil are covered with a jungle of reed-grass (*Saccharum* and *Andropogon sp.*) and tamarisk (*jhao, pilchi*). Trees are chiefly planted, but the *dhāk* (*Butea frondosa*) and *kikar* (*Acacia arabica*) grow spontaneously, though the second is a doubtful native. The *ber* (*Zizyphus Jujuba*) is abundant. The submontane tract east of the Rāvi is well wooded; the mango, the *jāmun* (*Eugenia Jambolana*), and the mulberry, with different shrubs and herbs of the Outer Himālaya, are frequent. West of the Rāvi there is little natural vegetation. The Pathānkot *tahsīl* is mainly Outer Himālayan.

The wild animals include the leopard, wolf, wild cat, hyena, hog, and deer, found chiefly in the Pathānkot *tahsīl*. *Nīlgai* are also common. Owing to the drying up of the *jhīls*, the water-fowl for which the District was once famous have largely disappeared.

The climate is on the whole good, and, because of the proximity of the hills, the heat is never excessive. The Pathānkot *tahsīl* is decidedly malarious, owing to its heavy rainfall, and to the large proportion of its soil which is saturated with canal-irrigation. Goitre is common here and spleen disease in all parts.

The rainfall is abundant. Excluding Dalhousie, where the annual fall averages 80 inches, the average varies from 24 inches at Aliwāl in the Batāla *tahsīl* to 51 inches at Mādhopur, where 11 inches fall in the winter and 40 in the summer. The heaviest rainfall recorded during the twenty years ending 1901 was 99 inches at Dalhousie in 1882–3, and 80 inches at Mādhopur in 1881–2. Only 9·6 inches fell at Aliwāl

in 1899–1900. In 1870 the Rāvi altered its course, and began to threaten the town of Dera Nānak. In spite of strenuous efforts made to divert the channel, the river carried away the Tāli Sāhib temple, and the town itself was only saved by the erection of a strong embankment. There were heavy floods in 1892 and 1894.

The earliest relics of antiquity are the cave-temples of Mukheshwar, attributed to the Pāndavas, on the Rāvi. PATHĀNKOT was the seat of an ancient Hindu kingdom whose history is related in the article on that town. During the Saiyid dynasty the District was in the heart of the Khokhar country, and KALĀNAUR was twice attacked by Jasrath Khokhar. Akbar was at Kalānaur when he received the news of Humāyūn's death, and he was here installed by Bairām Khān on February 15, 1556, and seems often subsequently to have held his court here. He had to retake the District from Sikandar Shāh, Sūri, in the following year. Under Akbar the Afghāns who had been settled at Kāhnūwān by Sher Shāh were driven out, and the place became a favourite resort of Jahāngir. In the reign of Shāh Jahān the Shāh Nahr or 'royal canal' was begun, in order to conduct water from the Rāvi to the gardens at Shālamār, near Lahore; and prince Murād's army assembled at Bahrāmpur, the head-quarters of the *chakladār* or governor of Jammu and Kāngra, for his campaign against Rājā Jagat Chand. The chief historical importance of the District, however, lies in its connexion with the rise of the Sikhs. Dera Nānak on the Rāvi preserves the name of the founder of Sikhism, who died in 1538 on the opposite bank. Both Gurū Amar Dās and Gurū Har Rai were also connected with the District. In 1710 the Sikh leader Banda plundered Batāla and Kalānaur, and made the District the head-quarters of his raids on the neighbourhood. Driven into the hills by Bahādur Shāh in 1711, he returned and built a fort at Lohgarh, identified with the modern Gurdāspur, and defeated Islām Jang, viceroy of Lahore. In 1713 Abdus Samad Khān drove him back to the hills, and, though he again returned and recaptured Kalānaur, finally took him prisoner at Lohgarh in 1716.

History.

The next period in the history of the District is closely connected with Adīna Beg. At first governor of Bahrāmpur and subsequently of the Jullundur Doāb, he founded Dīnānagar in 1730, which he seems generally to have made his head-quarters. This ruler is chiefly remarkable for the astuteness with which he played off Ahmad Shāh, the Delhi emperors, and the Marāthās, one against the other, until he was installed by the last-named power as governor of Lahore with head-quarters at Batāla. His death in 1758 removed the main obstacle to the spread of the Sikh power, which was only temporarily checked by their defeat at Barnāla in 1762.

The Sikh Rāmgarhia confederacy, under the famous Jassa Singh,

then occupied Batāla, Dīnānagar, Kalānaur, Srīgovindpur, and other places, the rest of the Bāri Doāb south of Dīnānagar falling into the hands of the Kanhayās, while west of the Rāvi the Bhangī confederacy rose to power. The rival confederacies soon fell out, and a struggle for supremacy ensued between the Rāmgarhiās and Kanhayās; the Bhangīs, who supported the former, lost their power in these parts in 1774, and Jassa Singh himself was expelled by the Kanhayās. He returned in 1783, but again lost Batāla to the Kanhayās in 1786; and two years after his death, in 1806, all the remaining possessions of the Rāmgarhia confederacy were annexed by Ranjīt Singh. The Kanhayā estates were confiscated in 1811, and later on Batāla and its dependencies were assigned to Sher Singh, a putative son of Ranjīt Singh by his Kanhayā wife, Mahtāb Kaur. Dīnānagar was a favourite resort of Ranjīt Singh, and it was there that in 1838 he received the Macnaghten mission which negotiated the proposed alliance for placing Shāh Shujā on the throne of Kābul.

Pathānkot and a few neighbouring villages in the plains, together with all the hilly portion of the District, formed part of the country ceded by the Sikhs to the British after the first Sikh War in 1846. Under the original distribution of the new territory they were attached to Kāngra; but after the final annexation in 1849, the upper portion of the Bāri Doāb became a separate District, with its head-quarters at Batāla. In 1852 the head-quarters were removed to Gurdāspur, and in 1853 the District received an addition by the transfer from Siālkot of the Shakargarh *tahsīl*. No outbreak took place during the Mutiny, in spite of the large number of Hindustānīs then employed on the head-works of the canal; but the ford of Trimmu was the scene of the battle at which Nicholson, after his famous forced march from Amritsar, intercepted and destroyed the Siālkot mutineers. In 1853 the site for the new sanitarium of Dalhousie, together with the strip of hill road connecting it with the plains, was acquired by the British Government by purchase from the Chamba State. It was transferred from Kāngra in 1860, and in 1862 the further transfer of a strip of hill country between the Rāvi and the Chakki brought the District into its present shape.

Recent authorities locate the Sangala of Alexander's historians, the stronghold of the Kathaei, in Gurdāspur District, but the exact site has not been determined. If this theory be correct, the twelve altars set up by Alexander to mark the extreme limit of his advance were probably erected in the Beās lowlands, somewhere near the meeting-point of the three Districts of Gurdāspur, Hoshiārpur, and Kāngra. The antiquities of PATHĀNKOT are dealt with in the article on that town. It is impossible to fix the date of the rock-temples at Mukheshwar (Mukesar) on the Rāvi, which legend attributes to the Pāndavas.

The only inscription is undecipherable, but, judging from the character of the letters that have been made out, it dates approximately from the eleventh century. The soft sandstone of the sculptures has everywhere decayed. Among monuments of later date, the most interesting is the masonry platform at KALĀNAUR, which marks the scene of Akbar's coronation in 1556. For particulars as to other remains of interest, see the article on BATĀLA TOWN.

Population.

Gurdāspur contains 11 towns and 2,244 villages. Its population at the last three enumerations was: (1881) 823,695, (1891) 943,922, and (1901) 940,334. During the last decade it decreased by 0·4 per cent., the fall being largely accounted for by emigration, about 44,000 settlers having gone from this District to the Chenāb Colony. The District is divided into the four *tahsīls* of GURDĀSPUR, BATĀLA, SHAKARGARH, and PATHĀNKOT, the head-quarters of each being at the place from which it is named. The chief towns are the municipalities of GURDĀSPUR, the administrative head-quarters of the District, DALHOUSIE, BATĀLA, DINĀNAGAR, KALĀNAUR, PATHĀNKOT, SUJĀNPUR, DERA NĀNAK, and SRĪGOBINDPUR.

The following table shows the chief statistics of population in 1901:—

Tahsil.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Gurdāspur .	496	3	668	258,379	520·9	+ 2·5	7,478
Shakargarh .	485	..	703	234,465	483·4	− 6·3	4,789
Pathānkot .	367	5	395	141,623	385·9	+ 0·5	5,250
Batāla . .	476	3	478	305,867	642·6	+ 1·7	9,262
District total	1,889*	11	2,244	940,334	497·8	+ 0·4	26,779

* The only figures available for the areas of *tahsils* are those derived from the revenue returns, and the *tahsil* densities have been calculated on the areas given in the revenue returns for 1900-1. These returns do not always cover the whole of the country comprised in a *tahsil*; and hence the total of the *tahsil* areas does not agree with the District area as shown in the *Census Report* of 1901, in the table above, and on page 390, which is the complete area as calculated by the Survey department. The tracts not included in the revenue survey are as a rule uninhabited or very sparsely populated.

Muhammadans number 463,371, or over 49 per cent. of the total; Hindus, 380,636, or over 40 per cent.; and Sikhs, 91,756, or 10 per cent. Mirza Ghulām Ahmad of Kādiān, who claims to be the Mahdi and the Messiah, has founded a Muhammadan sect known as the Ahmadiyās. The District contains several important Sikh shrines, especially at Dera Nānak, and a large number of Hindu and Sikh religious houses. The density of the population is high. The language of the District is chiefly Punjābi, but a good deal of Dogrī is spoken on the Jammu border.

The agricultural Jats are the most numerous tribe, numbering 143,000, or 15 per cent. of the total. Other agricultural tribes are the Rājputs, who mostly inhabit the submontane portion of the District and number 80,000, the Arains (64,000), and the Gūjars (49,000). Of the commercial and money-lending classes, the most numerous are the Khattrīs (17,000) and Mahājan Pahārī (14,000), who are stronger here than in any other part of the Province. The Brāhmans number 45,000. Of artisan classes, the Julāhās (weavers, 47,000), Tarkhāns (carpenters, 35,000), Kumhārs (potters, 22,000), Telis (oil-pressers, 19,000), and Mochīs (shoemakers and leather-workers, 15,000) are the most important. The menial castes include the Chūhrās (sweepers, 67,000), Jhīnwars (water-carriers, 39,000), Nais (barbers, 16,000), Chhīmbās and Dhobis (washermen, 13,000), Chamārs (field labourers, general coolies, and leather workers, 28,000), Dumnās (makers of bamboo articles, 10,000), and Meghs (weavers, 7,000). Other castes worth mentioning in this District are the Mīrāsīs (village minstrels, 31,000), Fakīrs (mendicants, 17,000), and Barwālās (village watchmen and messengers, 11,000). About 50 per cent. of the population are supported by agriculture.

The American United Presbyterian Mission has been established in Gurdāspur since 1872, and occupies the Pathānkot and Shakargarh *tahsīls*. The Church Missionary Society has an important station at Batāla, established in 1878, where it maintains the flourishing Baring high school. In 1901 the District contained 4,198 native Christians.

Agriculture.

The soils of the hilly tract consist of beds of conglomerate and boulder drift, changing into strata of soft sandstone alternated with beds of stiff red clay. The surface soil is nowhere rich, and, where the sandstone is close to the surface, needs constant showers of rain. In the plains, the soil varies from the sandy soils of Shakargarh to the light loam which is largely characteristic of the plains portion of the Doāb, with clay soils in the canal-irrigated tracts and rich alluvial deposits in the river-beds. Fertile as the District is with its ordinary supply of rain, the crop failure is apt to be complete when rain fails, except where there is irrigation; fortunately, however, two bad harvests in succession are almost unknown.

The District is held almost entirely on the *bhaiyāchārā* and *pattīdārī* tenures, *zamīndārī* lands covering only about 55 square miles.

The area for which details are available from the revenue records of 1903–4 is 1,824 square miles, as shown on the next page.

Wheat is the chief crop of the spring harvest, covering 510 square miles in 1903–4; gram and barley covered 132 and 81 square miles, respectively. Sugar-cane, the chief crop of the autumn harvest, is the most valuable staple: and the area under sugar-cane (82 square miles)

is greater, both actually and relatively, than in any other District in the Province. Rice, maize, and pulses are the chief autumn food-grains, covering 91, 106, and 147 square miles, respectively.

Tahsil.	Total area.	Cultivated.	Irrigated.	Cultivable waste.
Gurdāspur . .	496	379	79	37
Shakargarh . .	485	365	19	30
Pathānkot . . .	367	209	58	40
Batāla . . .	476	380	188	34
Total	1,824	1,333	344	141

The cultivated area increased by nearly 5 cent. during the decade ending 1901, the increase being chiefly due to the extension of canal-irrigation. Nothing has been done to improve the quality of the crops grown, but owing to the development of the export trade the cultivation of wheat has greatly increased of recent years. Loans for the construction of wells are popular, and Rs. 24,000 was advanced under the Land Improvement Loans Act during the five years ending 1903–4.

The cattle of the District deserve no particular mention, though the breed has been considerably improved by the introduction of Hissar bulls, and a fair of some importance is held at Dīnānagar. The horses of the Shakargarh *tahsīl* are above the average. The District board maintains three horse and three donkey stallions; the people keep very few camels, and the sheep and goats are not of importance.

Of the total area cultivated in 1903–4, 344 square miles, or 26 per cent., were classed as irrigated. Of this area, 215 square miles were irrigated from wells, 2,046 acres from wells and canals, 121 square miles from canals, and 3,150 acres from streams and tanks. In addition, 193 square miles, or 14 per cent., are subject to inundation from the Rāvi, Sutlej, and other streams. Half the canal-irrigation is from the BĀRI DOĀB CANAL, while the remainder is provided by private inundation canals which water the riverain tracts, chiefly in the Pathānkot *tahsīl*. Owing to the rapid slope of the country, there is practically no well-irrigation north of the road which passes through Gurdāspur and Shakargarh; but south of this wells become more frequent, and in the Batāla *tahsīl* are an important feature in the agricultural conditions of the country. The District has 6,760 masonry wells, all worked with Persian wheels by cattle, and 2,988 lever wells, unbricked wells, and water-lifts.

'Reserved' forests, covering 12·5 square miles, are managed by the Deputy-Conservator of the Kāngra division. The *chīl* (*Pinus longifolia*) is the most important tree. About 400 acres of unclassed forests and Government waste are under the control of the Deputy-Commissioner.

The Pathānkot *tahsīl* is abundantly wooded, mango groves and bamboo clumps having been planted round most of the villages. The sub-montane tract in Shakargarh is very bare, but the plains portion of the District is on the whole well covered with trees, and the avenues which fringe the roads are exceptionally fine. The forest revenue in 1903–4 was Rs. 200.

Kankar or nodular limestone and saltpetre are the only mineral products of any importance.

Trade and communications.

The New Egerton Woollen Mills at Dhārīwāl turn out woollen worsteds and hosiery of all kinds. In 1904 the number of hands employed was 908. The wool industry is carried on by hand to a considerable extent, shawls being made of *pashm*, the fine wool of the Tibetan goat, at Dera Nānak and Kanjrūr: but the industry is declining. Coarse blankets are also produced. A great deal of cotton is woven; and at Batāla a striped mixture of silk and English cotton thread known as *sūsī* used to be made in large quantities, but the manufacture has been largely displaced by that of chintz. Soap and carpets are also made at Batāla. Turbans are woven of silk or cotton or a mixture. Many attempts have been made to domesticate the silkworm, but without success. Harness and other articles of leather are made at Dīnānagar. Iron sugar-mills are made and ivory bangles are turned at several places. Sugar-refining is an important industry, and a large refinery and distillery at SUJĀNPUR employed 117 hands in 1904. The carpentry of the District is above the average. There is a brewery at DALHOUSIE.

Grain, sugar, oilseeds, and cotton are exported, besides woollen stuffs from the Egerton Mills, rum from Sujānpur, and beer from Dalhousie. Gram is imported from Ludhiāna and Ferozepore, *ghī* from Kashmīr, cotton from Rūpar, and iron and piece-goods from Amritsar and Delhi. Most of the trade is by rail, but a certain amount is carried by road to Siālkot and Jammu. Batāla is the chief trade centre. The Punjab Banking Company has a branch at Dalhousie.

