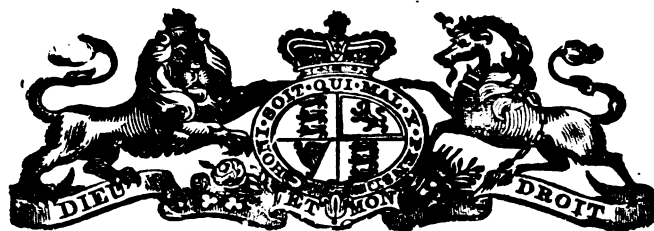


UNIV. OF
CALIFORNIA

REPORT
ON THE
ADMINISTRATION
OF THE
PROVINCE OF ASSAM
FOR THE YEAR
1901-1902.



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PART I.
GENERAL SUMMARY.

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CONTENTS.

PART I. GENERAL SUMMARY.

	PAGE		PAGE
PARAGRAPH 1.—OFFICE OF CHIEF COMMISSIONER	i	PARAGRAPH 11.—CIVIL POLICE ...	iii
" 2.—TOURS OF THE CHIEF COMMISSIONER ...	ib.	" 12.—CRIMINAL JUSTICE ...	iv
" 3.—VISIT OF HIS EXCELLENCY THE VICEROY ...	ib.	" 13.—JAILS ...	ib.
" 4.—TRANSFER OF A TRACT OF LAND FROM THE NAGA HILLS TO SIBSAGAB ...	ib.	" 14.—CIVIL JUSTICE ...	ib.
" 5.—POLITICAL RELATIONS ...	ib.	" 15.—REGISTRATION ...	ib.
" 6.—TRIBUTARY STATE— MANIPUR ...	ib.	" 16.—MUNICIPALITIES ...	ib.
" 7.—FRONTIER TRIBES— BHUTIAS ...	ii	" 17.—LOCAL BOARDS ...	ib.
AKAS ...	ib.	" 18.—WEATHER, CROPS, AND PRICES...	ib.
DAYLAS ...	ib.	" 19.—FORESTS ...	v
MIRIS ...	ib.	" 20.—THE TEA INDUSTRY ...	ib.
PASSI MEYONGS ...	ib.	" 21.—FOREIGN TRADE ...	ib.
BOB ABOBS ...	ib.	" 22.—INTERPROVINCIAL TRADE ...	ib.
MISHMIS, KHANTIS AND SINGPHOS ...	ib.	" 23.—PUBLIC WORKS ...	ib.
NAGAS ...	ib.	" 24.—RAILWAYS ...	ib.
KHASI AND JAINTIA HILLS ...	ib.	" 25.—FINANCE ...	ib.
" 8.—CONDITION OF THE PEOPLE ...	iii	" 26.—PROVINCIAL REVENUE ...	vi
" 9.—ADMINISTRATION OF THE LAND ...	ib.	" 27.—VITAL STATISTICS ...	ib.
" 10.—MILITARY POLICE ...	ib.	" 28.—IMMIGRATION ...	ib.
		" 29.—DISPENSARIES ...	vii
		" 30.—VACCINATION ...	ib.
		" 31.—EDUCATION ...	ib.
		" 32.—LITERATURE AND THE PRESS ...	ib.

REPORT
ON THE
ADMINISTRATION OF ASSAM
FOR
1901-1902.

PART I.

GENERAL SUMMARY.

The office of Chief Commissioner of Assam was held throughout the year by the Hon'ble Mr. H. J. S. Cotton, C.S.I. Office of Chief Commissioner.

2. In May Mr. Cotton made a short tour in the Assam Valley, in the course of which he formally opened the Cotton College at Gauhati on 27th May 1901. Tours of the Chief Commissioner.

Mr. Cotton left Shillong on the 29th October 1901 and proceeded to Silchar, whence he accompanied His Excellency the Viceroy to Manipur. On his return from Manipur, the Chief Commissioner visited the district and subdivisional headquarters of the Cachar and Sylhet districts, and then proceeded to Calcutta, where Christmas was spent. In January and February Mr. Cotton visited different parts of the Brahmaputra Valley and returned to Shillong on the 26th February.

3. His Excellency the Viceroy arrived on the 7th November at Silchar, where he was received by the Chief Commissioner, the Political Agent, Manipur, and the Civil and Military Officers of the district. On the 8th November His Excellency received and replied to addresses presented by the people of Cachar and by the Local Branch of the Indian Tea Association. His Excellency left Silchar on the morning of 9th November and proceeded by stages to Manipur, which was reached on the 15th November. On the 16th November a Durbar was held, at which His Highness the Raja of Manipur, Rajkumar Digendra Singh, half-brother of the Raja, and the leading men of the State were presented by the Political Agent to His Excellency the Viceroy. The Hindu and Mahomedan subjects of the State also presented addresses to His Excellency. On the 19th November His Excellency and staff left for Palel, marched to Lockchao on the 20th, and on the 21st November crossed the Manipur frontier into Burma. Visit of His Excellency the Viceroy.

4. For administrative (including revenue) purposes a tract of land in the Naga Hills district was transferred to the Sibsagar district during the year, and, with the sanction of the Government of India, the Inner Line of the Sibsagar district was modified accordingly. Transfer of a tract of land from Naga Hills to Sibsagar.

5. The political relations of the Administration with the frontier tribes were uneventful and no expeditions were undertaken. Political relations.

6. *Manipur.*—At Manipur the year was marked by the return to Manipur of His Highness the Raja Chura Chand Singh, and by the visit in November 1901 of His Excellency the Viceroy. There was some scarcity of water towards the close of the year, owing to short rainfall, but the public health continued good, and the outturn of crops was fair. The revenue of the State amounted to Rs. 3,96,061, against Rs. 3,87,826 for the preceding year. Tributary State.

Frontier
tribes.

7. *Bhutias*.—There was a considerable increase in the attendance of Bhutias at the fairs in the Kamrup district, and in the import and export trade between Bhutan and that district. On the other hand, the fairs in the Darrang district attended by Bhutias fell off, owing, it is believed, to the facilities for trade being better in Kamrup.

Akas.—There were no complications with the Akas, but fighting was reported between them and Daflas beyond our border.

Daflas.—Some Khari Dikrai Daflas threatened the servants of an *agar* trader who were camped within the Inner Line, collecting *agar*. The Daflas were fined Rs. 100, which was paid immediately.

Towards the close of the year some Daflas, who had come down to trade in North Lakhimpur, wounded a Nepali herdsman and drove off his buffaloes, 14 of which were afterwards found three or four miles off, close to the Inner Line. The *posa* of Tehi Gam, to whose village the offenders belonged, was stopped for one year.

Miris.—The principal hill *Miri gam*, with some plains people, was given permission to hunt elephants within certain boundaries beyond the Inner Line. Some Abors objected, alleging that the operations were being carried on within their territory. The matter was under enquiry at the close of the year.

Passi Meyongs.—With a view to keeping the Passi Meyongs under better control, it was decided that they should be excluded from Dibrugarh, and allowed to trade at Sadiya only in future.

Bor Abors.—The Bor Abors visited Sadiya in large numbers, and gave no trouble. They are now being allowed to settle in British territory on certain conditions.

The Mishmis, Khamtis, and Singphos behaved well throughout the year.

Nagas.—Complaints were received of raids committed beyond the Inner Line by the Rangpang Nagas on the Sarkari Naga villages near Margherita. The Rangpangs are said to be addicted to human sacrifice, and have on different occasions kidnapped coolies who desert across the line from the coal mines and tea gardens in its vicinity. The Nagas of Rangpang village of the Yogli captured and imprisoned the chief of Bor Lungchang, a Sarkari village, who had been instrumental in recovering a British subject kidnapped in this way. They, however, released the chief on hearing that his brother had applied to the Deputy Commissioner, Lakhimpur, for assistance. In consequence of the murderous feud which still continues between the Borduaria and Namsangiya Naga chiefs, the *posa* payable to the Borduarias has been stopped.

Khasi and Jaintia Hills.—In the Khasi Hills interest centred round the events relating to the succession to the Siemship of Cherra. U Hajon Manik, Siem of the Cherra State, died in May 1901, and the succession was contested by his nephew, Chandra Singh, and by Roba Singh, representing an elder branch of the family. Chandra Singh having been nominated by the Myntris of the twelve principal clans was appointed Siem by the Chief Commissioner. An appeal was made against this appointment to the Governor General in Council, and while it was pending, disturbances took place at Cherra, the authority of Chandra Singh being resisted by Roba Singh's adherents. Matters, however, soon quieted down on the arrival of the Deputy Commissioner with a detachment of troops from Shillong, who were shortly afterwards withdrawn. Subsequently, the Government of India decided that the appointment of Chandra Singh was irregular, and directed that a new Siem be elected by the inhabitants of the Cherra State. The election, which took place in April, was unfortunately preceded by further disturbances in which guns were used on both sides, with the result that one man was killed and six wounded. Chandra Singh having withdrawn from the election, Roba Singh was elected Siem, and was in due course confirmed in the appointment. Steps were at the same time taken to punish the authors of the disturbances. Against the persons who had actually used firearms no evidence was found, but the ringleaders on either side were arrested, and on conviction were sentenced to three years' rigorous imprisonment by the Deputy Commissioner.

The affairs of the State of Khyrim are not in a satisfactory state, and there is much opposition in certain areas to the authority of the present Siem. An enquiry is being made into certain charges of oppression which have been made against him.

8. The condition of the people was generally good, but in the early part of the year there was some scarcity in the Sylhet district, owing to a bad harvest of late rice in the preceding year, and in parts of Kamrup owing to failure of the early rice. The cases of distress which resulted were met by *taccavi* loans, and the expenditure of small amounts on gratuitous relief. By the end of the rains, all cause for anxiety had been removed by the favourable character of the monsoon and the improved prospects of the harvests. Condition of the people.

9. The current demand of ordinary land revenue was Rs. 56,99,000, or Rs. 1,01,000 less than in the preceding year, the decrease being due to abatements amounting to Rs. 1,80,000, which were made under the orders of the Government of India in three districts of the Assam Valley which had suffered from the effects of the earthquake of 1897 and the epidemic of *kalá-ásár*. Of the current demand, 92 per cent. was collected during the year. The collections from temporarily-settled lands in Sylhet were unsatisfactory, owing, partly, to defects in the settlement records of the Jaintia parganas, and in Kamrup delay in collection was caused by the enquiry incident to the abatement of revenue. In Cachar and Sylhet a large number of notices of demand had to be issued to defaulters, but there were very few actual sales of property for the realisation of revenue. In the Assam Valley the revenue was realised with much less pressure even than in Cachar and Sylhet. Administration of the land.

No revision of settlement was in progress during the year, and new surveys were confined to topographical work and the cadastral survey of small tracts of cultivation hitherto unsurveyed. The new rates of assessment sanctioned for *ilam* and other temporarily-settled estates the leases of which have expired in Sylhet came into force from the beginning of the year.

In the Assam Valley, there was a net increase of 42,337 acres in the area settled under the rules for ordinary cultivation. Progress was made with the settlement of the disforested Langai-Singla tract in Sylhet, the total area settled up to the close of the year being 6,891 acres. There is not much demand at present for waste land for tea cultivation, but a total area of 6,991 acres was settled during the year on leases for thirty years under the rules applicable to such grants.

10. The Military Police were re-armed with Martini-Henry rifles in place of sniders. Military Police.

11. In pursuance of the scheme for the re-organisation of the Civil Police, the number of head constables was reduced during the year by 12, and 9 Sub-Inspectors were added. The total force actually on duty on the 31st December 1901 was 2,600, or one policeman for each 2,000 of the population of the plains districts (round numbers). Civil Police.

A difficulty of the police force in Assam has always been the readiness with which the men resign, and obtain, as they easily can, employment elsewhere at the same or better pay. It is, therefore, a matter for satisfaction that the number of resignations among the men has shown a steady decrease during the past three years. This is attributed in great measure to the lessening of the individual share of work which has resulted from the strengthening of the force, as well as to the healthier spirit of discipline that has been created by the amalgamation of the Civil and Armed Civil Police.

The high prices which prevailed during a portion of the year might have been expected to lead to an increase in crime; but, as a matter of fact, the statistics show that crime remained stationary, and that the increase, which has been an almost continuous feature of the past seven years, ceased, if all classes of crime be considered together. A comparison of the crime statistics of different districts appears to indicate that the existence of a large foreign (tea garden) population has an effect Crime.

in increasing crime generally and beyond the extent to which the foreign element actually itself contributes to it.

The total cost of the Military and Civil Police forces amounted to Rs. 15,57,960, being Rs. 83,225 less than in the preceding year.

**Criminal
Justice.**

12. In the administration of criminal justice, the only feature requiring notice was the somewhat excessive delay in the disposal of sessions cases in the Assam Valley, where the Sessions Judge was also Commissioner. Since the close of the year the sanction of the Secretary of State has been obtained to the separation of the two offices, and a separate Judge has been appointed for the Assam Valley.

Jails.

13. There was no marked fluctuation in the number of admissions to the jails. The death-rate among prisoners for the year 1901 was 24·5 per mille, which was slightly higher than the rate of 1900, but the rate would be lower if three accidental deaths and the suicide of an insane under-trial prisoner were excluded. The far higher rates which prevailed in 1898 and 1899 led to the issue of instructions discouraging the employment of prisoners on extramural labour, which was believed to be a cause of sickness and mortality. The numbers so employed have materially decreased, and the rate of mortality has also shown a marked decrease. On the other hand, the discouragement of extramural labour has entailed a considerable decrease in the cash earnings of convicts, and the average amount contributed by prisoners towards the cost of their maintenance has fallen to the insignificant amount of Rs. 8—little more than half the corresponding average of the preceding year. The question of remunerative employment for convicts sentenced to hard labour is receiving attention. The expenditure on medical charges was liberal, the average expenditure for each sick prisoner having been Rs. 120-5-11, which is almost double as high as that of some other provinces of India.

Civil Justice.

14. During 1901 there was a decrease of 1,075 in number of original civil suits instituted in the Civil Courts subordinate to the High Court, as compared with the previous year. The decrease was confined to the Assam Valley districts and Cachar, while in Sylhet the number of institutions increased. The number of appeals instituted in the lower appellate courts fell from 1,033 to 841.

Registration.

15. The number of documents registered (45,716) exceeded that of any previous year, the increase in instruments of sale and mortgage of immoveable property being most marked. Three-fourths of the registration business is centred in the district of Sylhet.

**Municipali-
ties.**

16. Act III (B.C.) of 1884 was extended to the Dhubri Municipality in place of Act V (B.C.) of 1876. The aggregate income of the municipalities in the province remained practically stationary at Rs. 2,46,000, but the revisions of assessment which were carried out in several municipalities may be expected to produce an increase. The incidence of municipal taxation was Re. 1-4-7 per head of population. Municipal expenditure (Rs. 2,36,000) showed a decrease, which was chiefly due to exceptional outlay in Shillong on conservancy and water-supply during the preceding year.

Local Boards.

17. The income of the nineteen Local Boards of the province, exclusive of opening balances, amounted to Rs. 11,50,690, as against Rs. 11,27,554 in 1900-1901. There was an increase in the receipts from local rates, due to better collections, from pounds, probably owing to the extension of the system of farming out pounds in the Cachar and Sylhet districts, and from ferries as the result of keener competition among the bidders at the time of auction. The gross expenditure of the Boards amounted to Rs. 10,96,915, or Rs. 1,26,414 less than that of the previous year. Of this sum, 59·1 per cent. was spent on civil works, 24·70 on education, and 8·9 on medical objects.

**Weather,
crops, and
prices.**

18. The weather was, on the whole, favourable to agriculture throughout the province. With stocks in hand much reduced below their normal level, owing to the serious failure of the rice crop in 1900-1901, the villagers took advantage of the

avourable conditions of the year to extend the area under rice, and the harvest was, on the whole, a good one. The area under mustard increased also, but the crop was only moderate. Owing to the failure of the winter rice crop of 1900-1901, prices rose to an unusual degree, and the price of common rice ranged very high in every district throughout the greater part of the year. There was, however, a rapid fall in prices towards the end of the year after the reaping of the late rice crop.

19. Two additional forest reserves of importance were constituted during the year, adding 98 square miles to the area of reserved forest in the province. The revenue from forests fell off considerably, chiefly owing to the absence of demand for sleepers for the Eastern Bengal State Railway and to the fall in the market price of rubber. Forests.

20. While there was a small extension of the area under tea, the total outturn decreased from 141,118,644 lbs. to 134,896,317 lbs., the average per acre declining from 468 lbs. to 437 lbs. This was due partly to finer plucking, which was resorted to with the object of restricting production and improving quality and partly to unfavourable weather. There was a slight improvement in prices, the average returned being 4 annas 7 pies per lb. for the Surma Valley and 6 annas 1 pie for the Assam Valley. The tea industry.

21. The value of the overland imports from foreign territory showed a decrease of over a lakh of rupees, as compared with the preceding year, chiefly under the heads of rubber and other foreign produce. Exports across the frontier, on the other hand, increased in value by nearly Rs. 36,000. There was a marked increase in the exports to Bhutan in consequence of the removal of the duties formerly levied in that country. Foreign trade.

22. The aggregate value of the trade of Assam with other provinces of British India showed a decrease from 1,037 to 997 lakhs of rupees. Imports increased in weight by 1,079,860 maunds, and in value by 20 lakhs of rupees, owing to the large quantity of husked rice (2,040 thousands of maunds) which was brought into the province in consequence of the bad harvest of 1900. Exports decreased in weight by 551,817 maunds, and in value by 61 lakhs of rupees. The decrease occurred chiefly under the heads of rice in the husk and tea. Interprovincial trade.

23. The expenditure on Provincial Civil Works in charge of the Public Works Department amounted to Rs. 16,94,694, as compared with Rs. 18,03,764 in 1900-1901. Of this amount, Rs. 5,33,026 were spent on the maintenance of provincial roads, and the balance was devoted chiefly to the restoration of buildings and roads destroyed or damaged in the earthquake of 1897, which is being gradually carried out as funds permit, but will still take several years to complete, and to the improvement of communications in the Lushai Hills. Some expenditure was also incurred on new buildings for the Jails and Police Departments, and for the Gauhati College and Berry-White Medical School. Public Works.