A branch of the North-Western Railway from Amritsar passes through the District, with its terminus at Pathānkot, whence a metalled cart-road runs to Dalhousie and another to Pālampur in Kāngra District, with a branch to Dharmsāla. The most important unmetalled roads are the Hoshiārpur-Siālkot road, which passes through Gurdāspur and Siālkot, and the road from Pathānkot passing through Gurdāspur to Amritsar. The total length of metalled roads is 59 miles and of unmetalled roads 608 miles. Of these, 31 miles of metalled and 25 miles of unmetalled roads are under the Public Works department, while the District board controls 28 miles of metalled and 583 miles of unmetalled roads. The Rāvi is crossed by fifteen ferries and the Beās

by ten, only one of which is managed by the Gurdāspur District authorities. Little traffic is carried on by either river.

Famine.

With the exception of a small area in the north-west, the District is practically immune from famine; and in the tract liable to distress ready employment is afforded to the inhabitants by migration to the highly-irrigated tracts of the Pathānkot *tahsīl* and Jammu territory. The crops matured in the famine year 1899–1900 amounted to 77 per cent. of the normal.

Administration.

The District is in charge of a Deputy-Commissioner, aided by six Assistant or Extra-Assistant Commissioners, of whom one is subdivisional officer in charge of Dalhousie during the summer months, and another is in charge of the District treasury. The District is divided into four *tahsīls*—Gurdāspur, Batāla, Shakargarh, and Pathānkot—each under a *tahsīldār* assisted by a *naib-tahsīldār*.

The Deputy-Commissioner as District Magistrate is responsible for criminal justice. The civil judicial work is under a District Judge, and both are supervised by the Divisional Judge of the Amritsar Civil Division (who is also Sessions Judge). There are five Munsifs, one at head-quarters, two at Batāla, and one at each of the other *tahsīls*. There are also Cantonment Magistrates at Dalhousie and Bakloh, and two honorary magistrates. The predominant form of crime is burglary.

Changes in boundaries made during the early settlements render any comparison of past and present assessments impossible for the District as a whole. The various summary settlements were all high, except in Pathānkot, and had to be reduced in the other *tahsīls*. The regular settlement of the various areas now included fixed the assessment in 1852 at 14 lakhs. In 1862 a revision resulted in a demand of 13 lakhs, a reduction of 8 per cent. The assessment was full on 'dry' lands, while wells were treated very lightly. Land irrigated from wells or canals was assessed as if unirrigated, with the addition of a rupee per acre. The area which could be irrigated from a well in ordinary years was underestimated, and considerable loss to Government ensued. The assessment, which was very light, worked easily and well. In 1869 the records-of-rights of the villages of the Shāhpur hill tract in the Pathānkot *tahsīl*, including Dalhousie, were revised, but not the assessment. In the Gurdāspur *tahsīl* the assessment of 63 estates, which had been settled for ten years only, was completely revised in 1876. An assessment based on crop rates, and fluctuating from year to year with the area actually under crop, was introduced into 37 estates damaged by percolation from the Bāri Doāb Canal. The fluctuating system was extended in 1879 to 29 other villages.

The resettlement of the whole District was completed between 1885

and 1892. Prices had increased enormously, by 83 per cent. in the case of wheat and barley, 57 in that of maize, and 158 in that of great millet. Cultivation had also increased by 7 per cent., the area supplied from wells by 26, and the number of wells by 14 per cent. The water rate charged on canal lands was replaced by general enhanced rates for land irrigated from wells and canals. The result was a demand of 15½ lakhs, an increase of 20 per cent. on the revenue of the last years of the expiring assessment, and the settlement was sanctioned for twenty years. The average assessment on 'dry' land is Rs. 1–2–6 (maximum Rs. 1–13, minimum 8 annas), and on 'wet' land Rs. 2–7 (maximum Rs. 4, minimum Rs. 1–6). The demand, including cesses, for 1903–4 was 17·7 lakhs.

The collections of land revenue alone and of total revenue are shown below, in thousands of rupees:—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue . .	11,08	13,85	13,85	14,57
Total revenue . .	13,67	18,30	19,86	21,17

The District contains nine municipalities, GURDĀSPUR, DALHOUSIE, BATĀLA, DĪNĀNAGAR, KALĀNAUR, PATHĀNKOT, SUJĀNPUR, DERA NĀNAK, and SRĪGOBINDPUR; and two 'notified areas,' Fatehgarh and Bahrāmpur. Outside these, local affairs are managed by the District board, whose expenditure in 1903–4 amounted to 1·7 lakhs, public works being the largest item. The income, which is mainly derived from a local rate, was 1·8 lakhs.

The regular police force consists of 566 of all ranks, including 5 cantonment and 147 municipal police, in charge of a Superintendent, who usually has 4 inspectors under him. The village watchmen number 1,957. There are 18 police stations and 12 outposts. The District jail at head-quarters has accommodation for 287 prisoners.

Gurdāspur stands twenty-fourth among the twenty-eight Districts of the Province in respect of the literacy of its population. In 1901 the proportion of literate persons was 2·8 per cent. (5·1 males and 0·2 females). The number of pupils under instruction was 5,697 in 1880–1, 10,631 in 1890–1, 8,790 in 1900–1, and 8,323 in 1903–4. In the last year there were 15 secondary and 142 primary (public) schools, and 5 advanced and 58 elementary (private) schools, with 258 girls in the public and 76 in the private schools. The District possesses 3 Anglo-vernacular high schools, one of which contains only Christian boys. It also possesses 10 public schools for girls, the most important of which is the Dalhousie Convent School. The total expenditure on education in 1903–4 was Rs. 92,000, to which Government

contributed Rs. 7,000, and Local funds Rs. 27,000, while fees brought in Rs. 28,000.

Besides the Gurdāspur civil dispensary, the District has twelve outlying dispensaries. These in 1904 treated a total of 208,766 out-patients and 1,537 in-patients, and 7,268 operations were performed. The income and expenditure were Rs. 30,000, Local and municipal funds contributing Rs. 12,000 and Rs. 15,000 respectively.

The number of successful vaccinations in 1903–4 was 28,641, representing 30·6 per 1,000 of population. The Vaccination Act is in force at Dalhousie.

[L. W. Dane, *District Gazetteer* (1891–2); *Settlement Report* (1892); and *Customary Law of the Main Tribes in the Gurdāspur District* (1893).]

Gurdāspur Tahsīl.—*Tahsīl* of Gurdāspur District, Punjab, lying between 31° 48′ and 32° 13′ N. and 75° 6′ and 75° 36′ E., with an area of 496 square miles. The Beās bounds it on the east, and the Rāvi on the north-west. Along each of these rivers is a strip of alluvial country. The plateau between the two is well wooded and fertile, and is irrigated by the Bāri Doāb Canal. The population in 1901 was 258,379, compared with 252,092 in 1891. It contains the towns of GURDĀSPUR (population, 5,764), the head-quarters, DĪNĀNAGAR (5,191), and KALĀNAUR (5,251); and 668 villages. The land revenue and cesses in 1903–4 amounted to Rs. 5,17,000. The woollen mills of Dhārīwāl in this *tahsīl* are well-known throughout India.

Gurdāspur Town.—Head-quarters of the District and *tahsīl* of the same name, Punjab, situated in 32° 3′ N. and 75° 25′ E., on the Amritsar-Pathānkot branch of the North-Western Railway; distant by rail from Calcutta 1,252 miles, from Bombay 1,283, and from Karāchi 839 miles. Population (1901), 5,764. The town stands high on the watershed between the Rāvi and the Beās. The fort was built by the Sikh leader Banda during the revolt which followed the death of the emperor Bahādur Shāh in 1712. When hard pressed by the Mughal forces Banda retired into the fort, but was starved out. His followers were massacred wholesale, while he himself was carried in a cage to Delhi and tortured to death. The fort now contains a monastery of Saraswat Brāhmans. The town was selected as the head-quarters of the District in 1852 on account of its central position. The municipality was created in 1867. The income and expenditure during the ten years ending 1902–3 averaged Rs. 19,400. In 1903–4 the income was Rs. 18,600, chiefly from octroi (Rs. 4,400) and grants from Government (Rs. 6,100); and the expenditure was Rs. 17,700. The town has little trade, being overshadowed by the commercial centre of Batāla. It contains an Anglo-vernacular high school and a dispensary.

Gurgaon District.—District in the Delhi Division of the Punjab,

lying between 27° 39′ and 28° 33′ N. and 76° 18′ and 77° 34′ E., in the extreme south-east of the Province, with an area of 1,984 square miles. It stretches towards the outlying hills of the Rājputāna table-land, and its southern part belongs geographically to that part of Northern Rājputāna known as Mewāt or the country of the Meos. It is bounded on the north by the States of Dujāna and Pataudi, and the Districts of Rohtak and Delhi; on the east the river Jumna separates it from Bulandshahr and Alīgarh in the United Provinces; on the south it marches with the Muttra District of the United Provinces and the State of Bharatpur; on the west it is bounded by territories belonging to the States of Alwar, Jaipur, and Nābha. The surface presents a considerable variety of contour. Two low rocky ranges, continuations of the Arāvalli chain, enter its border from the south, and run northward in a bare and treeless mass towards the plain country. The northern plain falls into two natural divisions, divided by the western range. Eastwards, the valley between the two ridges lies wide and open throughout; and below the escarpment of the eastern ridge an alluvial level extends unbroken to the banks of the Jumna. Immediately at the foot of the uplands lie a series of undulating hollows, which during the rains become extensive swamps. West of the western range lies the Rewāri *tahsīl*, consisting of a sandy plain, dotted with isolated hills. Though naturally dry and sterile, it has become, under the careful hands of its Ahīr inhabitants, a well-cultivated tract. Numerous torrents carry off the drainage from the hills, while large pools or *jhīls* collect the water brought down by these torrents.

Physical aspects.

The greater part of the District is covered by alluvium, but outcrops of rock occur in numerous small hills and ridges. These are outliers of the slates and quartzites (Alwar quartzite) of the Delhi system. The slate is usually a fissile clay slate, and is quarried near Rewāri. There are brine wells in the Sultānpur *mahāl* and sulphur springs at Sohna[1].

The flora is mainly that of North-Eastern Rājputāna, and in the south-west includes several desert forms. Trees are few, except where planted; but on the hills that extend into the District from the Arāvalli ranges *gugal* (*Boswellia serrata*), yielding frankincense, occurs, and also an acacia yielding catechu; while the south-east portion is characterized by the *dhaok* or *dhao* (*Anogeissus pendula*). The Jumna valley and the north-eastern corner belong botanically to the Upper Gangetic plain.

The days when tigers abounded in Gurgaon on the wooded banks of the Jumna are long since gone by, though now and then a straggler from the Alwar hills is seen. The striped hyena is found only in the

[1] Hacket, 'Geology of the Arāvalli Region,' *Records, Geological Survey of India*, vol. xiv, part iv.

neighbourhood of the hills. Leopards are not uncommon. Wolves, foxes, and jackals are common in all parts. The sacred monkey is found in great numbers about Hodal, and there are also a few in Rewāri and Gurgaon. Wild hog frequent the low hills near Bhaundī and Sohna and the lowlands of the Jumna. Both antelope and 'ravine deer' (Indian gazelle) are fairly plentiful, the former in the hilly and sandy parts, the latter in the lowlands. The *nīlgai* is also found in the southern parts of the Rewāri *tahsīl*. Hog deer are occasionally met with in the lowlands of the Jumna.

Both heat and cold are less extreme than in the Punjab proper, though near the hill ranges and in the Fīrozpur-Jhirka valley the radiation from the rocks makes the heat intense. Fever is the chief cause of mortality, but the District is the least unhealthy of the Division, Simla excepted. The flooded tracts near Nūh are particularly malarious, and fever has come with the Agra Canal into the high plain.

The average rainfall varies from 22 inches at Rewāri to 26 at Gurgaon. Of the total at the latter place, $23\frac{1}{2}$ inches fall in the summer months and $2\frac{1}{2}$ in the winter. The uncertain nature of the monsoon is the most marked feature of the returns, the precipitation having varied from 48 inches at Nūh in 1885–6 to 0·1 inch at Hattīn in 1899–1900.

History.

Gurgaon, with the rest of the territory known as MEWĀT, formed in early times part of an extensive kingdom ruled over by Rājputs of the Jaduvansī or Jādon tribe. The Jādon power was broken by Muhammad of Ghor in 1196; but for two centuries they sturdily resisted the Muhammadan domination, and the history of the District is a record of incursions of the people of Mewāt into Delhi territory and of punitive expeditions undertaken against them. Under Fīroz Shāh III the Jādons were converted to Islām; and Bahādur Khān or Bahādur Nahar took a prominent part in the intestine struggles that followed the invasion of Tīmūr, founding the family of the Khānzādas, members of which ruled Mewāt in partial independence of the Delhi empire. Bābar annexed Mewāt, and from this time the power of the Khānzādas rapidly declined. During the decay of the Mughal empire the District was torn between contending powers. In the north were the Nawābs of Farrukhnagar, a principality founded in 1732; in the centre an independent power had risen at Ghasera; Rewāri was held by an Ahīr family, with forts at Gokulgarh and Guraora; while from the south the great Jāt ruler, Sūraj Mal of Bharatpur, was extending his dominions. He captured Ghasera and Farrukhnagar; but after his death in 1763 Farrukhnagar returned to its former rulers, and a great part of the tract was recovered for the empire by Najaf Kulī Khān. Under the Marāthās the greater part of the District was held by Generals de Boigne, Perron, and Bourquin. Begam

Sumrū owned the *pargana* of Jhārsa; and George Thomas had that of Fīrozpur assigned to him in 1793, and once plundered Gurgaon, but lost this part of his possessions in the following year. In Rewāri, Tej Singh, ancestor of the present leading family of Ahīrs, allied himself with the Marāthās and established himself in power.

After Lord Lake's conquests the District passed to the British with the rest of the country ceded by Sindhia in 1803, but was left in the hands of native assignees, the District of Gurgaon being formed piecemeal as their estates for one cause or another escheated. The first of these acquisitions was in 1808, when Rewāri, Nūh, Bahora, and Sohna came under British rule, and a District was formed with its head-quarters at Bharāwās near Rewāri. After the lapse of Hodal and Palwal the head-quarters were transferred to Gurgaon. More escheats followed; and in 1836 the Nawāb of Fīrozpur-Jhirka lost his estates for complicity in the murder of Mr. William Fraser, Commissioner of Delhi, while Jhārsa lapsed on the death of Begam Sumrū. In 1857 the Nawāb of Farrukhnagar, followed by the Meos, rose in rebellion, while in Rewāri the Ahīr chief preserved an armed neutrality. Order was, however, quickly restored after the fall of Delhi, and the estates of Farrukhnagar were confiscated.

The chief objects of antiquarian interest are at PALWAL, HODAL, FARRUKHNAGAR, FĪROZPUR-JHIRKA, and REWĀRI.

Population.

The District contains 8 towns and 1,171 villages. The population at each of the last four enumerations was: (1868) 689,034, (1881) 641,848, (1891) 668,929, and (1901) 746,208. It increased by 11·5 per cent. during the last decade. There are five *tahsīls*—GURGAON, FĪROZPUR, NŪH, PALWAL, and REWĀRI—each named from its head-quarters. The chief towns are the municipalities of REWĀRI, FARRUKHNAGAR, PALWAL, FĪROZPUR-JHIRKA, SOHNA, and HODAL. GURGAON, the head-quarters of the District, is a small place. The following table shows the chief statistics of population in 1901:—

Tahsīl.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Gurgaon . .	413	3	207	125,760	304·5	+ 11·9	3,986
Palwal . .	382	2	187	172,557	451·7	+ 15·2	4,301
Fīrozpur . .	317	1	230	132,287	417·3	+ 16·2	2,362
Nūh . .	403	1	257	145,931	362·1	+ 10·9	2,397
Rewāri . .	426	1	290	169,673	398·3	+ 5·2	6,397
District total	1,984	8	1,171	746,208	376·1	+ 11·5	19,443

NOTE.—The figures for the areas of *tahsīls* are taken from revenue returns. The total District area is that given in the *Census Report*.

Hindus number 499,373, or 67 per cent., and Muhammadans 242,548. About 85 per cent. of the people returned their language as Hindustāni or Urdū; 14 per cent. speak Mewātī, and 2,600 persons Braj.