24. The only Provincial Railway open during the year (the Jorhat State Railway) showed a loss of Rs. 4,174 on the working of the calendar year 1901. The two subsidised lines, the Tezpur-Balipara and the Dibrugarh-Sadiya, gave profits of 4.49 per cent. and 5.77 per cent. on their capital, respectively, and no subsidy had to be paid to the latter line, under the terms of its contract. On the Assam-Bengal Railway construction work was in progress in the hill section, between Damcherra and Lumding, and also between Nazira and Tinsukia. The extension of the Eastern Bengal State Railway to Dhubri was in progress. Railways.

25. The gross receipts of the province under all heads amounted to Rs. 1,50,81,228, and the expenditure, including the capital outlay on the Assam-Bengal Railway, to Rs. 1,75,92,223. Excluding railway receipts and expenditure, the receipts amounted to Rs. 1,29,02,332 and the expenditure to Rs. 87,53,631, as compared with Rs. 1,31,12,754 and Rs. 90,60,214, respectively, in the preceding year. Under the principal heads of revenue, the receipts amounted to Rs. 1,19,38,419, being a decrease Finance.

of nearly two lakhs, as compared with the preceding year. The total Land revenue receipts decreased by Rs. 47,000, while under Opium, Excise, and Forests there were decreases of Rs. 30,000, 1,00,000, and 37,000, respectively. Under the head of direct demands on the revenue, expenditure diminished by Rs. 94,000, the chief decreases being under Land revenue and Forests. Salaries and expenses of Civil Departments, on the other hand, rose from Rs. 39,64,000 to Rs. 41,46,000, the principal increases being under Jails (Rs. 21,000), Police (Rs. 86,000), and Education (Rs. 37,000).

The causes of the shrinkage in Land revenue and Forest receipts have already been referred to. The falling off under Opium and Excise was chiefly due to a decrease of 86 maunds in the quantity of opium sold from the treasuries. A decrease in the consumption of treasury opium, in spite of an increase in the number of licensed opium shops, has been a marked feature of the Excise Administration of the past three years, and points to the sale of contraband opium by licensed vendors under cover of their licenses. A small preventive force was entertained with a view to the suppression of opium smuggling. The revenue from country spirits increased by Rs. 38,000.

The small increase in revenue from Stamps was confined to judicial stamps, the revenue from non-judicial stamps having fallen off. There was also a small increase under Income-tax.

Provincial
revenues.

29. The year opened with a provincial balance of Rs. 4,53,027, and closed with one of Rs. 5,99,449. The provincial revenues for 1901-1902 exhibit an increase of Rs. 1,62,484 over those of 1900-1901, which is due to two special contributions made by the Imperial Government—one of Rs. 2,00,000 in aid of provincial resources, the other of Rs. 38,611 to meet half the cost of re-arming the Military Police. The total provincial receipts amounted to Rs. 72,66,824, and the expenditure to Rs. 71,20,402. At the opening of the current provincial settlement, which has been extended up to the 31st March 1904, the provincial balance stood at Rs. 9,43,729.

Vital statis-
tics.

27. The year was on the whole healthy, though deaths from fevers increased, and the mortality from small-pox was also heavier, owing to several outbreaks in the Sylhet district. On the other hand, deaths from cholera showed a most satisfactory diminution, and there were fewer victims to diarrhoea and dysentery than in the preceding year. The recorded birth-rate showed a small decrease, but much reliance cannot be placed on the returns.

Immigration.

28. The new Assam Labour and Emigration Act, VI of 1901, came into force on the 9th March 1901. There was a very striking decrease in immigration during the year 1901, the number of immigrants imported being only 26,223, as compared with 62,733 in 1900. During 1900, recruitment was promoted by the existence of famine conditions in the recruiting districts, but its contraction in 1901 was not altogether due to a return of prosperity in the Central Provinces and the hill tracts of Bengal. The low prices obtained for tea in recent years has necessitated economy in the importation of coolies as well as in other directions. The present state of the tea industry must have discouraged the importation of fresh labour. The opening out of new gardens and the extension of existing tea gardens have, to a certain extent, ceased, and the necessity for the importation of large numbers of new coolies for this purpose no longer exists. It appears probable also that the effect of the provisions of the new Labour Law has been to make recruitment more difficult. Of the 26,223 immigrants in 1901, 14,249 were labourers engaged under Act VI of 1901 as compared with 29,969 enrolled under Act I of 1882 in the preceding year. In Sylhet and Cachar the special labour Act has practically fallen into disuse as a basis for local contracts, and in some portions of the Assam Valley Act XIII of 1859 is gaining in favour with employers. For the first time, statistics of the wages paid to tea-garden labourers were obtained by means of a monthly return, which employers have been called upon to submit in future. According to the returns received, which cover a period of six months, the average wages

of male labourers engaged under Act VI of 1901 were Rs. 5-3-1, and those of female labourers Rs. 4-3-8 a month.

The year was a healthy one, and the fact that there were fewer importations of new coolies, especially contractors' coolies, exercised a favourable influence on the health of the labour force. The death-rate of the whole labour force on tea gardens fell substantially, and was no more than 25·8 per mille. The improved health must be in part ascribed to the care which was taken to ensure that sanitary regulations were properly enforced. The death-rate amongst Act labourers was considerably higher than that of the labour force as a whole, being 37·2 per mille. But this represents a great improvement on the conditions of the preceding year, when the rate was as high as 43·5 per mille.

29. There was again a large increase in the number of patients treated at the Dispensaries. dispensaries in the province, which are steadily becoming more popular. The attendance of women in particular showed a marked increase owing to the institution of separate consulting rooms for female patients.

30. Vaccination showed steady and satisfactory progress, and nearly $4\frac{1}{2}$ per cent. Vaccination. of the population were successfully vaccinated or revaccinated during the year. The vaccination depôt at Shillong continued to give satisfactory results.

31. The chief educational event of the year was the opening of the Cotton College Education. at Gauhati, a second-grade College under Government management, established chiefly for the benefit of the inhabitants of the Brahmaputra Valley, whom it will enable to pursue their studies as far as the First Arts standard without going to Calcutta. At the close of the year the College had 57 students on its roll. There was a marked increase in the attendance at High Schools.

32. Fifteen original works, most of them being educational or religious, were Literature and the Press. published in the province. In the Assam Valley, two weekly newspapers ceased to appear, and two monthly ones were revived. One new monthly paper was published in the Khasi Hills.

PART II.
ADMINISTRATION REPORT.

CONTENTS.

PART II. ADMINISTRATION REPORT.

CHAPTER I.

PHYSICAL AND POLITICAL GEOGRAPHY.

	PAGE
SECTION 1.—PHYSICAL FEATURES OF THE COUNTRY, AREA, CLIMATE, AND CHIEF STAPLES ...	1
POLITICAL.	
SECTION 2.—HISTORICAL SUMMARY ...	27
SECTION 3.—FORM OF ADMINISTRATION ...	45
SECTION 4.—CHARACTER OF LAND TENURES AND SYSTEM OF SETTLEMENT AND SURVEY ...	52
SECTION 5.—CIVIL DIVISIONS OF BRITISH TERRITORY ...	64
SECTION 6.—DETAILS OF THE LAST CENSUS...	65
SECTION 7.—CHANGES IN THE ADMINISTRATION ...	72
SECTION 8.—FRONTIER RELATIONS AND FEUDATORY STATES ...	76
SECTION 9.—RELATIONS WITH TRIBUTARY STATES AND FRONTIER AFFAIRS ...	81
SECTION 10.—CONDITION OF THE PEOPLE ...	91

CHAPTER II.

ADMINISTRATION OF THE LAND.

SECTION 1.—REALIZATION OF THE REVENUE	93
SECTION 2.—SURVEYS ...	95
SECTION 3.—SETTLEMENTS ...	96
SECTION 4.—LAND RECORDS ...	99
SECTION 5.—WASTE LANDS ...	ib.
SECTION 6.—GOVERNMENT ESTATES ...	100
SECTION 7.—WARDS' AND ATTACHED ESTATES	ib.
SECTION 8.—REVENUE AND RENT-PAYING CLASSES ...	ib.

CHAPTER III.

PROTECTION.

	PAGE
SECTION 1.—LEGISLATIVE AUTHORITY ...	102
SECTION 2.—COURSE OF LEGISLATURE ...	ib.
SECTION 3.—POLICE ...	103
SECTION 4.—CRIMINAL JUSTICE ...	106
SECTION 5.—PRISONS ...	109
SECTION 6.—CIVIL JUSTICE ...	110
SECTION 7.—REGISTRATION ...	113
SECTION 8.—MUNICIPAL ADMINISTRATION ...	ib.
SECTION 9.—LOCAL BOARDS' ADMINISTRATION	115
SECTION 10.—MILITARY AND VOLUNTEERING	118

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

SECTION 1.—WEATHER, CROPS, AND PRICES...	119
SECTION 2.—AGRICULTURE AND HORTICULTURE	ib.
SECTION 3.—FORESTS ...	121
SECTION 4.—MINES AND QUARRIES ...	122
SECTION 5.—MANUFACTURES ...	123
SECTION 6.—TRADE ...	124
SECTION 7.—PUBLIC WORKS ...	127

CHAPTER V.

REVENUE AND FINANCE.