The Meos (129,000), who number one-sixth of the population, are probably almost pure aborigines, of the same stock as the Mīnās of the Arāvalli Hills, though perhaps with an admixture of Rājput blood. They hold large tracts of land in the southern portion of the District, and are now without exception Muhammadans, though retaining many Hindu customs. The tribe has laid aside its former lawless turbulence; and the Meos, though still thriftless, extravagant, and lazy, now rank among the most peaceable communities in the Punjab. The Jāts (77,000) live chiefly in Palwal and the northern *parganas*; they are almost entirely Hindus. Some of their villages worthily sustain the general high reputation of the tribe, but others are reported to be ill-cultivated. The Ahīrs (78,000) form the majority of the population in Rewāri, and are justly esteemed for the skill and perseverance with which they have developed the naturally poor resources of that sterile region. They are all Hindus. The Gūjars (25,000) also are practically all Hindus. The Rājputs comprise 18,000 Hindus and 9,000 Muhammadans. The Gaurwas (4,000) are Rājputs who have adopted widow remarriage. The Khānzādas (4,000) claim descent from Jādon Rājputs, converted by Fīroz Shāh, who made them rulers of Mewāt. It is possible that they are akin to the Meos, some of whom profess to have been formerly Khānzādas; if so, they may be the representatives of the upper, as the Meos are of the lower, classes of the aboriginal population. The Mālīs (market-gardeners) number 11,000. The Saiyids (3,000) and Balochs (2,000) bear a bad name as indolent and thriftless cultivators, and swell the returns of crime far beyond their just proportion. The criminal class of Mīnās (800) are notorious for their thieving propensities. The chief of the commercial tribes are the Baniās (37,000). Of the menial tribes, the most important are the Chūhrās (scavengers, 21,000), Jhīnwars (water-carriers, 12,000), Kumhārs (potters, 16,000), Lohārs (blacksmiths, 7,000), Nais (barbers, 14,000), Kassābs (butchers, 17,000), Tarkhāns (carpenters, 13,000), and Telis (oilmen, 7,000). There are 26,000 Fakīrs. About 60 per cent. of the population are dependent on agriculture.

The Society for the Propagation of the Gospel has branch missions at Gurgaon and Rewāri, with dispensaries at the latter place and at Palwal. In 1901 the District contained 221 native Christians.

Agriculture.

The Jumna in Gurgaon, as elsewhere, is fringed by a strip of alluvial land, the *khādar*, which leads to the broad level plain, known as the *bāngar*. Here the soil is almost uniformly a good loam. Towards the hills the plain sinks into a shallow depression of clayey soil, the *dabar*, which receives the drainage of the

higher ground. West of the hills the ground is broken by rocky knolls and sandhills, while even in the level parts the soil is much lighter than that of the *bāngar*.

The District is held almost entirely on the *pattidāri* and *bhaiyāchārā* tenures, though *zamīndāri* lands cover 9,000 acres.

The area for which details are available from the revenue records of 1903–4 is 1,941 square miles, as shown below:—

Tahsil.	Total.	Cultivated.	Irrigated.	Cultivable waste.
Gurgaon . .	413	299	43	37
Palwal . . .	382	314	130	40
Firozpur . .	317	259	49	7
Nūh . . .	403	329	72	23
Rewāri . . .	426	365	106	23
Total	1,941	1,566	400	130

The chief crops of the spring harvest are gram and barley, which occupied 71 and 167 square miles respectively in 1903–4. Wheat occupied 68 square miles. In the autumn, spiked millet is by far the most important crop, occupying 347 square miles. Next come pulses (275 square miles), great millet (111 square miles), and cotton (86 square miles). There is little sugar-cane (only 12 square miles), and practically no rice.

The cultivated area has increased but slightly since the settlement of 1872–83, being 1,566 square miles in 1903–4 as compared with 1,555 square miles at settlement; and as four-fifths of the total area is now under cultivation, no great extension is to be expected, or could be possible without unduly reducing the area utilized for grazing. Little attention is paid to any regular course of cropping. Unmanured land is generally cultivated only for one harvest, and the rest it gets during the other harvest is thought sufficient. Great millet is not sown in the same land two years in succession. Cotton is not sown after spiked millet. In all other cases, in deciding what crop to sow, regard is paid to the kind of soil and amount of rainfall, without any consideration as to what the previous crop was. Advances for constructing wells under the Land Improvement Loans Act are fairly popular, Rs. 67,000 having been advanced during the five years ending 1904. During the same period 2·8 lakhs was advanced under the Agriculturists' Loans Act, for the purchase of bullocks and seed.

As might be expected from the small proportion of land uncultivated, grazing is scarce, and Gurgaon is not a great cattle-breeding District. A cattle fair is held at Rewāri. The horses and sheep are of no special importance. The District board maintains two horse and two donkey stallions. Large numbers of goats are grazed on the hills; they are

frequently owned by butchers, who make them over to shepherds on condition of receiving a certain share, generally a half, of the increase.

Of the total area cultivated in 1903–4, 400 square miles, or 25 per cent., were classed as irrigated. Of this area, 222 square miles were irrigated from wells, 152 from canals, and 25 from streams, tanks, and embankments. The District has 9,208 wells in use, all worked by bullocks on the rope-and-bucket system, besides 3,511 unbricked wells, lever wells, and water-lifts. Canal-irrigation is entirely from the AGRA CANAL, which traverses the eastern portion of the District. The third main source of irrigation is the collection of the water of the hill torrents by means of embankments. These are maintained by the District board, and the total area irrigated from them doubled in the twenty years ending 1901. On the other hand, owing to the diminution of water in the Sāhibi, Indori, and Landoha streams, the low-lying flooded area has considerably decreased.

The only forests are about one square mile of unclassed forest and Government waste under the control of the Deputy-Commissioner. As a whole, the District is not well wooded, and some parts, such as the low-lying tracts in the Nūh *tahsīl*, are extremely bare. In Rewāri the tamarisk is especially common, and the ownership of these trees in waste lands and along village roads is often distinct from that of the soil. Palwal is by far the best wooded *tahsīl*, and most of the Jāt villages in it reserve a certain portion of their area from the plough.

The Sultānpur salt sources lie in six villages, five in this District and one in Rohtak. The salt is made entirely from natural brine, 43 wells of which were worked in this District in 1903–4. The brine is about 26 feet below the surface and 15 feet deep, and the supply seems inexhaustible, as some of the works have existed for over 200 years. The salt, known as Sultānpurī, is, however, of poor quality, and the demand for it is dying out. Saltpetre is extracted from the earth of old sites and refined at Hodal. Iron ore exists in the hills, but its manufacture has long been abandoned owing to the scarcity of fuel. Traces of copper exist and mica is occasionally extracted. Plumbago has been found, but is too impure to be of any commercial value. A little gold is sometimes washed out of the sand of the hill torrents. Excellent slates are quarried in the neighbourhood of Rewāri.

Coarse cotton and woollen fabrics are made in the villages. Muslin is woven at Rewāri, but there is little trade in it. The chief industry is the brass manufacture of Rewāri; the greater part of the out-turn consists of cooking utensils, but articles decorated with chasing, engraving, and parcel tinning are also produced for export. Glass bangles are made at Sohna, shoes at Jharsa, Sohna, and other places, and iron vessels at Fīrozpur-Jhirka, and at Dārāpur and Tānkrī in the Rewāri *tahsīl*. There are two

Trade and communications.

factories for ginning cotton, one at Palwal and one at Hodal, employing 268 hands in 1904. There is an out-still for the distillation of spirit at Fīrozpur-Jhirka.

Trade centres in the town of Rewāri, which ranks as one of the chief emporiums in the Punjab. Its merchants transact a large part of the commerce between the States of Rājputāna and Northern India. Salt from the Sāmbhar Lake and iron are the principal imports; while sugar, grain, and English piece-goods are the staple exports. Hardware of brass, coated with white metal, is also largely exported. The District produces cereals and pulses considerably beyond its needs for home consumption; and of late years, owing to the extension of railway communication, a steady export trade in grain has sprung up. Nūh, Fīrozpur-Jhirka, Palwal, Hattīn, Nagīna, Punahāna, Hodal, Hasanpur, and Farrukhnagar are the chief marts (after Rewāri) for country produce, the last named being also the market for the Sultānpurī salt.

The Rājputāna-Mālwā Railway from Delhi to Ajmer crosses the District with a branch line to Farrukhnagar, and the Bhatinda line leaves it at Rewāri, which is an important junction. The Agra-Delhi chord of the Great Indian Peninsula Railway, opened in 1904, runs through the east, and the Rewāri-Phulera line through the Rewāri *tahsīl*.

The grand trunk road from Delhi to Agra traverses the Palwal *tahsīl*, and there is a metalled road from Gurgaon to Sohna (15 miles), which is to be carried 6 miles farther on to Nūh. A metalled road also runs from Fīrozpur-Jhirka through Nagauna into the State of Alwar. The roads of greatest mercantile importance are, however, still unmetalled, very heavy, and difficult to traverse in the rains. The total length of metalled roads is 81 miles, and of unmetalled roads 509 miles. Of these, 30 miles of metalled roads are under the Public Works department, and the rest are maintained from Local funds. The Jumna is navigable by country craft throughout its course, and is crossed by eight ferries.

Famine.

As might be expected in a District so largely dependent, until lately, on the rainfall, Gurgaon suffered severely in all the famines that have visited the Punjab. The *chālīsa* famine of 1783–4 was very disastrous; and in the famines of 1833–4 and 1837–8 a number of estates were deserted, partly on account of high assessments and partly from too stringent collection of revenue. The effects of the famines of 1860–1 and 1868–9 were greatly mitigated by the relief afforded by Government. In the latter year, the first for which we have full reports, 344,527 daily units were relieved, and 15,324 persons were employed on works, with a total expenditure of Rs. 11,139. The famine of 1877–8, in conjunction with a new and excessive assessment of land revenue and an unsympathetic revenue

administration, badly crippled the District for some time; the maximum number on relief on any one day was 2,155, while 313 deaths from starvation were reported, and 150,000 head of cattle died. There was scarcity in 1884. In 1896–7 the famine was by no means severe, as irrigation from the Agra Canal had been developed and a much larger measure of protection ensured. Distress lasted from January to May, 1897, and affected none but the menial classes. The daily average of persons relieved in no week exceeded 3,100, and the total cost was only Rs. 14,070. In the famine of 1899–1900 an area of 1,033 square miles, or 53 per cent. of the District, was affected; the greatest daily number in receipt of relief was 18,153 persons, or 5 per cent. of the population affected, and the total expenditure was 3·8 lakhs.

Administration.

The District is divided for administrative purposes into five *tahsīls*, each under a *tahsīldār* and a *naib-tahsīldār*. It is in charge of a Deputy-Commissioner, who has under him two Assistant or Extra-Assistant Commissioners, one being in charge of the District treasury.

The Deputy-Commissioner as District Magistrate is responsible for criminal justice, and the District Judge for civil judicial work. Both are under the supervision of the Divisional and Sessions Judge of Delhi. There is only one Munsif, who sits at head-quarters. The predominant forms of crime are cattle-theft and burglary.

A notable feature in the system of land tenures is the re-distribution of the land among the communal proprietors. This custom has survived in a few villages, but is dying out. The fiscal history is a melancholy one. As each *pargana* came under British rule, it was either summarily settled, or else the Collector managed the whole as a single estate, and made from it what collections he could, no regular engagement being entered into with the proprietors. Regular settlements began in 1836–7, and by 1842 every *pargana* had been dealt with. The working of this settlement, though very uneven, was satisfactory on the whole. The rapid rise in prices which continued to the end of the decade helped to mitigate the severities of the assessment. Thus, by the time prices fell in the next decade, increased cultivation and irrigation had put the people in a better position to fulfil their engagements.

The revised settlement was carried out between 1872 and 1883. The increase in cultivation was estimated at 40 per cent., while the increase taken in revenue was only 17 per cent. The new settlement, however, was most unfortunate in the opening seasons of its term. The autumn harvest of 1877 was a complete failure, and the local officials recommended the suspension of the entire instalment; but sanction was refused on the ground that proprietors whose revenue had just been raised must be in a position of affluence and therefore able to pay in a bad year as well as in a good. The result was widespread distress,

and collection of the revenue in full proved impossible. Moreover, it was not until 1882 that counsels of leniency prevailed, and by that time pestilence and famine had stamped upon the people an impress of poverty which years of prosperity could hardly remove. The assessment was lowered by nearly 8 per cent. for a term of seven years, and permanently by 4 per cent. At the expiry of the term in 1889 the larger reduction was made permanent; and though the years 1890–5 were years of plenty, they were overshadowed by the famine lustrum that followed. The District came under resettlement in 1903. The average assessment on 'dry' land is Rs. 1–0–6 (maximum Rs. 1–12, minimum 9 annas), and on 'wet' land Rs. 2–8 (maximum Rs. 3–8, minimum Rs. 1–8). The demand, including cesses, in 1903–4 was nearly 14 lakhs. The average size of a proprietary holding is 3·7 acres.

The collections of land revenue alone and of total revenue are shown below, in thousands of rupees:—

	1880–1.	1890–1.	1900–1.	1903–4.
Land revenue .	12,47	11,96	10,12	11,31
Total revenue .	13,68	13,72	12,97	14,32

The District contains six municipalities—Rewāri, Farrukhnagar, Palwal, Fīrozpur-Jhirka, Sohna, and Hodal—besides four 'notified areas.' Outside these, local affairs are managed by a District board, whose income amounted in 1903–4 to Rs. 1,24,000. Its expenditure in the same year was Rs. 1,46,000, the principal item being public works.

The regular police force consists of 520 of all ranks, including 117 municipal police, under a Superintendent, who is usually assisted by two inspectors. The village watchmen number 1,428. The District contains 15 police stations, one outpost, and 13 road-posts. There is no jail in Gurgaon, and the convicts are sent to the Delhi District jail. The Mīnās and Baurīās are proclaimed under the Criminal Tribes Act, and 908 were on the register in 1901.

Gurgaon stands twenty-seventh among the twenty-eight Districts of the Province in respect of the literacy of its population. In 1901 the proportion of literate persons was 2·6 per cent. (4·9 males and 0·1 females). The number of pupils under instruction was 3,199 in 1880–1, 4,696 in 1890–1, 5,139 in 1900–1, and 5,563 in 1903–4. In the last year the District possessed 7 secondary and 108 primary (public) schools, and 17 elementary (private) schools, the number of girls being 347 in the public and 105 in the private schools. Of the public schools, 11 were supported by municipalities and 18 received a grant-in-aid, the remainder being maintained by the District board. The only high school is an Anglo-vernacular municipal school at Rewāri, managed by the

Educational department. The special schools include two for low-caste boys, and one industrial school for boys and another for girls. To encourage education among the criminal tribe of Mīnās, stipends of from R. 1 to Rs. 3 per month are offered to boys of this class to support them at school. The total expenditure on education in 1903–4 amounted to Rs. 51,000, of which Government contributed Rs. 2,000, municipalities Rs. 15,000, District funds Rs. 25,000, and fees Rs. 8,000.

Besides the Gurgaon dispensary, the District has eight out-lying dispensaries. At these institutions 77,889 out-patients and 1,716 in-patients were treated in 1904, and 3,707 operations were performed. The expenditure was Rs. 24,000, of which Rs. 13,000 was derived from Local funds and the greater part of the remainder from municipal funds. The Society for the Propagation of the Gospel has a dispensary in charge of a lady doctor at Rewāri, and another at Palwal.

The number of successful vaccinations in 1903–4 was 23,697, or 31·76 per 1,000 of the population. Vaccination is compulsory only in Rewāri.

[J. Wilson, *Codes of Tribal Custom of Twenty-one Tribes in the Gurgaon District* (1882); D. C. J. Ibbetson, *District Gazetteer* (1884); F. C. Channing and J. Wilson, *Settlement Report* (1882).]