(a) GROSS REVENUE ...	133
(b) IMPERIAL REVENUE AND FINANCE.	
SECTION 1.—LAND REVENUE ...	135
(c) SOURCES OF IMPERIAL REVENUE OTHER THAN THE LAND.	
SECTION 2.—OPIUM ...	ib.
SECTION 3.—EXCISE ...	136
SECTION 4.—STAMPS ...	138
SECTION 5.—INCOME TAX ...	ib.
SECTION 6.—FORESTS ...	139
(d) REVENUE AND FINANCE OTHER THAN IMPERIAL.	
SECTION 7.—PROVINCIAL REVENUES ...	ib.
SECTION 8.—LOCAL FUNDS ...	140
SECTION 9.—ROAD CASSES ...	ib.
SECTION 10.—EDUCATION CASSES ...	ib.
SECTION 11.—MUNICIPAL REVENUES ...	ib.

CHAPTER VI.		VITAL STATISTICS AND MEDICAL SERVICES.	
	PAGE		
SECTION 1.—BIRTHS AND DEATHS	...	141	
SECTION 2.—IMMIGRATION AND LABOUR INSPECTION	<i>ib.</i>
SECTION 3.—MEDICAL RELIEF	...	147	
SECTION 4.—SANITATION	...	148	
SECTION 5.—VACCINATION	<i>ib.</i>

CHAPTER VII.		INSTRUCTION	
SECTION 1.—GENERAL SYSTEM OF PUBLIC INSTRUCTION	150
SECTION 2.—EDUCATION	153
SECTION 3.—LITERATURE AND THE PRESS	158

CHAPTER VII—concl'd.		PAGE
SECTION 4.—LITERARY SOCIETIES	...	150
SECTION 5.—ARTS AND SCIENCES	...	<i>ib.</i>

CHAPTER VIII.		
ARCHAEOLOGY	...	157

CHAPTER IX.		
MISCELLANEOUS.		
SECTION 1.—ECCLESIASTICAL JURISDICTION	...	158
SECTION 2.—ECCLESIASTICAL	...	<i>ib.</i>
SECTION 3.—STATIONERY	...	<i>ib.</i>
SECTION 4.—PRINTING	...	<i>ib.</i>

* These figures do not include Manipur (3,284 square miles), and represent the area of the plains and hill districts, respectively, the North Cachar subdivision being treated for this purpose as a hill district. The area of the hilly country is somewhat greater than that shown, for though a portion of the Garo Hills district is plain it is more than counterbalanced by the Mikir Hills in Nowgong and Sibsagar and the low ranges to the south of Cachar and Sylhet.

B

PART II.

CHAPTER I.

Physical and Political Geography.

SECTION 1.—PHYSICAL FEATURES OF THE COUNTRY, AREA, CLIMATE,
AND CHIEF STAPLES.

1. The Province of Assam lies on the north-east border of Bengal, on the extreme frontier of the Indian Empire, with Bhutan and Thibet beyond it on the north, and Burma and Manipur on the east. It comprises the whole of the valley of the Brahmaputra down to the point where that river, emerging on the Bengal delta, takes a sudden southward curve, and the greater portion of the valley of the Surma, nearly to the junction of that stream with the great estuary of the Megna, together with the intervening range of hills which forms the watershed between them. It lies between latitude $28^{\circ}17'$ and $22^{\circ}19'$ North, and longitude $89^{\circ}45'$ and $97^{\circ}15'$ East, and contains an area of 52,959 square miles, of which 31,789 square miles are plain and 21,170 square miles are hilly country.* The immediate boundaries of the province on the north are, Independent Bhutan, a tract inhabited by Bhutias under the direct Government of Lhasa, known as Towang, and a range of sub-Himalayan hills, inhabited, first by two small races of Bhutia origin, who are believed to be independent, and further eastwards by the savage tribes of Akas, Daflas, Miris, Abors, and Mishmis; on the north-east the Mishmi Hills which sweep round the head of the Brahmaputra Valley; on the east the Patkoi range, the intervening ranges, inhabited chiefly by various tribes of Nagas, and the Native State of Manipur; on the south the Lushai Hills, which have been incorporated into the province, though the southern boundary of the district is still undefined, Hill Tippera, and the Bengal district of Tippera; on the west the Bengal districts of Mymensingh and Rangpur, and the Native State of Koch Behar.

2. Assam Proper, or the valley of the Brahmaputra, is an alluvial plain, about 450 miles in length, with an average breadth of about 50 miles, lying almost east and west in its lower portion, but in its upper half trending somewhat to the north-east. To the north is the main chain of the Himalayas, the lower ranges of which rise abruptly from the plain; to the south is the great elevated plateau, or succession of plateaux known as the Assam Range, much broken at its eastern and western extremities and along its northern face, but in its central portion, from the eastern border of the Garo Hills to the watershed of the Dhansiri, a region of tableland and rolling uplands. The various portions of this range are called by the names of the tribes who inhabit them,—the Garo, the Khasi, the Jaintia, the North Cachar, and the Naga Hills. At several points on the southern side of the valley the hills of the Assam Range abut on the river, and at Goalpara, Gauhati, and Tezpur there are spurs belonging to this group on the north as well as on the south bank. The broadest part of the valley is where the river divides the districts of Sibsagar and Lakhimpur, below which the isolated block of the Mikir Hills to the south (a mass of mountains cut off from the main Assam Range by the valleys of the Dhansiri, Langpher, and Jamuna rivers), and the projecting group of the Dafla Hills to the north suddenly contract it. Forty miles lower down, it widens out, but at the lower end of the Nowgong district it is again encroached upon by the Khasi Hills, among the spurs of which the river makes its way in front of the station of Gauhati, and it is almost completely shut in just to the west of that town, below the temple-crowned hill of Nilachal or Kamakhya, where the stream is not 1,000 yards broad. Beyond this point the hills recede again, and the mountains do not approach the Brahmaputra until the station of Goalpara, situated on a spur of the Garo Hills, is reached. Here at the confluence of the Manas, and between the rocks of Jogighopa and Pagla Tek, is the

* These figures do not include Manipur (3,284 square miles), and represent the area of the plains and hill districts, respectively, the North Cachar subdivision being treated for this purpose as a hill district. The area of the hilly country is somewhat greater than that shown, for though a portion of the Garo Hills district is plain it is more than counterbalanced by the Mikir Hills in Nowgong and Sibsagar and the low ranges to the south of Cachar and Sylhet.

Physical
and
Political
Geography.

"Gate of Assam," to the east of which Assamese is spoken, and to the west of it Bengali. Beyond this point the valley again widens, and at Dhubri opens out into the great delta of Bengal.

The Brah-
maputra and
its Affluents.

3. Throughout its course the Brahmaputra receives a vast number of affluents, great and small, from the hills to the north and south. The greater of the northern streams are snow-fed, while those from the south (except the Dihing) depend upon the annual rains for their volume, and shrink to small dimensions in the dry season. On the north the chief tributaries of the Brahmaputra are the Dibong, Dihong, Subansiri, Bhareli, Bornadi, and Manas; on the south the greater affluents are the new and old Dihings, the Disang, the Disoi, and the Dhansiri. A short distance below the junction of the last named, a considerable body of water separates itself from the Brahmaputra, and, under the name of the Kallang, goes on a tortuous course through the Nowgong district, rejoining the main stream about ten miles above Gauhati. The Kallang receives, in the Kopili, the whole drainage of the North Cachar and the Jaintia Hills, besides several minor streams from the Khasi Hills. Below Gauhati, the Kulsi and the Jinjiram are the chief southern affluents of the Brahmaputra.

The journey made by Mr. Needham, C.I.E., in 1886 has left little doubt that the Dihong, which emerges from the Himalayas through the hills inhabited by the Abors, is the same stream as the Sanpo. Unfortunately, the persistent refusal of the hillmen to admit foreigners into their country, has rendered it impossible to explore and survey the hundred and twenty miles which intervene between the furthest point north to which we have penetrated from Assam, and Gyala Sindong, the last known station on the great Thibetan river. The Brahmaputra itself, so far as is known, has but a short course beyond the limits of British territory, and above Sadiya is far inferior in volume to the Dihong.

Except at the points already mentioned, where hills impinge upon the Brahmaputra, the river flows between sandy banks, which are subject to constant changes for a breadth of about six miles on either side of the stream. Within this belt there is no permanent cultivation, nor any habitation but temporary huts erected by people who grow mustard on the *chur* lands during the cold weather, and an occasional Miri village. Beyond, the level of the alluvium rises, and tillage and population take the place of sandy flats covered with long grass. Little of this is seen from the river, and the traveller up the Brahmaputra receives the impression that the country is a wilderness untenanted by man, except at the few points where, rock giving permanency to the channel, towns and villages have been established along the stream. These points are Dhubri, the capital of the Goalpara district, Goalpara, Gauhati, the capital of Kamrup, Tezpur, the capital of Darrang, Silghat, the port for Nowgong, from which it is distant 32 miles, and Bishnath, in the Darrang district. Between the last named place and Sadiya, close to the point where the river emerges from the hills, a distance of about 200 miles, there is no town or large village on the banks, Golaghat being 20 miles, Jorhat 10, Sibsagar 8, and Dibrugarh 5, away from the cold-weather channel. Proceeding inland from the belt just described, through which the river flows, one finds a country consisting mainly of alluvial flats, much of which is untilled and covered with long grass, and in the eastern portion of the valley with forest, but much also is under cultivation. The most thickly populated parts of the valley are North Kamrup, Jorhat, and Sibsagar; the most thinly, Darrang, west of Tezpur, the southern part of Nowgong, Lakhimpur, north of the Brahmaputra, and the forests in the extreme east and south of the latter district. To the peopled belt on either side of the valley succeeds another where population again falls off, and extensive forests and grass savannahs reach to the foot of the hills on the north and south. The Brahmaputra is navigable by large steamers as far as Dibrugarh throughout the year, and by smaller vessels as far as Sadiya. Many of its affluents are also navigable in the rains by steamers, and at all seasons by boats of small burthen.