Gurgaon Tahsīl.—*Tahsīl* of Gurgaon District, Punjab, lying between 28° 12′ and 28° 33′ N. and 76° 42′ and 77° 15′ E., with an area of 413 square miles. The population in 1901 was 125,760, compared with 112,390 in 1891. It contains the three towns of GURGAON (population, 4,765), the head-quarters, SOHNA (6,024), and FARRUKHNAGAR (6,136); and 207 villages. The land revenue and cesses in 1903–4 amounted to 2·5 lakhs. At annexation the area covered by the present *tahsīl* was occupied by the *parganas* of Farrukhnagar held by the Nawāb of Farrukhnagar, Jhārsa held by Begam Sumrū, and the greater part of Bahora and Sohna held by General Perron. The two last *parganas* were resumed at annexation, and were brought under British administration in 1808–9. Jhārsa lapsed on Begam Sumrū's death in 1835, and Farrukhnagar was confiscated owing to the Nawāb's complicity in the Mutiny of 1857. Dams are built across the torrent-beds which descend from the low rocky hills in the centre and east, and the water is stored up for irrigation. In the north, the soil is a rich mould; in the south, sand predominates; while in the north-west, in the neighbourhood of Farrukhnagar, the sand ridges are separated by depressions of hard soil where the water collects in seasons of heavy rainfall.

Gurgaon Town.—Head-quarters of the District and *tahsīl* of the same name, Punjab, situated in 28° 29′ N. and 77° 2′ E., 3 miles from Gurgaon station on the Rājputāna-Mālwā Railway. Population (1901), 4,765. It is of no commercial or historical importance. Gurgaon is also known as Hidāyatpur, the village where at annexation a cavalry

cantonment was located in order to watch Begam Sumrū's troops at Jhārsa. The civil head-quarters of the District were transferred here in 1816. Its name is taken from the neighbouring village of Gurgaon-Masāni, where there is a temple of Sītla, goddess of small-pox, which is visited annually by 50,000 or 60,000 people. The town is administered as a 'notified area,' and contains a vernacular middle school and a dispensary.

Gurmatkāl.—Former *tāluk* in the south-east of Gulbarga District, Hyderābād State. In 1901 it had an area of 320 square miles and a population of 52,480, compared with 48,348 in 1891. The 91 villages it contained were divided in 1905 between the Seram, Yādgīr, and Kodangal *tāluks*. The land revenue in 1901 was a lakh.

Gurramkonda (*gurram*, 'a horse,' and *konda*, 'a hill').—Ancient fortress in the Vāyalpād *tāluk* of Cuddapah District, Madras, situated in 13° 47′ N. and 78° 36′ E. Population (1901), 1,718. The fort was always one of the most important strongholds in Cuddapah, and is supposed to have been first built by the Golconda Sultāns. The work in it is entirely Muhammadan. It stands on an extraordinary hill, 500 feet high, three sides of which consist of almost perpendicular precipices. The fourth side, though steep, is accessible; but the fortifications guard every assailable part of it by ramparts and redoubts, line behind line. A long wall, curving and winding through the rocks, connects the upper with the lower fort, and the whole presents the appearance of a fastness built with a skill and knowledge of fortification unusual in Southern India. On the plain below is the old palace of its chiefs, now used as a halting-place for officials. Round about the fort are many of the wild barren hills characteristic of this part of the country, and here they are even more picturesque than usual.

'They are beautiful,' one writer has said, 'under almost every aspect; whether on a bright sunshiny day with the sun's beams glancing from the bare rocks, and throwing the stony hills into a bold contrast with the green and narrow valleys lying between them, or as seen on a moonlight night from the windows of the old Gurramkonda palace, when the valleys lie dark and sleeping below, with the gloomy lofty rocks erect above them, as if on guard, each outline and almost each stone appearing plainly defined against the silvery sky behind; or else when towards evening a squall comes rolling up from the north-east, enveloping first one hill and then another in clouds of mist and rain, while the valleys are still smiling in the sunshine. Under every aspect the scene is a beautiful one, and the old palace of Gurramkonda forms a favourite halting-place.'

Gurramkonda was the capital of the Carnatic Bālāghāt at the beginning of the eighteenth century. Afterwards, when held by a local chief under the Nawāb of Cuddapah, it was of such importance that the tenure was purely military, and the governor had the privilege of coin-

ing money. When Mīr Sāhib betrayed Sīra (1766), he received Gurramkonda (which had at some former time been held by his ancestors) as a *jāgīr* from the Marāthās. Two years later he made it over to Haidar Alī, his brother-in-law. In 1771 Saiyid Shāh, Haidar's general, surrendered it to Trimbak Rao. Tipū recaptured it in 1773. In 1791 the Nizām's forces, aided by a British battery under Captain Read, besieged Gurramkonda and captured the lower fort; but the citadel held out till the peace, when the place was ceded to the Nizām. In 1800 it was transferred to the British, with the rest of the District of Cuddapah.

How the place got its name of 'horse-hill' is not clear. The rock itself bears no resemblance whatever to a horse. The local legend says the appellation was derived from the fact that a horse which was supposed to be the guardian of the fort was kept on the top of the hill. As long as the horse remained there, the fort would be impregnable. For generations, this horse (or at all events one of its descendants) was kept in a stable on the summit of the hill. At length a Marāthā thief climbed up the perpendicular rock by driving long iron nails into it. He reached the top, gained the stable, and, wonderful to narrate, conveyed the horse down by the same way by which he had come. He reached the foot of the hill in safety, but, while stopping in a grove to rest, was captured with the horse. The governor of the fort, astonished at the boldness and skill of the thief, contented himself with inflicting the comparatively lenient punishment of cutting off both his hands. But the spell was broken, the divine horse had been carried away, and when next the fort was attacked it fell. Near the fort is the tomb of Mīr Rājā Alī Khān, uncle of Tipū Sultān, and several other Musalmān buildings. A Persian inscription on the tomb contains an epitaph with the date of Alī Khān's death (A.D. 1780).

Gursarai.—Estate in Jhānsi District, United Provinces, with an area of 155 square miles. The estate is held on the *ubārī* tenure (*see* JHĀNSI DISTRICT), the land revenue payable to Government being at present Rs. 20,000 and the cesses Rs. 5,500. The proprietors receive about Rs. 54,000 from the under-proprietors. The owner is a Marāthā Brāhman, whose family settled here about 1727. A member of the family was governor of Jālaun and other territories belonging to the Peshwā in Bundelkhand. In 1840 Kesho Rao, who at that time managed Gursarai under the Rājā of Jālaun, was a claimant for the succession to the Jālaun estate, which was, however, held to have lapsed. Kesho Rao was allowed to continue in the management of Gursarai, and in 1852 the estate was granted to him, subject to the payment of Rs. 22,500 as a quit-rent. On the outbreak of the Mutiny in Jālaun the British officer in charge of that District was forced to retire to Agra, and Kesho Rao assumed charge on behalf of Government, and maintained order till the end of October, 1857. He was then seized by the

Gwalior mutineers and maltreated, after which he retired to Gursarai. When Sir Hugh Rose reached Jhānsi, Kesho Rao at once communicated with him, and together with his sons gave valuable help in the subsequent operations. The title of Rājā Bahādur and other rewards were granted for these services. Rājā Kesho Rao was an honorary magistrate with civil and revenue powers, and had a limited jurisdiction in his own estates. He died in 1880, and in 1886 the special powers vested in the Rājā were cancelled. The *ubārī* grant, which carried with it a reduced demand for land revenue, was conditional on the estate remaining undivided. In 1895 serious disputes led to the cancellation of the grant and the assessment of a full revenue demand. The title of Rājā was at the same time withdrawn from the head of the family. Default in the payment of revenue led to the assumption of direct management by Government, a money allowance being paid to the proprietors. The disputes as to the shares due to each member of the family were finally settled by a decree of the Privy Council passed in 1898, and in 1902 the *ubārī* grant was restored. The privileged rate of revenue is Rs. 25,000, which has been temporarily reduced to Rs. 20,000 for five years. The payments made to the *ubārīdārs* by the village proprietors will be revised in the settlement operations now being carried out in JHĀNSI DISTRICT. Gursarai town had a population of 4,304 in 1901, and contained a police station, a post office, and a school with about 84 pupils.

Guruvāyūr.—Village in the Ponnāni *tāluk* of Malabar District, Madras, situated in 10° 35′ N. and 76° 3′ E., near Chowghāt. Population (1901), 3,393. It is notable for a large Hindu temple dedicated to Krishna, an inscription on the western *gopuram* (tower) of which shows that it was built in A.D. 1747. The wall of the shrine is elaborately painted with scenes from the Bhāgavatam. The temple is largely resorted to by the sick.

Guti.—Subdivision, *tāluk*, and town in Anantapur District, Madras. *See* GOOTY.

Gwa.—Southernmost township of Sandoway District, Lower Burma, lying between 17° 15′ and 18° 10′ N. and 94° 25′ and 94° 49′ E., with an area of 1,264 square miles. It lies between the Arakan Yoma and the Bay of Bengal, presenting to the latter a long stretch of rock-bound coast. The population was 15,331 in 1891, and 18,437 in 1901, the density being only 15 persons per square mile. The head-quarters are at the village of Gwa (population, 1,436), at the mouth of the Gwa river in the extreme south of the District. There are 177 villages. The majority of the population are Buddhists, but the Chin communities, inhabiting the Arakan Yoma to the east of the township, are mostly spirit-worshippers. The area cultivated in 1903–4 was 22 square miles, paying Rs. 22,800 land revenue.

Gwādar.—An open roadstead and port in Makrān, Baluchistān, situated in 25° 8′ N. and 62° 19′ E., about 290 miles from Karāchi, with a population of 4,350 persons (1903). The majority are fishermen, Meds. The Portuguese attacked and burnt the town in 1581; and at the end of the next century it was taken by the Khāns of Kalāt and was handed over by Nasīr Khān I to Sultān Said, a brother of the ruler of Maskat, for his maintenance. It has since remained, with about 300 square miles of the adjoining country, in the hands of Maskat, the ruler of which place is represented by an Arab governor, or *wāli*, with an escort of twenty sepoys. The value of the trade, which is carried on by Hindus and by Khojas, locally known as Lotiās, was estimated in 1903 at 5½ lakhs of exports and 2 lakhs of imports. The contract for customs, which are generally levied at 5 per cent. *ad valorem*, was leased for Rs. 40,000 in the same year. Gwādar is a fortnightly port of call of the British India Steam Navigation Company's steamers. On the hill overlooking the town is a stone dam of fine workmanship.

Gwalior Residency.—A Political Charge in the Central India Agency, which comprises all the northern part of the western section of Central India, extending from the Chambal in the north to Bhīlsa in the south, and from Bundelkhand and the Jhānsi District of the United Provinces on the east to the Rājputāna Agency on the west: or, generally speaking, the tract lying between 23° 21′ and 26° 52′ N. and 76° 29′ and 79° 8′ E., with an area of 17,825 square miles. Of this area, 17,020 square miles belong to the Gwalior State, the rest being occupied by the CHHABRA *pargana* of Tonk State (Rājputāna), and the minor States of RĀGHUGARH, KHANIĀDHĀNA, PĀRON, GARHA, UMRĪ, BHADAURA, and several small holdings (see table on page 417).

The population of the charge (1901) is 2,187,612, of whom Hindus number 1,883,038, or 86 per cent.; Animists, 170,316, or 8 per cent.; Musalmāns, 103,430, or 4 per cent.; and Jains, 30,129, or 1 per cent. The density of population is 123 persons per square mile. The charge contains 6,820 villages and 16 towns, of which the chief are LASHKAR (102,626, with Brigade), MORĀR (19,179), GWALIOR (16,807), GUNA (11,452, with military station), BHIND (8,032), BHĪLSA (7,481), NARWAR (4,929), and CHANDERĪ (4,093). Bhīlsa, Morena, and Guna are the chief centres for the sale of grain, and Chanderī for the manufacture of fine cloths.

After the Treaty of Sālbai (1782), Mr. Anderson was appointed Resident at the court of Mahādjī Sindhia, which was merely a moving camp until 1810, when Daulat Rao Sindhia permanently fixed his head-quarters on the spot where Lashkar city now stands. Till 1854, when an Agent to the Governor-General for Central India was appointed, the Resident at Gwalior corresponded directly with the Governor-General. In 1860 the minor States were made into a separate charge, under the

officer commanding the Central India Horse at Guna. This arrangement was abolished in 1896, when these States were again placed under the Resident, the officer commanding at Guna continuing to act as *ex-officio* Assistant to the Resident, with, however, very limited powers. In 1888 the Khaniādhāna State was transferred from the Bundelkhand Agency to the Resident at Gwalior; and in 1895 the Gwalior State districts of Bhīlsa and Isāgarh were transferred from the Bhopāl Agency to this charge. The Resident, as the officer accredited to the Gwalior Darbār, is also in all matters of general policy the channel of communication between the Darbār and other Political officers, such as the Agents in Mālwā and Bhopāwar, within whose charges isolated portions of the Gwalior State are situated. He exercises a close supervision over the minor holdings of the charge, all criminal cases of any importance in which are either dealt with by him personally or submitted for his sanction and approval. He also has the powers of a District and Sessions Judge for portions of the Midland and Bīna-Bāran sections of the Great Indian Peninsula Railway which pass through the States of Gwalior, Datiā, Samthar, Khaniādhāna, and the Chhabra *pargana*. The head-quarters of the Political officer are situated in the area known as 'The Residency,' a piece of land measuring 1·17 square miles situated close to Morār, about four miles to the east of Gwalior fort. This area is administered by the Resident, and includes three villages, the revenues from which are devoted to the upkeep of the Residency limits. In 1901 the population of the Residency was 1,391. The Great Indian Peninsula and Gwalior Light Railways and the Agra-Bombay and Bhind-Jhānsi high roads traverse the charge.

The table on the next page shows the States, portions of States, and minor holdings under the Residency.

Gwalior State.—The largest treaty State in the Central India Agency, under the political supervision of a Resident at Gwalior. The State has a total area of 25,041 square miles, and is composed of several detached portions, but may be roughly divided into two, the Gwalior or northern, and the Mālwā section. The northern section consists of a compact block of territory, lying between 22° 10′ and 26° 52′ N. and 74° 38′ and 79° 8′ E., with an area of 17,020 square miles. It is bounded on the north, north-east, and north-west by the Chambal river, which separates it from the Agra and Etāwah Districts of the United Provinces, and from the Native States of Dholpur, Karauli, and Jaipur in the Rājputāna Agency; on the east by the British Districts of Jālaun and Jhānsi in the United Provinces, and by Saugor in the Central Provinces; on the south by the States of Bhopāl, Khilchipur, and Rājgarh, and by the Sironj *pargana* of Tonk; and on the west by the States of Jhālawār, Tonk, and Kotah in the Rājputāna

Agency. The Mālwā section, with an area of 8,021 square miles, is made up of several detached districts, between which portions of other States are interposed, and which are themselves intermingled in bewildering intricacy.

Name.	Title.	Caste, clan, &c.	Area in square miles.	Population, 1901.	Total revenue, 1902–3.
					Rs.
Gwalior (portion)	H.H. Mahārājā	Marāthā	17,020	2,068,032	55,56,000
Rāghugarh	Rājā	Khīchī Rājput	112	19,446	52,000
Khaniādhāna	Jāgīrdār	Bundelā Rājput	68	15,528	22,000
Pāron	Rājā	Kachwāha Rājput	60	5,557	25,000
Garha	Rājā	Khīchī Rājput	44	9,481	22,000
Umri	Rājā	Sesodia Rājput	60	2,469	6,000
Bhadaura	Rājā	Sesodia Rājput	50	2,275	5,000
Dharnaoda	Thākur	Khīchī Rājput	41	4,325	9,000
Sirsi	Dīwān	Dhandere Rājput	12	5,448	6,000
Khiaoda	Thākur	Sesodia Rājput	10	857	2,000
Kāthaun	Thākur	Jādon Rājput	5	3,505	7,000
Agra Barkhera	Thākur	Ponwār Rājput	31	5,258	19,000
Chhabra (Tonk portion)	...	...	312	36,046	2,37,000
Nimrol (Dholpur portion)	...	...	...	523	...
Railways and military stations	...	...	...	8,862	...
		Total	17,825	2,187,612	59,68,000

The State takes its name from the old town of GWALIOR, which, though never the actual capital, has always been an important place from the strength of its fort. The name is a corruption of Gopādri or Gopagiri, 'the shepherd's hill.'

Physical aspects.

The State falls into three natural divisions, conveniently designated the plain, plateau, and hilly tract. The plain occupies the country lying to the north, east, and west of the town of Gwalior, and corresponding practically with the GWALIOR GIRD, TONWARGHĀR, BHIND, and SHEOPUR *zilas* of the State, with an area of 5,884 square miles. The elevation in this tract averages only a few hundred feet above the sea, ranging from about 500 feet to nearly 900. From a point about 80 miles south of Gwalior the country rises rapidly towards the south until it reaches the level of the Mālwā plateau, with an average elevation of about 1,500 feet. The area of this tract is 17,856 square miles, or more than 70 per cent. of the whole State. The hilly tract comprised in the AMJHERA *zila* consists of a medley of hill and valley, covered for the most part with thick jungle. It has an area of 1,301 square miles and a mean elevation of 1,800 feet above sea-level.

Two branches of the Vindhya range traverse the State: one striking northwards from Bhilsa passes up the centre of the State to Gwalior,

while the other runs in a parallel direction through the Ujjain and Nīmach districts. The watershed is determined by the main scarp of the Vindhyas, which lies to the north of the Narbadā river, and all streams flow in a northerly direction. The most important are the CHAMBAL, with its tributaries, the greater KĀLĪ SIND, SIPRĀ, and the western PĀRBATI; the BETWĀ; and the SIND, with its tributaries, the eastern Pārbati, Pahūj, and Kunwārī. These streams, though affording a considerable water-supply, are practically of no value for agricultural purposes, as the steepness of their banks makes irrigation from their waters almost impossible.

[1]To describe its geological formation, the Gwalior State may be divided into four principal sections: the country extending between the western portion of Bundelkhand to the east, the Chambal river to the west, and the northern part of Mālwā to the south, within which is situated the capital of the State; the district of Nīmach; several large tracts of the Mālwā plateau; and a portion of the southern scarp of the Mālwā plateau and of the country along the Narbadā river.

The first region, constituting Gwalior proper, is largely occupied by the Vindhyan series, rising in a succession of scarps which strike approximately north and south, except in their northern portion where the direction gradually changes to north-east and becomes parallel to the course of the Chambal river. There are four principal ranges capped by massive beds of sandstones which, taken in order from east to west, belong respectively to the Kaimur, lower Rewah, upper Rewah, and lower Bandair divisions. Beyond the fourth range, towards the Chambal river, the ground becomes largely covered by alluvial deposits, which conceal the next division of the Vindhyans, the Sirbū shales. A number of rock exposures appear, however, in the Chambal river, remarkable for the occurrence of the Chambal limestone band, here intercalated among the Sirbū shales and not known to occur at that horizon in Bhopāl or in Bundelkhand and Baghelkhand.

North of latitude 26° N., the Kaimur sandstone no longer rests upon the crystalline rocks of the Bundelkhand gneiss, but upon sedimentary rocks belonging to the Bijāwar series. They were originally distinguished as the Gwalior series, but their complete lithological agreement with the Bijāwars of Bundelkhand and with those of Rewah authorizes their correlation with that group. The Bijāwars are very much older than the Vindhyans, and these hill ranges already existed as such before the commencement of the Vindhyan era. This is one of the oldest and at the same time one of the most distinct instances of a former land surface to be found in India, though similar features frequently recur among rocks of various geological ages in consequence

[1] By Mr. E. Vredenburg, Geological Survey of India.

of the protracted continental conditions and absence of marked disturbance in the Peninsula.

The Bijāwar strata consist of the same rocks as in the Bundelkhand and Rewah exposures; but as they are less disturbed than in those outcrops, their degree of alteration is remarkably slight, shales and sandstones taking the place of the usual slates and quartzites. The lowest bed of the series is, as usual, a conglomerate of white quartz pebbles overlaid by a mass of sandstone, which caps the gneissose scarp forming the southern limit of the most southern and most continuous of the ranges. The sandstone is called the Pār sandstone, from the town of Pār situated at the foot of the scarp, 15 miles south-west of Gwalior. The overlying rocks, whose aggregate thickness amounts to about 2,000 feet, form the parallel ranges north of the Pār sandstone scarp, and include shales, banded jaspers, limestones, porcellanites, and basic volcanic rocks. Several bands of the latter occur at various horizons. They are well exposed in the hill upon which the fort of Gwalior stands, where they are capped by an outlier of Kaimur sandstone. Some of the shales and jaspers are impregnated with hematite, sometimes to such an extent as to become valuable iron ores. In the angle included between the scarps formed by the Kaimur and Pār sandstones, a considerable area of the Bundelkhand gneiss outcrop is situated in Gwalior territory. The southern continuation of the Vindhyan ranges is greatly concealed by the overflowing Deccan trap, while, to the north, they sink beneath the Gangetic alluvium, which also covers a great deal of the Bijāwars and gneiss.

A great variety of rocks occur in the Nīmach area, which has, however, been very little studied. The three great groups of the Upper Vindhyans—the Kaimur, Rewar, and Bandair—are all represented with their characteristic subdivisions, and are here underlaid by typical Lower Vindhyans of great thickness and considerable superficial extent. These rest on crystalline schists and gneisses of Archaean age (Arāvalli series), and on strata of the Delhi series, whose age is difficult to decide, as it appears to be a heterogeneous group probably constituted partly of true Bijāwar rocks and partly of newer strata intermediate in age between the Bijāwars and Vindhyans. A considerable portion of Sindhia's territories situated in Mālwā has never been geologically surveyed. The formations consist largely of Deccan trap, and it is also known that the Vindhyans occur in the neighbourhood of Bhilsa.

Farther south the districts bordering the Narbadā have been geologically famous ever since Keatinge's discovery of Cretaceous fossils at Chirākhān, 22 miles east of Bāgh, in 1856, and the region has been carefully surveyed by Dr. Blanford. The fossil sea-urchins have been studied by the late Professor Duncan, who arrived at the

conclusion that the beds containing them are of cenomanian age, approximately corresponding, therefore, with the upper greensand in England. These fossils are found in a series of calcareous strata which, through a misapprehension regarding their geographical situation, have been misnamed the Bāgh beds by Dr. Carter in the first published account of Keatinge's discovery. Both the underlying and overlying beds are sandstones, the whole series being conformable with one another. The lower sandstone is sometimes distinguished under the name of Nimār sandstone. All these strata belong to the Lameta or infra-trappean group.

The town of Bāgh itself is situated on Bijāwars, much of the neighbouring region being occupied by an outcrop of these rocks bordered on all sides by faults. The area includes the usual rock of the Bijāwar series—slates, siliceous limestones, jaspers, and basic volcanic rocks. The lines of fracture are occupied by a siliceous breccia, which often contains a large proportion of hematite and then constitutes a valuable iron ore which was once extensively mined and smelted. The same district contains extensive outcrops of gneissose rocks. The gneiss exhibits a great deal of variety, and in this respect differs from the Bundelkhand gneiss, and seems closely related to the type called Bengal gneiss, which is regarded as more recent. The remainder of the district is occupied by Deccan trap.[1]

In the northern parts of the Gwalior State the vegetation in waste tracts consists largely of deciduous trees and shrubs, many of which flower when leafless or nearly so in the hot season. The principal species of trees are *Bombax malabaricum*, *Sterculia urens*, *Semecarpus Anacardium*, *Acacia arabica*, *A. leucophloea*, and *A. Catechu*, *Anogeissus latifolia* and *A. pendula*, *Cordia Rothii*, *Phyllanthus Emblica*, *Erythrina suberosa*, and *Gmelina arborea*. Farther south the low hills are covered with low forest, containing many shrubs like *Grewia*, *Zizyphus*, *Woodfordia*, *Casearia*, *Carissa*, *Capparis*, and *Antidesma*, mixed with *Butea frondosa*, *Buchanania latifolia*, *Bassia latifolia*, *Diospyros tomentosa*, *Odina Wodier*, and *Boswellia serrata*, though when the last is plentiful the brushwood undergrowth is often scanty. In places bamboos abound. In the extreme south the typical forest of the Central Indian highlands occurs, containing some teak, *sāj* (*Terminalia tomentosa*), and other species—such as *Ougeinia*, *Dalbergia latifolia*, *Hardwickia*, *Cochlospermum*, *Schreibera*, and *Soymida*—characteristic of the region generally.

The Gwalior forests, and especially those in the northern section,

[1] 'Geology of Gwalior and Vicinity,' *Records, Geological Survey of India*, vol. iii, pp. 33–42; *Memoirs, Geological Survey of India*, vol. vi, part iii; *Quarterly Journal of the Geological Society of London*, vol. xxx, 1865; *Records, Geological Survey of India*, vol. xx, pp. 81–92.

abound in wild animals of every kind, tigers, leopards, *sāmbar*, *chītal*, antelope, and bears being met with, while small game is found everywhere.

Throughout the plateau, which comprises nearly three-quarters of the total area, the climate is comparatively equable, being free from extremes of either heat or cold. In the plains, however, the hot season is distinctly oppressive, and the cold in winter is severe. The annual rainfall varies from about 30 inches on the plateau to 40 inches in the plains.

History.

The house of Sindhia (or Shinde) traces its descent from a family of which one branch held the hereditary post of *pātel* in Kannerkhera, a village 16 miles east of Sātāra. The head of the family received a patent of rank from the emperor Aurangzeb, while a daughter of the house was married to Rājā Sāhū, son and successor of Sambhājī. The founder of the Gwalior house was Rānojī Sindhia, who belonged to an impoverished branch and, according to a story current in Sir John Malcolm's time, had become a personal attendant on the Peshwā Bālājī Bājī Rao, and used to carry his slippers. He rose rapidly in favour, brought to the front by his soldierly qualities. In 1726, together with Malhār Rao Holkar, the founder of the house of Indore, and the Ponwār, he was authorized by the Peshwā to collect *chauth* (25 per cent. of the revenues) and *sardeshmukhī* (10 per cent. over and above the *chauth*) in the Mālwā districts, retaining for his own remuneration half the *mokassa* (or remaining 65 per cent.). Rānojī fixed his head-quarters at the ancient city of UJJAIN, which ultimately became the capital of the Sindhia dominions, and in 1745 he died near SHUJĀLPUR, where his cenotaph stands. He left three legitimate sons, Jayāpa, Dattājī, and Jotiba, and two illegitimate, Tūkajī and Mahādjī. Jayāpa succeeded to the territories of Rānojī, estimated to produce 65·5 lakhs yearly, but was killed at Nāgaur in 1759. He was followed by his son Jankojī, who was taken prisoner at Pānīpat (1761) and put to death, and Mahādjī Sindhia succeeded.

The history of Gwalior State during the rule of Mahādjī and his successor Daulat Rao is practically the history of India, in shaping which they both took a leading part. Mahādjī returned from the Deccan to Mālwā in 1764, and by 1769 re-established his power there. In 1772 Mādhu Rao Peshwā died; and in the struggles which ensued Mahādjī took an important part, and seized every chance of increasing his power and augmenting his possessions. In 1775 Raghuba Peshwā threw himself on the protection of the British. The reverses which Sindhia's forces met with at the hands of Colonel Goddard after his famous march from Bengal to Gujarāt (1778), the fall of Gwalior to Major Popham (1780), and the night attack by Major Camac, opened

his eyes to the strength of the new power which had entered the arena of Indian politics. In 1782 the Treaty of Sālbai was made with Sindhia, the chief stipulations being that he should withdraw to Ujjain, and the British north of the Jumna, and that he should negotiate treaties with the other belligerents. The importance of this treaty can scarcely be exaggerated. It made the British arbiters of peace in India and virtually acknowledged their supremacy, while at the same time Sindhia was recognized as an independent chief and not as a vassal of the Peshwā. A Resident, Mr. Anderson (who had negotiated the treaty), was at the same time appointed to Sindhia's court.

Sindhia took full advantage of the system of neutrality pursued by the British to establish his supremacy over Northern Hindustān. In this he was assisted by the genius of Benoit de Boigne, whose influence in consolidating the power of Mahādjī Sindhia is seldom estimated at its true value. He was a Savoyard, a native of Chambéry, who had served under Lord Clare in the famous Irish Brigade at Fontenoy and elsewhere, and who after many vicissitudes, including imprisonment by the Turks, reached India and for a time held a commission in the 6th Madras Infantry. After resigning his commission he had proposed to travel overland to Russia, but was prevented by the loss of his possessions and papers, stolen, it appears, at the instigation of Mahādjī, who was suspicious of his intentions. De Boigne finally entered Sindhia's service, and, by his genius for organization and command in the field, was instrumental in establishing the Marāthā supremacy. Commencing with two battalions of infantry, he ultimately increased Sindhia's regular forces to three brigades. With these troops Sindhia became invincible, defeating the Rājputs at Lālsot (1787), Pātan (1790), and Merta (1790), Holkar at Lakherī (1793), and the Delhi forces at Agra (1787).

In 1785 Sindhia reinstated the emperor Shāh Alam on his throne at Delhi, receiving in return the title of deputy Vakīl-ul-Mutlak or vicegerent of the empire, that of Vakīl-ul-Mutlak being at his request conferred on the Peshwā, his master, as he was pleased to designate him. In 1788 the atrocities practised by Ghulām Kādir on the unfortunate emperor gave Sindhia the opportunity of taking possession of Delhi and becoming the protector of the aged Shāh Alam. After the peace made with Tipū Sultān in 1792, Sindhia successfully exerted his influence to prevent the completion of a treaty between the British, the Nizām, and the Peshwā, directed against Tipū. In the same year Sindhia carried out the investiture of the Peshwā with the insignia of Vakīl-ul-Mutlak. During the ceremony he professed the greatest humility, even insisting on bearing the Peshwā's slippers, as his father had served an earlier Peshwā. The old Marāthā nobles, however, were

disgusted, and refused to attend or offer the usual complimentary gifts to Sindhia. Mahādjī was now at the zenith of his power, when all his schemes for further aggrandizement were cut short by his sudden death in 1794 at Wānowri near Poona. Mahādjī Sindhia had many qualities superior to those of his successful contemporaries, such as Ghāzi-ud-dīn, Ghulām Kādir, and Raghuba, who had come to the front by treachery or sheer brutality. With such men Sindhia had nothing in common.

'Clear in the conception of reasonable projects, he was bold and prudent in their realization. . . . In a scene of barbarous anarchy, when all the bonds of society seemed to be unloosed, he was amiable, courteous, and free from cruelty. . . . Sindhia was easily provoked and not easily appeased. But, if he seldom forgave an injury, he never forgot a benefit . . . consequently he was served with fidelity and affection. His countenance was expressive of good sense and good humour, but his complexion was dark, his person inclining to corpulence, and he limped from the effects of his wound at Pānīpat. He could write, was a good accountant, and understood revenue affairs well.'

Mahādjī left no heir, and was succeeded by Daulat Rao, a grandson of his brother Tūkajī, who was scarcely fifteen years of age at the time. Born in wealthy surroundings, brought up among foreign troops from whom he had learned to despise those of his own country, the possessor of vast territories and a dominant military organization, Daulat Rao looked upon himself as the chief sovereign in India and not as a member of the Marāthā confederacy. At this time the death of the young Peshwā, Mādhu Rao II (1795), and the troubles which it occasioned, the demise of Tūkajī Holkar and the rise of the turbulent Jaswant Rao Holkar, together with the intrigues of Nānā Farnavīs, threw the country into confusion and enabled Sindhia to gain the ascendancy. He also came under the influence of Sarje Rao Ghātke, the most unprincipled scoundrel of the day, whose daughter he had married (1798). Urged possibly by this adviser, Daulat Rao aimed at increasing his dominions at all costs, and seized territory from the Marāthā Ponwārs of Dhār and Dewās. The rising power of Jaswant Rao Holkar, however, alarmed him. In July, 1801, Jaswant Rao appeared before Sindhia's capital of Ujjain, and, after defeating some battalions under Hessing, extorted a large sum from its inhabitants, but did not ravage the town. In October, however, Sarje Rao Ghātke took revenge by sacking Indore, razing it almost to the ground, and practising every form of atrocity on its inhabitants. From this time dates the *gardi-kā-wakt*, or 'period of unrest,' as it is still called, during which the whole of Central India was overrun by the armies of Sindhia and Holkar and their attendant predatory Pindāri bands, under Amīr Khān and others. De Boigne had retired in 1796; and his successor,

Perron, was a man of a very different stamp, whose determined favouritism of French officers, in defiance of all claims to promotion, produced discontent in the regular corps.