The Surma
Valley.

4. The southern, or Surma, valley, which constitutes the second main division of the province, and comprises the two districts of Cachar and Sylhet, presents many points of contrast with that of the Brahmaputra. It is much smaller in extent, covering only 7,506 square miles, against 24,283 in the latter. This, however, excludes a portion of it which lies south of the Garo Hills and east of the old Brahmaputra, and which, though geographically a part of the Surma Valley, is not included in the Province of Assam, but forms part of the Bengal district of Mymensingh. Its mean elevation above sea-level is much lower, the cold-weather zero of the Surma at Sylhet being only 22·7 feet above the sea, while that of the Brahmaputra at Gauhati is 148·36 feet. The course of the numerous rivers which traverse it is thus exceedingly sluggish, while the stream

of the Brahmaputra is swift. While the latter river hurries rapidly along, through a waste of sandy *churs*, making and unmaking its banks year by year, the rivers of the Surma Valley find their way to the great estuary of the Megna by extremely tortuous channels, the banks of which, reinforced by the annual deposition of silt, are the highest ground in the alluvial area, and as such are the most populous and best cultivated portions. To the north of the valley stands the steep face of the Khasi and Jaintia Hills, the plateau of which rises very abruptly from the plains to a height of 4,000 feet, the table land presenting, when seen from Sylhet, an almost level line. Near the eastern boundary of Sylhet, the plateau recedes into the interior of the hills, and a new barrier, the angular and serrated range of the Barail, or "Great Dyke" takes its place as the northern boundary of the valley. This range gradually increases in height and precipitous character as one proceeds eastwards, and at the eastern extremity of Cachar takes a curve to the north-east, thereafter forming the main axis of the Naga Hills, and eventually merging in the Patkoi. To the east the valley is shut in by the mountains of Manipur, a continuation of the succession of parallel ridges, lying north and south, into which the Arakan Yoma range divides as it approaches the Himalayas. On the south also these parallel ridges extend for some distance into the alluvial plain, gradually retreating as the river emerges from Cachar into Sylhet, but still preserving their uniform meridional direction, until the Bengal district of Tippera is reached.

Throughout this great alluvial plain, except in the western portion adjoining Mymensingh, the surface is broken by frequent groups of isolated hills of small height, called *tilas*. These may be regarded as continuations below the alluvium of the southern ranges of Tippera and the Lushai Hills. The most notable are the groups about Chhatak, and north of Sylhet, and the Chiknagul hills in Jaintia. In Cachar, the ridges from the south touch the Surma, or Barak, at Badarpur and at the northern end of the Tilain range, and many isolated hills rise throughout that district, chiefly to the south of the river. Except where the *tilas* and the southern ranges project, the whole valley is a vast deltaic expanse, covered with a perplexing network of sluggish streams, and liable to deep flooding in the rains. The highest ground is on the river banks, from which the surface slopes backward into great hollows, called *haors*, all of which are lakes, some of great extent in the rains, and in the greater of which water lies in some part throughout the cold season. In the deeply-flooded but populous country to the west the villages are built on artificially-raised sites along the river margins, and the ground which is thus obtained is so precious that the houses are crowded together in a manner very unlike the straggling aspect of a village in Assam.

5. The Surma, or Barak, river rises in the Barail range to the north of Manipur. Its sources are among the southern spurs of the great mountain mass called Japvo, on the northern slopes of which are situated the most powerful villages of the Angami Nagas. Thence its course is south, with a slight westerly bearing, among the Manipur hills, where it receives numerous tributaries before entering British territory. At Tipaimukh, the trijunction point of Manipur, Cachar, and the Lushai Hills, it turns sharply to the north, and, after emerging from the Bhuban range near Lakhipur, takes a very tortuous course, with a generally westward direction, through the district. A short distance below Badarpur, on the western boundary of Cachar, it divides into two branches, the northern of which is known as the Surma, and flows westwards, more or less closely under the Khasi Hills, having on its banks the important centres of Sylhet and Chhatak, till it turns southwards at Sunamganj; the southern, called at first the Kusiara, has a south-westerly direction, and near the confluence of the Manu river from the south again divides into two branches, the southern of which re-assumes the original name of the whole river, Barak, and, passing by the towns of Nabiganj and Habiganj, rejoins the Surma a short distance to the west of the latter place. The other arm, called first the Bibiana and afterwards the Kalni, also rejoins the Surma, north of the confluence of the Barak, at Abidabad.

The Surma
River.

The chief affluents of the Surma on the north, after it enters British territory, are the Jiri and Jatinga from the North Cachar Hills, the Luba, Hari, Piyain, Bogapani, and Jadukata from the Jaintia and Khasi Hills, and the Maheshkali from the Garo Hills. On the south it receives the Sonai, Dhaleswari, and Katakhal from the Lushai Hills, and (in its southern branch, the Kusiara-Barak) the Langai, Juri, Manu, and Khwahi from the Tippera Hills. At Bhairab Bazar, in Mymensingh, 20 miles below the Sylhet frontier at Lakhai, it unites with the old Brahmaputra, and becomes known thenceforward as the Megna. The Surma is navigable by steamers as far as Silchar in the rains; in the cold weather, however, large vessels do not ascend above Chhatak on the northern and Fenchuganj on the southern branch. Boats of considerable burthen traverse the whole river system as far as Banskandi, east of Silchar, throughout the year, and in the rains are the most usual vehicle of traffic.

*Physical
and
Political
Geography.*

*The Hill
tracts.
The Assam
Range.*

6. The hilly tracts included in the Province of Assam consist of the Assam Range which is interposed between the Brahmaputra and Surma Valleys, with the Mikir Hills, the Lushai Hills, and the ridges, generally of low elevation, which run northward from Hill Tippera and the Lushai Hills into the Surma Valley. No part of the Himalayas falls within British territory. These hilly tracts have already been summarily described. The remarkable plateau of the Garo-Khasi-North-Cachar Hills, which, with the sharply-serrated range of the Barail and its spurs, constitutes the Assam Range, is joined at its eastern extremity by the Patkoi to the Himalayan system, and by the mountains of Manipur to the Arrakan Yoma. At its western end, in the Garo Hills, it attains an elevation of more than 4,600 feet in the peak of Nokrek, above Tura, but falls again before the Khasi boundary is reached. The highest points of the Khasi-Jaintia table land are the Shillong Peak, 6,450 feet, the Dingyei, 6,077, Rableng, 6,283, and Suer, 6,350; but these are only the most elevated portions of a plateau, hardly any portion of which falls much below 6,000 feet, and which is all inhabited and cultivated. To the east the level again falls, the highest summits not much exceeding 5,000 feet in the Jaintia Hills, and considerably less in the Cachar Hills north of the Barail. The latter range, commencing on the south-east margin of the Khasi-Jaintia plateau, where the Hari river issues from the Hills, rises by sudden leaps to a considerable height, and among the hills bordering the Jatinga Valley summits of from 5,000 to 6,000 feet are found. The range then curves north-eastwards, and attains a still greater height, where it forms the boundary between the Naga Hills district and the State of Manipur. Here the greatest elevation (in British territory) is reached by the peak of Japvo, which is a little less than 10,000 feet above the sea. To the north-east of this point the mountain system of the Barail is broken up, by the influence of the meridional axis of elevation prolonged from the Arrakan Yoma, into a mass of ranges having a general north-east and south-west direction until the Patkoi is reached. The highest points in this portion are from 8,000 to 9,000 feet. Snow is frequent on Japvo and in its neighbourhood, but seldom falls further west.* It is also seen to cover the hills lying about the upper course of the Dihing as far as the Patkoi, a country as yet insufficiently explored.

Between the main axis of the Assam Range and the valley of the Brahmaputra the average height of the hills varies considerably. The country is deeply cut into by river channels, and is covered with dense forest. The isolated block of hills already referred to, lying to the east of Nowgong, called the Mikir-Rengma Hills, is cut off from the main range by low-lying valleys, and has within it summits attaining a height of 4,000 feet. Its interior is little known, the population is very sparse, and the country is densely wooded. The hills lying south of Sibsagar and Lakhimpur, and peopled for the most part by the tribes of Nagas which have not yet been brought under British administration, consist of small broken ranges, running generally north-east and south-west, or having irregular spurs leading down into the plains, usually steep on the northern side, with a more gradual slope on the south. The greater part of this tract (in which very extensive and valuable seams of coal exist) is uncultivated and forest-clad, the outer ranges being chiefly uninhabited.