Finally, on December 31, 1802, the Peshwā signed the Treaty of Bassein, by which the British were recognized as the paramount power in India. The continual evasion shown by Sindhia in all attempts at negotiation brought him into conflict with the British, and his power was completely destroyed in both Western and Northern India by the victories of Ahmadnagar, Assaye, Asīrgarh, and Laswāri. His famous brigades were annihilated and his military power irretrievably broken. On December 30, 1803, he signed the Treaty of Sarji Anjangaon, by which he was obliged to give up his possessions between the Jumna and Ganges, the district of Broach, and other lands in the south of his dominions; and soon after, by the Treaty of Burhānpur, he agreed to maintain a subsidiary force to be paid for out of the revenues of territory ceded by the treaty. By the ninth article of the Treaty of Sarji Anjangaon he was deprived of the forts of Gwalior and Gohad. The discontent produced by the last condition almost caused a rupture, and did actually result in the plundering of the Resident's camp and detention of the Resident as a prisoner. In 1805, under the new policy of Lord Cornwallis, Gohad and Gwalior were restored, and the Chambal river was made the northern boundary of the State, while certain claims on Rājput States were abolished, the British Government at the same time binding itself to enter into no treaties with Udaipur, Jodhpur, Kotah, or any chief tributary to Sindhia in Mālwā, Mewār, or Mārwār. In 1816 Sindhia was called on to assist in the suppression of the Pindāris. For some time it was doubtful what line he would take, but he ultimately signed the Treaty of Gwalior in 1817 by which he promised full co-operation. He did not, however, act up to his professions, and connived at the retention of the fort of Asīrgarh, which had been ceded by the treaty. A fresh treaty in 1818 effected a readjustment of boundaries, Ajmer and other lands being ceded.

In 1827 Daulat Rao died, leaving no son or adopted heir. His widow, Baiza Bai, an unscrupulous and designing woman, adopted Mukut Rao, a boy of eleven belonging to a distant but legitimate branch of the family, who succeeded as Jankojī Rao Sindhia. Difficulties then arose as to whether the Bai should rule in her own right or as regent, and her behaviour towards the young chief finally caused a rise of feeling in his favour which impelled the Bai to take refuge in British territory. She returned after an interval and lived at Gwalior till her death in 1862. The chief's maternal uncle, known as the Māmā Sāhib, had meanwhile become minister. The most important event during this period was the readjustment of the terms for maintaining the contingent force raised under the treaty of 1817.

Jankoji Rao was a weak ruler and feuds were constant at his court, while the army was in a chronic state of mutiny. He died in 1843; and in the absence of an heir, his widow Tārā Bai adopted Bhāgīrath Rao, a son of Hanwant Rao, commonly called Bābājī Sindhia. He succeeded under the name of Jayājī Rao Sindhia, the Māmā Sāhib being chosen as regent. Tārā Bai, however, came under the evil influence of Dādā Khāsgiwāla, the comptroller of her household, an unscrupulous adventurer who wished to get all power into his own hands. A complicated series of intrigues followed, which it is impossible to unravel. The Dādā, however, succeeded in driving the Māmā Sāhib from the State, and became minister. He filled all appointments with his relatives, and matters rapidly passed from bad to worse, ending in the assemblage of large bodies of troops who threatened an attack on Sironj, where the Māmā Sāhib was then residing. War was impending in the Punjab, and, as it was essential to secure peace, the British Government decided to interfere. Colonel Sleeman, the Resident, was withdrawn, and the surrender of Dādā Khāsgiwāla was demanded. A British force under Sir Hugh Gough moved on Gwalior, and crossed the Chambal in December, 1843. On December 29 followed the simultaneous battles of Panniār and MAHĀRĀJPUR, in which the Gwalior army was annihilated. A treaty was then made, under which certain lands to the value of 18 lakhs were ceded for the upkeep of a contingent force, besides other lands for the liquidation of the expenses incurred in the late war, the State army was reduced, and a Council of Regency was appointed during the minority, to act under the Resident's advice.

In 1852 Dinkar Rao (afterwards Rao Rājā Sir Dinkar Rao, Mushīr-i-khās Bahādur, K.C.S.I.) became minister, and under his able management radical reforms were introduced into every department of the administration. During the Mutiny, Sindhia gave valuable assistance to the British, at no little risk to himself. Early in June, 1858, he was driven from the Gwalior fort by Tāntiā Topī and the Rānī of Jhānsi, to whom all his troops deserted. But on June 19, Gwalior was captured by Sir Hugh Rose and Sindhia was reinstated. For his services lands worth 3 lakhs a year were made over, while he was allowed to increase his infantry from 3,000 to 5,000 men, and his artillery from 32 to 36 guns. In 1861 he was created a G.C.S.I. In 1872 the State lent 75 lakhs for the construction of the Agra-Gwalior portion of the Great Indian Peninsula Railway, and a similar amount in 1873 for the Indore-Nīmach section of the Rājputāna-Mālwā Railway. A personal salute of 21 guns was conferred in 1877, and Jayājī Rao became a Counsellor of the Empress and later on a G.C.B. and G.C.I.E. In 1882 land was ceded by the State for the Midland section of the Great Indian Peninsula Railway. In 1886 Gwalior fort and Morār cantonment, with

some other villages, which had been held by British troops since 1858, were exchanged for Jhānsi city.

Jayājī Rao died in 1886 and was succeeded by his son, the present chief, Mādhava Rao Sindhia, then a boy in his tenth year. A Council of Regency conducted the administration until 1894, when the Mahārājā obtained powers. He takes a deep and active interest in the administration of his State, having a comprehensive grasp of the work done in each department. In 1900 the Mahārājā went to China during the war, at the same time presenting a hospital ship for the accommodation of the wounded. The chief bears the titles of Mahārājā and His Highness, and receives a salute of 19 guns, increased to 21 in his own territory. The present Mahārājā is a G.C.V.O., G.C.S.I., and A.D.C. to the King-Emperor, besides holding the rank of Honorary Colonel in the British Army, and Honorary Colonel of Skinner's Horse, a regiment originally raised by Colonel Skinner, an officer of De Boigne. He has also received the gold Kaisar-i-Hind medal, and the honorary degree of LL.D. granted by the University of Cambridge.

Gwalior State contains very many places of archaeological interest. Except Old Ujjain, which requires to be excavated before its site can be properly examined, the earliest remains are those round BHĪLSA, at Beshnagar, and UDAYAGIRI, where many Buddhist remains of the first century B. C. and Hindu relics of the fourth and fifth centuries A. D. are to be seen. At BĀGH a series of fine rock-cut Buddhist *vihāras* exist, dating probably from the seventh century. Mediaeval Hindu and Jain architecture is represented at BARO, GWALIOR, GYĀRASPUR, NAROD, and UDAYAPUR, while the best Muhammadan work is seen at CHANDERĪ, MANDASOR, NARWAR, GOHAD, and GWALIOR. Besides these, old shrines and buildings are met with in many localities, few places indeed of any size being without some such relic of the past. Most of the remains are those of Hindu and Jain temples of the tenth to the thirteenth centuries. At Kutwār or Kamantalpur, 10 miles north-east of Nūrābād (26° 24′ N. and 78° 6′ E.), and at Paroli and Parāvalī, 9 miles north of Gwalior, are remains which date back to the fifth and sixth centuries, perhaps even earlier. Rājāpur near Terāhi contains the remains of a *stūpa*, probably of late date. Terāhi, Kadwāha close by, Dubkund near Sheopur, and Suhānia, 25 miles north of Gwalior, all show signs of having once been places of importance, especially Suhānia, which appears to have been a large city. At Kāliadeh, 5 miles north of UJJAIN TOWN, is an old palace constructed in the bed of the Siprā. The waters of the river are led through fancifully shaped conduits into numerous tanks and over sculptured stone curtains, whence they fall in a thin iridescent sheet, until they finally return to their natural bed over a fall of some 20 feet.

The palace appears to have been built by the Khiljī Sultāns of Mālwā in the sixteenth century.

The population at the three enumerations was: (1881) 2,993,352, (1891) 3,378,774, and (1901) 2,933,001, the density in the last year being 117 persons per square mile. The decrease of 13 per cent. during the last decade is mainly due to the effect of bad seasons, notably the disastrous famine of 1899–1900. The State contains 23 towns, the two largest being GWALIOR CITY (population, 119,433), consisting of Gwalior, Lashkar, and Brigade; and UJJAIN (39,892), the former capital. Nine of these towns are in the plains, the remainder being on the plateau. There are 9,538 villages, with an average number of 273 inhabitants. **Population.**

The following table gives statistics of population and land revenue:

District.	Area in square miles.	Number of Towns.	Number of Villages.	Population, 1901.	Population per square mile.	Number of persons able to read and write.	Land revenue and cesses for *khalsa* area, 1902-3.
Sheopur	2,862	3	729	214,624	75	Details not available.	8,13,000
Tonwarghār	1,834	1	704	369,414	199		11,12,000
Bhind	1,554	2	819	394,461	254		11,65,000
Gwalior Gird	1,513	3	614	323,693	246		5,25,000
Narwar	4,041	2	1,298	398,361	131		6,58,000
Isāgarh	3,591	2	1,367	248,679	75		4,97,000
Bhīlsa	1,625	1	708	120,189	74		3,32,000
Shājāpur	3,494	3	1,393	361,050	103		14,02,000
Ujjain	1,505	3	667	209,670	139		9,86,000
Amjhera	1,301	...	464	96,426	74		1,51,000
Mandasor	1,721	3	775	196,434	114		9,03,000
Total	25,041	23	9,538	2,933,001	117	70,000	85,44,000

Hindus form 84 per cent. of the total, Animists 7 per cent., Musalmāns 6 per cent., and Jains 2 per cent. The followers of Bābā Kapūr, a Husaini Saiyid, are found only in this State. He was originally a soldier, but subsequently devoted his time to carrying water for the poor, and finally adopted a life of meditation. He fell from the roof of his house and died in 1571. His shrine is situated in a cave, cut in the north-eastern face of the rock on which the Gwalior fort stands. It is supported by grants from State funds, and is visited by both Hindus and Muhammadans.

Owing to the wide area covered by the State, a great diversity of languages exists. Thus Mālwī is spoken by 25 per cent. of the population, but is used by 80 to 90 per cent. of the people in the western districts. Bundelī speakers form 18 per cent. of the total, but the language is spoken by 70 per cent. in Bhānder and 86 per cent. in Bhīlsa. Urdū was returned by 18 per cent. and is spoken in all parts

by the official classes. In Tonwarghār a dialect of Western Hindī, called Tonwarghārī, is the prevailing tongue, and is spoken by 13 per cent. of the population of the State.

The Hindu castes most largely represented are the Chamārs (leather workers and labourers), 319,500: Brāhmans, 310,000; Rājputs, 297,000; Kāchhīs (agriculturists), 158,000; Ahīrs (graziers and cultivators), 108,715; Gūjars (graziers and cultivators), 100,700; Balais, 71,000; and Korīs (weavers), 66,500. Among the Muhammadans, Shaikhs number 58,800 and Pathāns 47,600. The most prominent jungle tribes are the Kirārs (agriculturists and hunters), 62,400; Mīnās, 62,300; and Bhīls, 41,300, the last being chiefly met with in the Amjhera district. A large proportion of the population is agricultural, 57 per cent. in the plains and hilly tracts and 47 in the plateau being supported by agriculture, while 26 per cent. follow pastoral occupations. Industrial pursuits are followed by 15 per cent., commercial by 3 per cent., and professional by 1 per cent.

Christians in 1901 numbered 765, including 379 native Christians. The Canadian Presbyterian Mission has establishments at Ujjain and Nīmach.

Agriculture.

The variety in the physical features of the State causes great differences in the agricultural conditions. The best soil is found in Mālwā, but the Tonwarghār and Bhind districts are covered with alluvial soil of fair fertility. In the centre of northern Gwalior a hilly tract, formed by an arm of the Vindhyas, makes much of the country in the Narwar, Sheopur, and Isāgarh districts of little use for agricultural purposes. Nearly the whole of Amjhera is cut up by hills and contains little soil of value. Other factors are the density and character of the population. Large tracts of good land are lying fallow for want of cultivators, while the endeavours made to induce the Bhīls in Amjhera to practise ordinary methods have not met with much success.

The soil is classed under ten main heads: *mār*, or black soil, very retentive of moisture; *kābar*, an inferior black soil, less retentive of moisture; *paruā*, a light soil; *dūmat*, a clayey soil; *pāthal*, a detrital soil found on the slopes of the hills; *karmatiya*, used mainly for growing rice; *bhūrī*, a yellow soil; *kachhār*, the soil found along river-beds; and *rānkar* and *dūnda*, two stony soils of little value. The first four classes produce both spring and autumn crops, while the rest bear only an autumn crop. The last two soils cannot be cultivated every year.

Of the total area of the State, 5,587 square miles, or 22 per cent., have been alienated in grants, leaving 19,454 square miles of *khālsa* or land directly under State control. The main agricultural statistics for 1902–3 are shown on the next page, areas being in square miles.

Jowār is the principal crop, covering 1,807 square miles, or 29 per

cent. of the total cropped area in *khālsa* land, in 1902–3: while gram (952), wheat (467), *bājra* (341), maize (252), barley (119), *arhar* (107), and rice (66) are also important. The chief non-food crops are oil-seeds (346), cotton (305), poppy (65), and sugar-cane (9). Various minor grains, mostly pulses, are also grown, while *til*, linseed, and *rameli* are grown for oil, and *ambārī* and *san*-hemp for fibre. In the country round Gwalior city a considerable quantity of Indian hemp is produced for the manufacture of *gānja* and *bhang*. Tobacco and the usual vegetables are grown in villages. The area in acres under poppy was 49,553 in 1900–1, 34,057 in 1901–2, and 41,345 in 1902–3. The decrease is due mainly to the diminution in the Mālwā population, which has made it difficult for agriculturists to obtain the necessary labour at the right moment, so essential to the proper cultivation of this crop. Liberal concessions are made for the breaking-up of waste land and clearing of forests.

District.	Total *khālsa*.	Cultivated.	Irrigated.	Cultivable waste.
Sheopur	2,522	502	21	335
Tonwarghār	1,620	794	47	299
Bhind	1,397	742	35	169
Gwalior Gird	1,362	274	37	332
Narwar	3,032	773	99	1,044
Isāgarh	2,421	528	19	1,126
Bhīlsa	1,423	299	3	757
Shājāpur	2,609	741	47	1,292
Ujjain	1,069	495	12	425
Amjhera	673	194	4	222
Mandasor	1,326	380	37	470
Total	19,454	5,722	361	6,471

The total area under cultivation increased from 5,287 square miles in 1901–2 to 5,722 square miles in 1902–3, but the irrigated area fell from 377 square miles to 361. Loans of seed and money are freely given, the rate of interest being 4 per cent. on seed grants and 6 per cent. on loans for well-digging and the purchase of bullocks. This system of making State advances is said to be rapidly ousting the former monopoly of the village bankers.

The only special breed of cattle met with in the State is the Mālwī. These are of medium size, generally of a grey, silver grey, or white colour. They are very strong and active. In the Narwar and Sheopur districts a local breed of cattle is raised of a very hardy type. The milch cows and the goats of the Bhind and Tonwarghār districts have a considerable reputation.

A separate irrigation department, which was started during the present chief's minority and is now a section of the State Public Works department, deals with the maintenance of existing wells and tanks and

the construction of new works. No water rates are levied, a return on the outlay being obtained from the higher rates levied on the increased area brought under irrigation. The chief source of water-supply is from wells. In Mālwā water is usually raised in a leathern bag worked by bullocks, while in northern Gwalior the Persian wheel is common. The cost of making wells is considerable in northern Gwalior, and in the Sheopur district especially is almost prohibitive, owing to the proximity of the rock to the surface. In 1902–3, 361 square miles of *khālsa* land were irrigated, of which 247 square miles were supplied from wells, 87 from tanks, and 27 from other sources. Owing to their depth below the surrounding country, the rivers are of little use for irrigation.

The forests lie mainly in the Sheopur, Isāgarh, Narwar, Amjhera, and Bhīlsa districts. In 1896 they were placed under regular supervision, but as yet no attempt has been made to work them commercially, and no areas have been formally 'reserved.' The forest produce, consisting of timber, charcoal, grass, gum, lac, and the flowers and fruit of the *mahuā* and *chironji*, is auctioned yearly to contractors who supply the public. A Conservator of forests has lately been appointed, who is introducing systematic management. An annual revenue of about Rs. 72,000 is derived, giving a profit of Rs. 13,000.

Iron is found round Gwalior in large quantities, a very pure hematite occurring in the Bijāwar rocks. In former days a considerable industry existed near Panniār, but this has almost entirely died out, owing to the cheapness of the European product. Heaps of slag still indicate the sites of old workings. A little crude salt and saltpetre are manufactured from surface efflorescences. A considerable deposit of mica exists at Gangāpur, but has not yet been worked commercially. Limestone occurs in many places, but is little quarried. The chief mineral product of Gwalior is the magnificent building material provided by the Vindhyan sandstone, which has been used in the old buildings on the fort and throughout the modern city of Lashkar. The quarrymen are mostly Chamārs, who pay an annual fee of Rs. 4 a head.

The main industries are connected with cotton, which is ginned and pressed in factories at many places. A large spinning-mill, established by a private firm at Ujjain in 1898, employs 500 hands and produces 3,000 lb. of yarn a day. The fabrics produced at CHANDERĪ are remarkable for their fineness, and a popular kind of cotton print is made at Mandasor. Opium is manufactured at Ujjain and Mandasor, the latter place being the chief centre of the industry. At Sheopur a local art in lacquer-work exists, bedstead legs and playing-cards being a speciality.

Trade and communications.

The principal exports are grain, oilseeds, cotton, opium, country cloth, and *ghī*. These articles are exported to Bombay, Ahmadābād,

Cawnpore, Indore, and Calcutta principally, much of the opium being shipped to China. The chief articles imported are hardware, kerosene oil, arms, machinery, and paper, which are obtained from Bombay, Ahmadābād, Cawnpore, Indore, and Calcutta. The Muhammadan population imports a considerable quantity of white metal utensils from Bhīlwāra in Rājputāna. The chief marts are LASHKAR, UJJAIN, BHIND, Morena, SABALGARH, SHEOPUR, SĪPRĪ, GUNA, MUNGAOLĪ, Pachhār, CHANDERĪ, MANDASOR (for opium especially), SHĀJĀPUR, NĪMACH, and Gangāpur.

The northern part of the State is traversed by the Midland section of the Great Indian Peninsula Railway, while two branches run from Bhopāl to Ujjain and from Bīna to Bāran. The Gwalior Light Railway, a local State line, runs for 185 miles, from Gwalior north-east to Bhind, and south-west to Sīprī with a branch to Sabalgarh. This was constructed by the Darbār at a cost of 44 lakhs, and is managed by the Great Indian Peninsula Railway Company. In the famine of 1897 it was of the greatest benefit to the districts round Gwalior, where the distress was keen. Small extensions of the line run to shooting preserves and round the palace precincts. The Rājputāna-Mālwā Railway main line from Khandwā to Ajmer and a branch to Ujjain pass through the Mālwā portion. The Baroda-Ujjain branch of the Bombay, Baroda, and Central India Railway runs for 46 miles in Gwalior territory, and the Nāgda-Muttra line, now under construction, will also pass through much of the State.

Gwalior possesses a large number of roads, some constructed by the British Government and some by the State. The total length of metalled roads is 885 miles. In 1888, at the request of the Council of Regency, all roads running through the State were taken over by the Darbār, which became responsible for their proper maintenance. One of the chief routes is the Agra-Bombay road, of which 216 miles lie in Gwalior territory. The Gwalior-Jhānsi road, 33 miles in length, constructed by the British Government, was handed over to the State in 1888.

No post offices had been opened in the State until 1885, when a convention was entered into with the British Government, which has been modified by additional agreements in 1888 and 1895. The State post offices issue money orders, the commission being retained by the Darbār, and all articles are delivered by the State officials. The number of post offices has risen from 65 in 1885 to 129 in 1903, while the number of letters and parcels carried has increased from 345,000 and 28,000 in 1896 to 4,308,000 and 106,000 in 1903. British stamps surcharged with two cobras and the word 'Gwalior' are used, and yielded a revenue of Rs. 85,000, including the sale of service stamps, in 1903. The department is in charge of the State postmaster-general.

British telegraph offices combined with post offices have been opened at a dozen of the principal towns.

Famine.

The first famine of which any records exist devastated northern Gwalior in 1783–4, its dire effects being noted by Mr. Malet in his diary. The next severe famine, that of 1896–7, was mainly felt in the northern districts, while that of 1899–1900 was worst in Mālwā, the Nīmach district being most affected, only 4 inches of rain falling. A large number of relief works at a cost of 38·2 lakhs and many poorhouses were opened, 14 lakhs was distributed on gratuitous relief, and large suspensions and remissions were granted to the cultivators. The sickness which followed the famine carried off numbers of the enfeebled population.

Administration.

For administrative purposes the State is divided into two large portions: northern Gwalior, comprising seven *zilas* or districts—GWALIOR GIRD, BHIND, SHEOPUR, TONWARGHĀR, ISĀGARH, BHĪLSA, and NARWAR; and the Mālwā *prānt* or division, comprising four *zilas*—UJJAIN, MANDASOR, SHĀJĀPUR, and AMJHERA. The *zilas* are subdivided into *parganas*, the villages in a *pargana* being grouped into circles, each under a *patwāri*.

The administrative machinery of the State is controlled by the Mahārājā, assisted by the Sadr Board. This Board consists of seven members, the Mahārājā himself being president and the members being in charge of different departments, of which the most important are the Revenue, Land Records and Settlement, Forest, Accounts, Public Works, Customs, and Post Office. The chief has no minister, but a staff of secretaries, supervised by a chief secretary, prepare cases for the final orders of the Mahārājā. A *Sar Sūbah*, in general charge of the Mālwā *prānt*, controls and supervises the work of the *Sūbahs* in charge of the *zilas*. The *Sūbahs* are *zila* magistrates, exercising powers similar to those of a District Magistrate in British India. They are assisted by *Kamāsdārs* (*Kamāvisdārs*) in charge of *parganas*, who are magistrates of the second or third class and Munsifs for their charges. The constitution in the northern division ' similar, except that here the *Sūbahs* are directly under the Sadr Board.

The first regular judicial court was established in 1844, by the Māmā Sāhib when minister of the State. This court, designated the *Huzūr Adālat*, was presided over by a judge, who heard cases only from the city and surrounding districts, as the farmers of revenue exercised judicial powers in the villages they held. In 1852 Sir Dinkar Rao abolished the system of leasing villages and appointed *Kamāsdārs* and *Sūbahs*, to whom judicial powers, both civil and criminal, were granted. In 1888 the Council of Regency adopted the system now in force.

The lowest civil courts are those of the *Kamāsdārs* in charge of *parganas*, who are empowered to hear cases up to Rs. 500 in value. The

Sadr Amin of the *zila* deals with cases up to Rs. 3,000 in value. The *prant* judge hears cases up to Rs. 50,000 in value; and the Chief Judge of the *Sadr Adalat*, or High Court, hears cases up to any value.

The lowest criminal courts in the State are those of the *Kamasdars*, who are magistrates of the second or third class. The *Sadr Amins* are first-class magistrates for the *zila*, and the *Subahs* are *zila* (District) magistrates. The *Prant Adalat*, to which both first and second-class magistrates commit cases, takes the place of the Sessions Court in British India. The Chief Judge's Court, the *Sadr Adalat* or High Court, is the highest criminal court in the State. Appeals, both civil and criminal, lie successively from the *pargana* courts to the *zila* and *prant* courts and the High Court. Cases involving imprisonment for life, or a sentence of death, are referred by the *Prant Adalat* (Sessions) to the *Sadr Adalat*, and all sentences of death are finally laid before the Maharaja for confirmation. The Maharaja also hears appeals against decisions of the *Sadr Adalat*. Codes based on those of British India, but modified so as to suit local customs, were issued in 1895.

Since 1902 a regular Accounts department has been formed, in which all State accounts are audited. The normal revenue of the State is 150 lakhs, excluding 11 lakhs assigned to *jagirdars*. In 1902–3 the chief heads of revenue were: land, 85 lakhs; customs, 11 lakhs; stamps, 2·8 lakhs; excise, 1·4 lakhs; opium, 2·8 lakhs; interest on railway loan, 21·3 lakhs; and railway earnings, 3 lakhs. The expenditure amounted to 133 lakhs, the chief heads being: collection of land revenue, 8·3 lakhs; general administration, including the chief's establishment, 16 lakhs; police, 7·5 lakhs; military, 41·3 lakhs; public works, 21·8 lakhs; irrigation, 6·7 lakhs; education, 2·4 lakhs; medical, 1·6 lakhs; and law and justice, 3 lakhs.

There are five main classes of tenure in the State. Guaranteed *Thakurs* possess land in the State under guarantee from the British Government; the conditions of their tenure vary in almost every case. *Jagirdars* hold directly from the Darbar, and often exercise limited judicial and general administrative powers within their own holdings, besides having a right to a seat in Darbar and enjoying other privileges. *Tankadars* and *istimrardars* hold on a permanent quit-rent. *Muafidars* enjoy rent-free grants, which are subdivided into *devasthan* grants for the upkeep of temples, and *dharmada* and *padarakh*, religious and charitable grants. The last and most general class consists of the *khalsa* area directly under State management. Since the first settlement made by Dinkar Rao in 1852, the *zamindars* have held their land for a regular term varying from seven to twelve years, and more recently a settlement has been made for twenty years in the Bhander *zila*. In the Bhil country of Amjhera, however, and in some parts of northern Gwalior, the poorness of the soil necessitates a yearly settlement by the

'plough' of land (about 15 acres) cultivated. Alienation of land under certain restrictions, of which the most important is the prohibition of sale to any man not a subject of the Gwalior Darbār, has been permitted since 1898, in which year proprietary rights were formally recognized. Revenue was originally collected through *tipdārs* or merchant bankers, who stood security and received 10 per cent. as remuneration. This system has lately been abolished, and all revenue due from *khālsa* land is now paid directly to the State officials. The rates paid vary according to the quality of the soil, ranging for irrigated land from Rs. 4 to Rs. 40 per acre, the latter rate being charged on poppy-growing land, and for 'dry' land from about 8 annas to Rs. 6. The average incidence of the land revenue demand is Rs. 2–7–9 per acre of cultivated land, and 11 annas per acre of total area. A regular survey for settlement purposes was first made in 1871, the *dorī* or rope of 1 *jarib* (66 feet in length) being used. In 1890, 1892, and 1896–7 a fresh survey of different parts of the State was made by the plane table, a training class being at the same time opened for the *patwāris*. The demand in 1871 was 50·8 lakhs, and in 1896 it was 89·7 lakhs.

The collections on account of land revenue and revenue from all sources have been, in thousands of rupees:—

	Average, 1881–90.	Average, 1891–1900.	1900–1.	1901–2.	1902–3.
Land revenue .	93,90	86,20	83,43	71,24	85,44
Total revenue .	2,05,27	1,51,55	1,36,77	1,38,78	1,51,87

A considerable revenue is derived from opium, which is grown chiefly in Mālwā. A duty of Rs. 25 is levied on every chest (140 lb.) of opium exported, to which an extra duty called *kāntā kharch*, amounting to Rs. 7–14–0 per chest at Mandasor and Rs. 7–6–0 at Ujjain, is added for the maintenance of the scales. The income from this source varied from 3·2 lakhs in 1881 to 4·3 lakhs in 1891, 2 lakhs in 1901, and 2·8 lakhs in 1903. The right to retail opium within the State is sold by auction annually. The salt revenue is governed by an agreement of 1878, by which the Darbār undertook not to open any new salt works, nor to allow more than 1,930 tons a year to be manufactured at existing works. At the same time it was agreed that none of the salt so manufactured should be exported from the State, and that no salt should be imported, except such as had paid duty in British India, such salt being admitted free of any further tax. In return, the Government of India pays a yearly sum of 3·1 lakhs as compensation.

A regular department for the collection of customs and excise duties was constituted in 1902. A superintendent of customs and excise is appointed for each *zila*, with a staff of inspectors and patrols. The department is controlled by a Commissioner of customs and excise, who

is a member of the Sadr Board. The practice of farming the collections makes it impossible to give figures for earlier years, but in 1903 customs yielded 11 lakhs and excise 1·4 lakhs.

Country liquor is made from the flowers of the *mahuā* (*Bassia latifolia*). The Persian still is used in distilling large quantities, and earthen pot-stills by petty contractors. The strength of the liquor varies from 70° to 25° under proof. The right to vend in all towns of any size is sold by auction, but in outlying areas any one can set up a still on payment of Rs. 5 for every maund of *mahuā* put under fermentation. A special tax is levied on the retail vend of foreign liquors. The right to sell drugs is included in the liquor contracts.

Court-fee stamps were first introduced in 1862, the system being revised in 1897. Four classes of stamps are now in use, known respectively as *adālatī* for judicial applications, *talbāna* for process services, *dastāwezi* for ordinary deeds, and *tamassuk* and *nakal tamassuk* for documents concerning loans to cultivators. The net income in 1902–3 was 2·8 lakhs.

Up to 1899 several issues from local mints were still current in Gwalior. Besides various coins belonging to neighbouring States, such as the *Sālim shāhi* of Partābgarh, the *Gajjā shāhi* of Jhānsi, and the Datiā issues, these included the Gwalior rupee struck at Gwalior, the *Chāndorī* at Isāgarh, and the *Top shāhi* at Sheopur. The inconvenience of this multiplicity of currencies was accentuated by the procedure at the regular settlement of 1871, when 5 *parganas* were assessed in British currency, 20 in the Gwalior, 19 in the *Chāndorī*, and 3 in the *Top shāhi*. In 1893 the State mints were closed By 1897, it was found possible to convert the *Gajjā shāhi* and the *Top shāhi* coins, and in 1898 the Gwalior and *Chāndorī* coins, which were called in. The British rupee and its fractional coins are now the only legal tender. The State still mints its own copper, which is of the same value as the British coin, and gold coins are struck for special purposes.

The Public Works department existed in the time of the late chief, when the Jai Bilās Palace in Lashkar was built, but was improved in 1886 under the Council of Regency, and various changes in its constitution have taken place since. At present it is divided into four sections, dealing respectively with irrigation, roads, buildings, and railways. The officer in charge of each section is independent, but all four are under the Sadr Board. The Victoria College and Memorial Hospital at Lashkar, the Mādhava College and Mahārājā's pālace at Ujjain, the Gwalior Light Railway, and the Ujjain water-works may be mentioned as the principal works undertaken within the last twenty years.

The chiefs of Gwalior have always given the greatest attention to their army, and a regular force was started by Mahādjī in 1784, the history of which has been briefly referred to above. By the treaty of

1817, Sindhia engaged to maintain a contingent force of 5,000 horse, which finally developed into the Gwalior Contingent, and mutinied in 1857 at Morār. The existing regiments of Central India Horse still represent this force.

The State at present maintains three regiments of Imperial Service Cavalry, of 610 men each, armed with lance, carbine, and sword; two battalions of Imperial Service Infantry, of 996 men each, of all ranks; and a Transport Corps, having 300 carts, 725 ponies, and 548 men. The Transport Corps served in the Chitrāl and Tīrāh Campaigns. Other troops include two batteries of horse artillery with 244 men, three bullock batteries with 322 men, one elephant battery with 189 men, and a total of 36 guns; and five battalions of infantry, numbering 8,532 combatants and 1,467 non-combatants. The irregulars who assist in police work consist of 5,613 men. The army is under the State commander-in-chief, with a staff.

For many years, no real distinction existed between the police and the army, a body of men being detailed for police work and called by various names. On the abolition of the system of farming villages in 1852, a regular *chaukidāri* force was introduced for village watch and ward. The police officers appointed at the same time received judicial powers, and were under the control of the superior district officials. In 1874 a regular police force was organized, and offences cognizable by the police were distinguished. The force, however, still continued to be a collection of district units, each controlled by the *Sūbah*. Finally in 1903 a system based on that followed in British India was introduced, the police being placed under an Inspector-General at head-quarters. There are now 13,236 men of all ranks in the force, giving one man to every two square miles, and to every 222 of the population. One police station has been opened in each *pargana*, with a certain number of outposts: and a certain number of military police, armed with rifles, are also posted to each *pargana*.

The State contains three Central jails, twelve district jails, and *pargana* lock-ups. They are under the control of a Superintendent at head-quarters. Carpets, rugs, cloth, and other articles are produced in the jails. The cost of maintaining a prisoner in 1902–3 was Rs. 23.