On the southern face the Garo and Khasi Hills rise very abruptly from the plains, and present a succession of precipitous faces, into which the rivers, fed by the enormous rainfall of this region, have cut deep gorges as they issue upon the swamps of North Sylhet. The level line forming the horizon of the plateau is not broken until the Barail is reached, where the contour becomes rugged and irregular, though the sides are precipitous. In the Garo Hills, the lower portions of the Khasi and Jaintia Hills and the Barail range, the slopes are forest-clad. In the upper and central plateau of the Khasi Hills, and the greater portion of North Cachar, the landscape is one of undulating grassy hills, with occasional groves of pine and oak. It is believed that the forests here have been destroyed or kept down by the custom of annually burning, either for pasture or for cultivation, the long grass with which the surface is covered. Where fires are excluded, thick forests of young pine and mixed leafy trees spring up.

*The southern
hills.*

7. The Lushai Hills, which divide Assam from Burma, consist of sandstones and shales of tertiary age thrown into long folds, the axes of which run in a nearly north and south direction. From the general character of the deposits, it seems probable that they were laid down in the delta and estuary of an immense river issuing from the Himalayas, to the north-east of Assam during tertiary times, and flowing due south through the country now occupied by the Naga and the Lushai Hills. The hills are for the most part covered with dense bamboo jungle and rank undergrowth, but in the eastern

* There was a snow-storm on the Shillong Peak on January 9th, 1899. Very little moisture is precipitated in Shillong during the winter, but ice frequently forms.

portion, owing probably to a smaller rainfall, open grass-covered slopes are found, with groves of oak and pine interspersed with rhododendrons. These hills are inhabited by the Lushais and cognate tribes, but the population is extremely scanty. The outlying slopes in the Cachar district constitute a great forest reserve, which is now being gradually thrown open to cultivators from the more congested parts of the district; in Sylhet they have been largely opened out for the growth of tea. Till lately, however, they were left to be roamed over by Tipperas and Kukis, whose annual *jhums* were the only cultivation which they supported.

*Physical
and
Political
Geography.*

8. The Province of Assam contains within its boundaries, as already mentioned, two great alluvial plains, separated by a central mass of mountains called the Assam Range, and further defined,—the Brahmaputra Valley by the Himalayas on the north, and the Surma Valley by the meridional ranges, the prolongation of the Arrakan hill system, on the south. To the east of both valleys is the great extension of the mountain system of Northern Burma, which eventually unites with the Himalayas in the Patkoi. The geology of this region, therefore, falls apart into that of the hill tracts, which are denuded, and of the alluvial plains, which are being formed by the same process.

*Geological
features.*

9. Of the Himalayan system which lies to the north of the Brahmaputra Valley we know very little. Such observers as have explored it have been unable to penetrate further than the exterior zone. In this, however, are found the same characteristic formations as distinguish the sub-Himalayan rocks throughout their whole length from the Indus to the eastern limit of observation. These rocks consist of great thicknesses of soft massive sandstones, of tertiary age and fresh-water origin, the dip of which is towards the interior zone of metamorphic rocks. In the western portion of the range, among the Bhutan hills; it is believed that a gap exists in these sub-Himalayan sandstones, or, at any rate, that the outer zone of rocks found elsewhere along the chain, and known as the Siwaliks, is wanting; but further east, in the Daffa Hills, and in the Abor mountains north of Dibrugarh, there are the usual two well-marked ranges of sub-Himalayan hills, with an intervening Dun. As in the Siwaliks, nests and strings of lignite are frequently found in these rocks, and have given rise to expectations, proved on enquiry to be baseless, that useful coal might be discovered in them.

*The Himala-
yas.*

10. Of the rocks which close in the valley on the east nothing is known, except that limestone is found among them. This occurs in the shape of boulders and pebbles in the river-beds east of Sadiya, whence it is conveyed by boat down the Brahmaputra, and forms almost the sole lime-supply of Upper Assam.

*The Eastern
Range.*

11. The Assam Range, which divides the Brahmaputra and Surma Valleys, is separated by well-marked physical and geological features into two great regions, the boundary between which follows the line of the Dhansiri Valley and the Barail range to the point where the latter commences at the south-eastern corner of the Jaintia Hills. The mountains to the west of this boundary, which include the Garo, the Khasi, the Jaintia, and the Mikir Hills, with so much of North Cachar as lies north and west of the Barail, have been described by geologists under the name of the Shillong Plateau. The area to the east of this boundary, including the Barail, the ranges of Manipur, and the Naga Hills, is orographically a part of the Burmese mountain system, and of a widely different geological character.

*The Assam
Range.*

12. The Shillong plateau consists of a great mass of gneiss, bare on the northern I border, where it is broken into hills, for the most part low and very irregular in outline, with numerous outliers in the Lower Assam Valley, even close up to the Himalayas. In the central region the gneiss is covered by transition or sub-metamorphic rocks, consisting of a strong band of quartzites overlaying a mass of earthy schists. In the very centre of the range, where the table land attains its highest elevation, great masses of intrusive diorite and granite occur; and the latter is found, in dykes piercing the gneiss and sub-metamorphic series, throughout the southern half to the boundary of the plains. To the south, in contact with the gneiss and sub-metamorphics, is a great volcanic outburst of trap, which is stratified, and is brought to the surface with the general rise of elevation along the face of the hills between Shella and Thariaghat south of Cherrapunji: this has been described as the "Sylhet trap." South of the main axis of this metamorphic and volcanic mass, and almost at the edge of the central intrusive dykes of granite and diorite, fossiliferous strata commence belonging to two well-defined series, (1) the cretaceous, and (2) the nummulitic. On their northern margin both rest conformably on the metamorphics, and rapidly increase in thickness as one proceeds southwards. On the south the whole series bends downwards in a monoclinical flexure, and south of Cherrapunji disappears below the alluvium of the Surma Valley.

*I. The Shil-
long Plateau.*

Physical and
Political
Geography.

The cretaceous series, where last seen, occupies about 1,500 feet between the Sylhet trap and the nummulitic limestone; it varies much in the character of the deposits, consisting chiefly of sandstones, locally massive, coarse, earthy, or ochreous, with intervening dark and pale shales and some layers of flaky earthy limestone. The series includes several beds of coal, of which the best known are the Maobehlarkar* coal, a few miles south of Mauphlung, whence the station of Shillong is supplied, the extensive and valuable coal-field of Darrangiri, on the Someswari river in the Garo Hills, and some coal close to the level of the plain where the Jadukata river debouches near Laur in Sylhet, another outcrop to the west of the last mentioned, on the Maheshkhali river in the Garo Hills, is very possibly continuous with the latter, and, if so, promises to be of great value. An isolated specimen of the same series is found on the Nambar stream, on the extreme eastern margin of the Shillong plateau in the Mikir Hills, a few miles east of Borpathar. This cretaceous coal is brown in colour, compact, splintery, with a conchoidal fracture, and contains numerous specks and small nests of fossil resin.

The nummulitic series, which overlies the cretaceous, varies greatly in thickness in different parts of the range. In the Garo Hills west of the Someswari it is insignificant; in the Khasi Hills it is much more massive. Below Cherrapunji it has a thickness of 900 feet in the Tharia river, consisting of alternating strata of compact limestones and sandstones. It is at the exposure of these rocks on their downward dip from the edge of the plateau that are situated the extensive limestone quarries of the Khasi Hills, whence Eastern Bengal is supplied with lime of the best quality. On the level of the plateau above, the same strata are found, but have undergone extensive denudation owing to the solubility of the limestone rock in water and the enormous rainfall of that region. In the whole of the southern face of these hills are found numerous caves and underground watercourses due to this cause; and on the plateau of Cherrapunji, while the nummulitic series survives in the rocks on which the Khasi village is built, and in the ridge to the west of the old station, the site of the station itself has been swept perfectly clear of it, with the exception of a few rounded hills composed of tumbled fragments of the harder sandstones which alternated with the calcareous beds.

Before the upthrust of the Barail range the nummulitic beds, like the other members of the series, retire in a north-easterly direction, and their eastern limit has not been traced satisfactorily.

This series also includes coal-beds, several of which have been worked. The best known are the Cherra mines, in a seam situated in the nummulitic mass to the west of the station, and the Lakadong mines in the Jaintia Hills. The nummulitic coal is black, bright, with a cuboidal fracture, and very bituminous.

II. The Barail
Range.

13. There is evidence that, as the nummulitic series overlies the cretaceous, the former was in its turn overlain (perhaps only on its outer margin) by a third, or upper tertiary, series. These rocks have been traced from the western margin of the Garo Hills, along their southern face (where, south of the Someswari, the tertiary zone is 14 miles wide), and beneath the scarp of the Khasi Hills, where they have been almost entirely removed from the plateau by denudation. East of Jaintiapur the soft massive greenish sandstones of this formation appear again in force, and they rise rapidly from this point into the Barail range. To this series, apparently, belong also the *tilas* of the Sylhet and Cachar plain, and the low meridional ranges of the Tippera and the Lushai Hills, which run up into it on the south; and the valley of Cachar seems to be excavated out of the broken ground where these two conflicting strikes, the west-east of the Barail, and the south-north of the southern ridges, meet. West of Cachar, the Barail curves north-eastwards, and the southern ranges take the same direction, till eventually the two lines are found in confluence.

Of this second great division of the Assam Range we know something of the north-western face, looking down upon the Sibsagar and Dibrugarh plains, but of the interior very little. A reconnaissance was made in the cold weather of 1881-1882, through the eastern and northern portions of Manipur and the district of the Naga Hills, which gave some information regarding the rocks of these regions.

The whole of the western portion of this division of the Assam Range, from the rise of the Barail in south-eastern Jaintia to the peak of Japvo in the neighbourhood of Kohima, would appear to be composed of the same tertiary sandstones as have already been mentioned; and the same rocks seem to be continued along the south-eastern margin of the Brahmaputra Valley in Sibsagar and Lakhimpur. To these succeed a series of hard sandstones, slates, and shales with quartzose beds,

* Described in "Records of the Geological Survey of India," Volume VIII, page 86.

supposed to be identical with the "axials" of the northern Arrakan group. Still further east is a considerable trappian intrusion, consisting of serpentine dykes running north and south, identical in composition with those of Burma. Of the Patkoi itself, and of the junction between it and the Himalayas in the Mishmi Hills, we have at present no information.

Physical and Political Geography.

14. The north-western face of this region, lying along the Dibrugarh and Sibsagar districts, contains several very important coal-fields, which constitute the chief mineral resource of the province. The rocks in which the coal measures occur are, with one exception, situated to the south-west of a great fault, in some places a short distance within the hills, and in others constituting their escarpment towards the plains, which is conjectured to have a throw of from 10,000 to 15,000 feet. They consist of an enormous thickness of sandstones, the upper series of which are topped by conglomerates and clays containing fossil wood; the coal measures have a thickness of some 2,000 feet, and are succeeded by fine hard sandstones, overlying splintery gray shales, several thousand feet thick. The exception is the Jaipur field, in the Tipam Hills in the southern corner of the Dibrugarh district, which is north of the fault. Along the Buri Dihing, and near the exit from the hills of the Dikhu, Safrai, Jhanzi, and Disoi rivers, the coal measures are exposed. The greatest of the fields is that of Makum, on the Dihing; here there is a seam 100 feet thick, containing at least 75 feet of solid coal, and some very large seams have been traced for more than a mile without diminution.

Coal-fields of Upper Assam.

The age of these important and extensive coal measures is still uncertain. The coal is of superior quality, and not unlike the nummulitic coal of the Khasi Hills, though quite different from the cretaceous coal of the same region; but the place of the coal in the series where it occurs in Upper Assam renders it extremely difficult to correlate with the nummulitic coal of Cherra and Lakadong. It is possible that it belongs to the third series, already noticed, along the southern face of the Shillong plateau; but the associated rocks have not as yet yielded any fossils by which their relations can be studied.*

15. Turning now to the alluvium, the marked difference in the physical geography of the Brahmaputra and Surma Valleys, both of which belong to the great Indo-Gangetic plain, has already been noticed. The former is at a considerably higher elevation above sea-level than the latter, and the fall is consequently greater. The following are the heights above mean sea-level of the chief points (at the surface of the alluvium) in the Brahmaputra Valley:

The alluvium.

		Feet.			Feet.
Sadiya	...	440		Tezpur	... 256
Dibrugarh	...	348		Gauhati	... 163
Sibsagar	...	319		Goalpara	... 150
	Dhubri	...			... 118 feet.

The valley has thus, in a distance of about 450 miles, a fall exceeding 300 feet. In the Surma Valley, on the other hand, the following are the heights:

Silchar	...	87 feet.		Sylhet	...	48 feet.
	Chhatak	...			...	41 feet.

In consequence of this greater fall, the rivers in the Brahmaputra Valley tend to cut away their banks, while those in the Surma Valley tend to raise them. The former is, indeed, most correctly described as in great part a gigantic *khadar* or strath, within which the river oscillates to and fro, while the latter is a delta in the process of formation. Nearly the whole of the central portion of the Brahmaputra Valley consists of fine greyish-white sand, lightly covered by a layer of clay; this is diversified near the rocks which occasionally impinge upon the river by beds of strong sandy clay, derived from their detritus. Away from the river the alluvium is more consolidated, and clay, due to the decomposition of the sand, predominates. Throughout this surface there are found here and there (as in the southern portions of the Sibsagar district in the plain of Biswanath, and in the ridge of Tezpur) more elevated tracts, which seem to represent a more ancient *bhangar*, or older alluvium, the greater part of which has disappeared. Such places, where they have been laid bare by the river, are easily distinguishable, by their closer and heavier texture and by their higher colour, from the shifting grey sands of which the rest of the trough is composed, and are often indicated by a name chosen for their peculiar features (*Ranga-mati*="coloured earth," *Ranga-gora*="coloured bank").

In the Surma Valley the process of deltaic formation (whether because depression of the surface has proceeded *pari passu* with alluvial accretion, or because the deposition of silt is slower and less copious than in the central portion of the Gangetic delta) is

* "Records of the Geological Survey of India," Volume XV, page 58.

Physical and Political Geography.

less advanced than anywhere else in the great alluvial plain. As already explained, the river banks are almost the only high land (always, of course, excepting the *tilas* and hill ranges) in the valley, and behind them lie great basins, or *haors*, which are deeply covered with water half the year. In the flood season the rivers drain into these *haors*, and there deposit their silt, the water emerging when the river falls perfectly clear. This process results in a very noticeable raising of the level of these basins; the Chatla *haor*, a great depression in South Cachar, which receives the floods of the Barak, is said to have risen nearly two-and-a-half feet between 1872 and 1892; the extensive Hakaluki *haor* in South Sylhet, which receives the Langai, is likewise steadily diminishing in depth. One remarkable event in the history of Western Sylhet was the diversion of the Brahmaputra, which, till the commencement of the present century, flowed east of Mymensingh, and of the great tract of old raised alluvium called the Madhupur Jungle, into a new course far to the west. Previously to this diversion, which has now brought the Brahmaputra, as a delta-forming agency, into direct competition with the Ganges, the former river threw the greater portion of its lighter silt into the *bils* of West Sylhet, and thus co-operated in raising that region. Now the Surma Valley depends for its accretions on the purely rain-fed floods of the minor rivers which traverse it, and which are, of course, far inferior as silt-bearers to the great glacier-fed streams that drain the mighty chain of the Himalayas.

Climate. General remarks.

16. The climate of the Assam Province, both in the Brahmaputra and Surma Valleys, is marked by extreme humidity, the natural result of the great water surface and extensive forests over which evaporation and condensation go on and the close proximity of the hill ranges which bound the alluvial tracts, and on and near to which an excessive precipitation takes place. The cloud proportion throughout the year, even in those months which in the rest of India are generally clear, is very large, dense fogs being characteristic of the cold weather both north and south of the Assam Range. It is frequently asserted that the monsoon may be said to begin in Assam two months before its commencement in the rest of India. This, however, is probably a mistake, the exceptionally heavy rainfall of April and May, which is characteristic of the province, and which, aided in the Brahmaputra Valley by the melting of the Himalayan snows, causes a sudden rise of the rivers in those months, being due to local causes, to storms and local evaporation. The spring rains are commonly succeeded by a break, more or less prolonged, of dry weather with westerly winds, before the true monsoon is ushered in, as in most other parts of India, about the beginning of June.

Observing stations.

17. Systematic observations have unfortunately been regularly taken at only a few points in the province, and the record of its meteorology till a few years ago left much to be desired. Meteorological stations have long been established at Sibsagar and Silchar, and that at Goalpara was transferred to Dhubri in 1891. It is only, however, within the last few years that observatories have been opened at Gauhati, Tezpur, Dibrugarh, Cherrapunji, and Shillong.

Temperature.

18. The mean temperature of the plains portion of the province is, for a sub-tropical country, generally low. The following are the latest figures for the various observations in the province for which returns for a complete year are available.

Average monthly mean temperature.

Stations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Whole year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Silchar ...	64·8	68·1	74·4	78·7	80·6	82·8	83·6	83·2	82·9	80·4	74·1	67·1	76·7
Dhubri ...	63·4	66·6	75·1	79·7	79·6	81·1	82·5	82·4	81·2	79·1	71·8	65·0	75·6
Sibsagar	59·6	63·1	69·2	74·3	78·6	82·9	84·0	83·6	82·2	77·7	68·9	61·1	73·8
Tezpur*...	62·0	65·4	72·8	73·2	79·5	81·2	84·0	83·1	81·5	78·6	70·4	62·9	74·6
Dibrugarh*	61·2	63·5	70·6	70·9	78·2	78·9	82·5	83·1	81·2	78·2	70·3	62·4	73·4

* Calculated on returns for one year only.

It will be seen that Sibsagar, in the upper half of the Assam Valley, has a lower cold-weather, and higher rainy-season, temperature than Dhubri in the lower half; and that there is a general coincidence throughout the year between the monthly means for the latter station and Silchar. These points may probably be taken as typical of the greater portion of the plains of Assam.