In 1854–5, during the ministry of Sir Dinkar Rao, some schools were established in the districts, and by 1857 the number of pupils throughout the State was 2,653. Mahārājā Jayājī Rao, on attaining his majority, paid great attention to the subject of education, and raised the annual expenditure from Rs. 9,200 to Rs. 17,500. A regular Educational department was formed under Sir Michael Filose, the present chief secretary, in 1863, and by 1891 there were 143 schools in the State. In 1895 an officer of the Indian Educational Service was appointed Inspector-General of education. At that time the

State contained 188 schools, including 2 colleges with high schools attached, 16 Anglo-vernacular schools, and 170 village schools. The present Mahārājā has always shown a special interest in the spread of education among girls as well as among boys. The ordinary educational institutions in 1902–3 included two Arts colleges at Lashkar and Ujjain with high schools attached to them, a high school at Morār, and 323 village schools. Besides these, many special schools have been opened, including a service school for training officials, a Sardārs' school and a Sardārs' daughters' school for the children of State Sardārs, a military school, and engineering and other special classes. Gwalior stands fairly high as regards the literacy of its population, of whom 2·4 per cent. (4 males and 0·1 females) were able to read and write in 1901. The total number of pupils in 1902–3 was 3,050, of whom 850 were girls, and the total expenditure was 2·4 lakhs. English education is chiefly confined to the Brāhmans, Marāthās, Rājputs, Muhammadans, and Jains. The *Gwalior Gazette*, published weekly, is an official publication containing State orders and general news from other newspapers.

A Medical department was first organized in 1887, and since that date hospitals and dispensaries have been opened in various parts of the State, with accommodation for 380 in-patients. In 1903 the number of cases treated was 258,394, including 3,398 in-patients, and 11,413 operations were performed. A women's ward is attached to the Jayājī Rao Hospital at Lashkar, in connexion with which a class for midwifery is carried on. The total cost of the department in 1902–3 was 1·6 lakhs.

Vaccination is regularly carried out and has increased rapidly. In 1903 the number of persons successfully vaccinated was 69,000, representing 23 per 1,000 of the population.

[J. Grant Duff: *History of the Mahrattas*, 3 vols. (1826).—H. G. Keene: *Madhava Rao Sindhia* (Oxford, 1891).—H. Compton: *Military Adventurers of Hindustan* (1892).—T. D. Broughton: *Letters written in a Mahratta Camp* (1813, new ed. 1892).—Kaye and Malleson: *History of the Indian Mutiny*, vols. iii and v.]

Gwalior Gird.—District of the Gwalior State, Central India, surrounding the city of Lashkar, and lying between 25° 44′ and 26° 25′ N. and 77° 45′ and 78° 43′ E., with an area of 1,513 square miles. It is bounded, except on the east and south-east, where it meets the borders of Datiā State, by other districts of Gwalior. The district, except for an outcrop of Vindhyan sandstone near Gwalior city, consists of a level alluvial plain. It is traversed by no rivers of any size, but the Sind flows along the eastern boundary. The population in 1901 was 323,693, giving a density of 246 persons per square mile. The district contains three towns, LASHKAR (population, including the Brigade, 102,626),

GWALIOR (16,807), and MORAR (19,179); and 614 villages. It is divided into three *parganas*, with head-quarters at Mastura, Pichhor, and Lashkar respectively. The land revenue is Rs. 5,25,000. At Antrī, not far from the railway station, stands the tomb of Abul Fazl, the author of the *Ain-i-Akbarī*, who was murdered near the spot by Bīr Singh Deo of Orchhā.

Gwalior City.—This name is commonly used by Europeans to describe the present capital of the Gwalior State, and is thus erroneously applied to two distinct areas. The northern town, which stands on the site of the ancient city of Gwalior, lies at the foot of the celebrated fort of the same name, while LASHKAR, the real capital, is situated 2 miles to the south. The Gwalior station on the Midland section of the Great Indian Peninsula Railway is one mile from Gwalior, two from Lashkar.

The population of both places at the three enumerations was: (1881) 88,066, (1891) 104,083, (1901) 119,433 (including Gwalior, Lashkar, and Brigade). Hindus formed 74 per cent. and Musalmāns 23 per cent. Gwalior proper is a decaying town and only contained 16,807 inhabitants at the last Census. In the sixteenth century Gwalior was the chief town of one of the *sarkārs* of the *Sūbah* of MĀLWĀ. It was famous for stone-carving, an industry which still survives, the manufacture of glazed tiles and jewellery, now lost arts, and ironware made from metal smelted locally. Until the opening of the present Agra-Bombay high road, Gwalior was also important as being one of the principal stages on the great route from the Deccan which passed by Sironj, Narwar, Gwalior, and Dholpur to Agra.

The old city of Gwalior is now a desolate-looking collection of half-empty, dilapidated, flat-roofed stone houses, deserted mosques, and ruined tombs. As it stands, the town is entirely Muhammadan in character, no old Hindu remains being traceable. It has one good main street, and, in spite of its generally wretched appearance, contains several fine buildings. The Jāma Masjid, built of red sandstone, is a good example of later Mughal style. The main building was erected in the time of Jahāngīr (1605–27), a new end being added in 1665. The mosque of Khāndola Khān, his tomb and that of his son Nazīri Khān, as well as several other tombs, are noticeable for the excellent carved stone with which they are decorated, much of the pierced screen-work being of unusual beauty. To the east of the town stands the mausoleum of Muhammad Ghaus, a fine example of early Mughal architecture. It is built in the form of a square, with hexagonal towers at its corners surmounted by small domes. The body of the building is enclosed on all sides by carved stone lattices of elaborate and delicate design, the whole being surmounted by a large dome, which was originally covered with blue glazed tiles. Shaikh Muhammad Ghaus, whose body lies

within, was a well-known personage in the sixteenth century. He was famous for his liberality, and also notorious among Muhammadans for his broad-minded views regarding infidels. He visited Akbar at Agra in 1558; but owing to the influence at court of a rival saint, he was ill received and in disgust retired into seclusion at Gwalior, where he died in 1562. Near to the tomb of Muhammad Ghaus is that of Tān Sen, the most famous singer India has ever known. It is an open structure, supported by twelve outer pillars and four inner. Over the tomb formerly grew a tamarind, the leaves of which, when chewed, were popularly supposed to endow the partaker with a most melodious voice, and which were in consequence much sought after by dancing-girls. Just beyond the fort to the north stands a tall cusped Pathān gateway. Nothing but the gate remains, a conspicuous object from a long distance.

Two miles south of the fort lies the city of LASHKAR, the modern capital of Sindhia's dominions. The site was originally selected by Daulat Rao Sindhia in 1810 for his camp (*lashkar*), but the headquarters never moved and the standing camp gradually developed into a city. Lashkar is now a large city with a population of 89,154 persons, and has a considerable trade. On its outskirts stand the chief's palaces and other important buildings. During the Mutiny, Sindhia, deserted by his troops, was forced by Tāntiā Topī and the Rānī of Jhānsi to leave Lashkar and retire to Agra. He was reinstated in his capital soon after by Sir Hugh Rose (Lord Strathnairn), who attacked and defeated the mutineers.

Gwalior fort is one of the most famous in India, 'the pearl in the necklace of the castles of Hind,' as the author of the *Tāj-ul-Maāsir* put it. It stands on an isolated sandstone hill, which towers 300 feet above the old town, measuring $1\frac{3}{4}$ miles long, and 2,800 feet across at its widest part. The walls above the scarp are about 30 feet high. As seen from the north-east its aspect is most imposing:—

'The long line of battlements which crown the steep scarp on the east is broken only by the lofty towers and fretted domes of the noble palace of Rājā Mān Singh. . . . At the northern end, where the rock has been quarried for ages, the jagged masses of the overhanging cliff seem ready to fall upon the city beneath them. . . . Midway over all towers the giant form of a massive temple, grey with the moss of ages.'

The fort has figured in Indian history since the sixth century, and may have been of importance long before then, as the date of its foundation is uncertain, while from the time of its capture by Kutb-ud-dīn in 1196 until 1858 it has been continuously the centre of war and tumult. Tradition assigns the foundation to one Sūraj Sen, who was cured of leprosy by an ascetic named Gwālipa. The latter inhabited

the hill on which the fort now stands, and this was called Gwalior after him. In inscriptions relating to the fort, however, it is called Gopagiri, Gopādri, and Gopāchala ('the shepherd's hill'), whence the modern Gwālher, Gwāliar, and Gwalior.

The first historical holders of Gwalior were the Huna adventurers, Toramāna and his son Mihirakula, who partially overthrew the Gupta power in the sixth century. An inscription belonging to this family has been found in the fort. In the ninth century it was in the hands of Rājā Bhoj of Kanauj, whose record, dated 876, is on the Chaturbhuj rock-cut temple. The Kachwāha Rājputs (*see* JAIPUR STATE) were its possessors in the middle of the tenth century, and they appear to have continued to hold it either as independent rulers or as feudatories till about 1128, when they were ousted by the Parihārs. The latter held possession until 1196, when the fort was taken for Sultān Muhammad Ghorī by Kutb-ud-dīn Aibak. Mahmūd of Ghazni had commenced an assault in 1021, but was bought off. In 1210, during the rule of Kutb-ud-dīn's son, the Parihārs recovered it, and held possession until 1232, when it was captured by Altamsh after a severe siege lasting eleven months, and 700 prisoners were executed before the victor's tent. It remained a Muhammadan possession till 1398, but, in the disturbances caused by Tīmūr's invasion, it was seized by the Tonwar Rājputs. Though subjected to attacks in 1404, 1416, and 1429, the Tonwars managed to retain their hold till 1518, when the fort was surrendered to Ibrāhīm Lodī.

During the period of Tonwar rule, Gwalior rose to great eminence, especially in the long reign of Rājā Mān Singh (1486–1517). It was in his time that the magnificent palace with its great gate, which crowns the eastern face of the rock, was built; while under the direction of his favourite Gūjarī queen, Mrignainā, 'the fawn-eyed,' Gwalior became pre-eminent as the home of music, whence all the finest musicians of India came for long after. Out of 36 singers and players enumerated in the *Ain-i-Akbarī*, 15 had learned in the Gwalior school, including the famous Tān Sen. In 1526 the fort was taken by Bābar. In 1542 it fell to Sher Shāh Sūri, with whom it became a favourite resort, the remaining rulers of his dynasty practically making it the capital of their dominions. It passed to Akbar in 1558, and remained a Mughal possession until the eighteenth century. During its possession by the Muhammadans it was used as a state prison, the cells for political prisoners, now called the Nauchauki, still existing near the Dhonda gate, to the west of the fort. Many members of the Delhi ruling house of the day have entered the fort, few ever to leave it. Political prisoners were disposed of by being made to drink a decoction of crushed poppy-heads, which produced insanity and finally death.

In the confusion which followed on the battle of Pānīpat in 1761,

Lokendra Singh, the Jāt chief of GOHAD, obtained possession of the fort, but was driven out by Sindhia soon after. During the Marāthā War it was captured in 1780 by Major Popham's brigade, a surprise assault being made by a party led by Captain Bruce, brother to the well-known traveller, who was guided up the rock by a dacoit. The spot where the escalade took place is to the west of the fort near the Urwāhī Gate, and is still called the Faringi Pahār, or 'white man's ascent.' The fort was then handed back to the Rānā of Gohad, but was retaken by Sindhia in 1784. During the troubles with Sindhia in the beginning of the nineteenth century, the fort was taken by General White in 1804, but was again made over to Sindhia in the following year. After the disturbances which ended in the battles of Mahārājpur and Panniār in 1843, the fort was garrisoned by the Gwalior Contingent under British officers, which had been raised in accordance with the treaty of 1844, and it continued in their charge till they rebelled in 1857. On June 19, 1858, it was taken by assault by a party of Sir Hugh Rose's force under Lieutenants Waller and Rose, the latter of whom fell in the great gateway. It was then held by a detachment of the British garrison at Morār until 1886, when it was made over to Sindhia in exchange for Jhānsi.

The fort contains many objects of historical and antiquarian interest. The main entrance is on the eastern side, where a long ramp, affording an ever-extending view over the plains below, leads up through six gates to the summit of the rock. Of these gates, three are worthy of special note: the lowest gate, built in Muhammadan style and known as the Alamgīri Darwāza, erected in 1660; the gate next above it, called the Bādalgarh Pol, in Hindu style of the fifteenth century; and the Hāthi Pol, of the same style and period, at the summit. Just beyond the fourth or Ganesh Gate is a small mosque which was built by a Musalman governor, on the site of the original shrine erected by Sūraj Sen to Gwālipa, the tutelary saint of the hill. Near the next or Lakshman Gate is a small rock-cut temple in ninth-century style, hewn out of the hill-side. It is dedicated to Chaturbhuj, the four-armed Vishnu, and bears near it an inscription of Rājā Bhoj of Kanauj, dated 876, in which he is termed Gopagiri Swāmi or 'lord of Gwalior.'

There are six palaces in the fort, four Hindu and two Muhammadan. Between the Lakshman and Hāthi Pol gates, one passes along the magnificent façade of Mān Singh's palace—a wall of hewn sandstone blocks, 300 feet long and 100 high, relieved along the top by an ornamental frieze of coloured tiles, and at intervals along the front by massive round towers crowned with graceful domes and connected together by a balustrade of delicately fretted stonework. The palace is a two-storeyed building 300 feet long by 160 broad, with two extra storeys of underground rooms for use in hot weather on its eastern face.

The rooms and courtyards of this palace are richly carved, and were profusely ornamented with coloured tiles, of which a few still remain. The emperor Bābar, who visited the place in 1529, about twenty years after its completion, has left a graphic account of its appearance. He notes that the palaces are singularly beautiful, but built without regular plan, and states that the façade was then covered with white stucco, and the domes plated with copper. The Gūjarī Mahal, situated at the south-east corner of the fort, has a noble quadrangle full of fine sculpture and mouldings, and some admirable windows. It was built by Rājā Mān Singh for his favourite queen Mrignainā. Just outside the palace is a small cemetery containing the graves of Europeans who have died in the fort. The remaining Hindu palaces are of less interest, while the two Muhammadan edifices are poor, being built only of rubble and plaster.

Many temples and shrines still stand in the fort, of which three are of special importance. Two are situated close together upon the eastern rampart, and are known to natives as the Greater and Lesser Sās-bāhu. They are, as a rule, erroneously called Jain by Europeans. Both must have been very beautiful examples of eleventh-century work. They are built on the same plan, that of a cross, and are richly ornamented with sculpture. The larger one bears an inscription which mentions its foundation in 1092, and its completion in the following year by Mahipāla, the Kachwāha chief of Gwalior. The dedicatory verses show that the temple was sacred to Harī (Vishnu), which is what the sculpture would lead one to expect. The smaller temple must have been built about the same time, and was also dedicated to Vishnu. The third temple of importance is that now called the Teli Mandir, or 'oilman's temple.' It is the loftiest building in the fort, being 110 feet high, and is distinguished by its roof from other temples in Northern India. The lower portion of the building is decidedly Northern in style, while the roof is of the wagon type met with at Mahābalipur and other places in the Madras Presidency. It was at first a Vaishnava temple, as the flying figures of Garuda over the lintel of the original door and on the side faces show. Later on, in the fifteenth century, when it was converted to Saiva uses, a second and smaller door was erected inside the other, which bears a figure of Siva's son, the elephant-headed god Ganesh, upon it. The building dates from the tenth or eleventh century.

The fort contains one small Jain temple to Pārasnāth, and the remains of another Jain temple, both of the twelfth century, but of no great interest. The only really important Jain remains are the five great collections of figures carved on the face of the rock itself, which were all executed between 1440 and 1473 during the sway of the Tonwar dynasty. Some of the figures are colossal, one in the group

near the Urwāhi Gate being 57 feet high. Bābar notices this figure and adds that he ordered all of them to be destroyed: but, as a matter of fact, only some of those most easily reached were partially mutilated.

A large number of tanks have been made in the fort, some of which are said never to fail in their supply—an important factor in the old days of long sieges, which, as Tavernier remarks, gave Gwalior the first place among the fortresses of India. The oldest tank is the Sūraj Kund, or 'tank of the sun,' where a temple formerly stood. At the northern end is the Johār tank, where the Rājputs sacrificed their women and children to save them from capture when the fort was taken by Altamsh in 1232.

[A. Cunningham, *Archaeological Survey Reports*, vol. ii, p. 330.]

OXFORD
PRINTED AT THE CLARENDON PRESS
BY HORACE HART, M.A.
PRINTER TO THE UNIVERSITY