19. The wind circulation differs considerably in the two valleys. In the Surma Valley, the general direction is the same as that in the Gangetic delta, south-west, changing to east towards the head of the valley, for the greater part of the year, with a north-north-east direction during the months of April and May. Over the western portion of the Assam Range the south-west wind from the Bay of Bengal sweeps with considerable force throughout the spring months, preserving a remarkable uniformity of direction. During the rains the direction changes somewhat towards south and south-east, with an occasional northing. In the Brahmaputra Valley, on the other hand, north-east winds are prevalent during the cold-weather and spring months in the upper portion, south-west winds taking their place during July and August. At Goalpara, in the lower half of the valley, the north-east wind also prevails during the greater part of the cold weather; but for the rest of the year south-east winds are the general feature. Thus, the monsoon winds of the Assam Valley are a back current of the south-west monsoon which undoubtedly blows across the hill range to the south. Both in the cold weather and rains calms are frequent in both valleys, though seldom of long continuance.

Physical and Political Geography.
Winds.

Storms often occur in the spring months, generally accompanied by high winds and heavy local rainfall. The valleys and hills of the Shillong plateau assist in the formation, and determine the direction, of these disturbances, which are most common in the lower portion of the Assam Valley. Cyclones from the Bay of Bengal frequently visit and give heavy rainfall to the western portion of the range and the plains at its foot; they most often occur at the close of the rainy season.

20. The average monthly mean relative humidity of the stations is shown below: Humidity.

Average monthly mean relative Humidity.

Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Whole year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Silchar ...	90.9	86.7	81.4	82.8	85.2	89.4	89.8	90.7	90.4	89.2	86.7	90.2	87.8
Dhubri ...	91.3	83.6	74.8	78.5	86.5	90.6	91.0	90.4	91.5	88.1	87.5	90.8	87.1
Sibsagar ...	99.0	97.7	93.1	90.4	91.1	91.9	92.9	94.4	94.9	96.5	98.5	99.4	95.0
Tezpur* ...	93.0	87.0	81.0	86.0	88.0	90.0	90.0	94.0	91.0	89.0	90.0	95.0	89.5
Dibrugarh*	93.0	90.0	85.0	87.0	87.0	92.0	94.0	95.0	92.0	88.0	88.0	92.0	90.3

* Calculated on returns for one year only.

This distribution of humidity resembles that of the Bengal delta, and differs greatly (except, of course, in the rainy season) from the data afforded by stations whose relative place in the Ganges Valley resembles those of the three stations selected in Assam. Taking the year as a whole, the humidity of the climate of Sibsaagar is exceeded by that of no other meteorological station in India,† and is equalled only by Darjeeling.

21. The following figures show the recorded averages of cloud proportion (complete overclouding being represented by 10): Cloud proportion.

Average of Cloud Proportion.

Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Whole year.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Silchar ...	3.2	3.8	4.7	6.2	7.2	8.8	9.1	9.2	8.5	6.1	4.5	3.7	6.3
Dhubri ...	2.1	2.3	2.5	5.0	6.7	8.1	8.3	8.4	7.5	3.7	2.0	1.6	4.9
Sibsagar ...	6.2	7.3	6.1	7.1	7.9	8.8	9.0	9.0	8.5	7.0	5.3	5.4	7.3
Tezpur*	2.3	2.3	2.9	7.3	6.6	7.4	7.8	8.5	6.5	4.5	4.8	1.9	5.2
Dibrugarh*	1.0	1.3	1.5	3.3	3.6	5.8	6.0	6.7	4.9	2.8	2.3	0.3	3.3

* Calculated on returns for one year only.

† Excluding Ceylon. The humidity of Galle and Newera Eliya in that island is slightly greater than that of Sibsaagar, and that of two other stations is exactly equal to it.

Physical and
Political
Geography.

Out of 81 stations at which cloud observations have been taken in India, Sibsagar stands at the head of the list, * being approached only by Darjeeling. This peculiarity is probably due to the regular prevalence of dense fogs (which are counted as cloud in the table) during the cold weather in the Assam Valley, and to the copious spring rainfall. In the Surma Valley, fogs are decidedly less prevalent, and less dense when they occur, than in that of the Brahmaputra, and are also less common in the upper part of the valley, where Silchar is situated, than in the western half.

Rainfall.

22. The distribution of rainfall in Assam is that portion of the meteorology of the province which is best known, and also that in which it differs most remarkably from other parts of India. Besides the observations taken at district and subdivisional headquarters, a rain-gauge is, as a rule, kept, and the rainfall is recorded at every tea garden. There are thus abundant materials for the study of the subject. The table below has been constructed to show separately the rainfall of the three seasons into which the year falls apart, in the Brahmaputra and Surma Valleys and the intervening hill region, respectively. The stations chosen are those at which observations have been recorded for the longest time :

	Autumn rainfall. (Oct., Nov.)	Winter rainfall. (Dec., Jan., Feb.)	Spring rainfall. (Mar., Apl., May.)	Monsoon rainfall. (June, July, Aug., Sep.)	Total.
1	2	3	4	5	6
<i>Brahmaputra Valley—</i>					
Dhubri	4·03	0·97	23·02	67·36	95·38
Goalpara	4·05	1·23	22·83	62·47	90·58
Gauhati	3·42	1·71	18·64	43·23	67·00
Tezpur	4·15	2·03	14·47	48·50	69·15
Nowgong	4·14	1·92	16·98	53·79	76·83
Sibsagar	6·29	3·91	25·96	57·88	94·04
Dibrugarh	7·02	5·00	29·70	71·84	113·56
<i>Hill Districts—</i>					
Tura	7·63	1·51	24·80	90·10	124·04
Shillong	6·65	1·53	15·97	55·62	79·77
Cherrapunji	15·59	3·19	94·56	347·85	461·19
Kohima	4·91	2·06	12·90	55·63	75·50
<i>Surma Valley—</i>					
Sylhet	9·13	2·06	41·89	102·76	155·84
Silchar	7·72	3·47	37·17	73·02	121·38
<i>Manipur and Lushai Hills—</i>					
Manipur	6·87	3·59	17·22	41·83	69·51
Aijal	7·29	2·28	19·45	51·00	80·02

This table exhibits, in a very conspicuous manner, the chief feature of the Assam climate, both in the Brahmaputra and Surma Valleys, *viz.*, its copious rainfall between March and May, at a season when throughout Northern India generally precipitation is at its minimum. It also indicates the existence, in the Brahmaputra Valley, of a middle region (Gauhati, Tezpur, Nowgong), where the spring and monsoon falls are less than at either extremity of the valley. This may possibly be due to the fact that south of this portion lies the most lofty part of the Shillong plateau, on the southern face of which (at Cherrapunji) and over the central table land the monsoon currents are drained of their humidity. To the west of this central plateau the valley is open to the winds of the Bengal delta; and to the east the average height of the range falls greatly, admitting the south-west monsoon, by the gorge of the Jatinga Valley, over the low uplands of North Cachar and down the long valley of the Dhansiri, into the great plain of Sibsagar and Lakhimpur.

In the Surma Valley, the copiousness of the spring rainfall is even more conspicuous than in Assam Proper. The recording stations here are, unfortunately, rather close to the southern face of the Assam Range, so that they do not very accurately represent the mean rainfall of this region.

The few stations for which observations have been recorded in the hill region have the character of their rainfall determined very largely by local conditions. Tura, the headquarters station of the Garo Hills, is situated (at an elevation of only 1,323 feet above the sea) on the northern skirts of the range which forms the main axis of the hills, and rises

* The cloud proportion at Batticaloa in Ceylon is exactly equal to that at Sibsagar.

south of the station to a height of 4,652 feet in the peak of Nokrek. It is thus greatly sheltered from the monsoon currents, which expend their moisture upon the ridge at its back. Similarly, Shillong, though only 30 miles distant from Cherra, where the greatest recorded rainfall in Asia is found, has the clouds drained of their humidity long before they reach it by the immense precipitation along the southern edge of the plateau and in the central table land, which lies some 1,000 feet above the site of the station. Cherrapunji, on the other hand, is so placed as to exemplify all the conditions needed for a great rainfall. It stands, immediately overlooking the plains at a height of 4,455 feet, on a small plateau of thick-bedded sandstones, bounded on two sides by 2,000 feet of sheer descent, which close in gorges debouching southwards on Sylhet, which is practically at sea-level. The south-west wind, sweeping over the inundated alluvial tract, blows up these gorges, as well as on the southern face of the general scarp, and, having reached the heads of the gorges, ascends vertically. The plateau is thus during the summer months surrounded, or nearly so, by vertically-ascending currents of saturated air, the dynamic cooling of which is the cause of the enormous precipitation. It lies, moreover, at the elevation of 4,000 feet, which is found in the Himalayas to be that of maximum precipitation. The annual average varies greatly in different parts of the station, although the whole extent of the plateau is not much more than a couple of square miles. Some of the earlier registers, which were those of rain-gauges near the edges of the plateau, show a higher precipitation than those kept in recent years nearer its centre. The fall has varied greatly from year to year: 805 inches were recorded in 1861, and in the month of July of that year 366 inches fell. In 1884 the total fall was only 276 inches.

Kohima is situated on a ridge north of the great mountain mass of Japvo (9,890 feet high), and is thus, like Tura and Shillong, protected from the full force of the monsoon currents.

23. These being the general characteristics of the climate of Assam, it will readily be understood that in its effects upon human health and economic conditions, it presents the usual features of a cool, equable humid, sub-tropical region. *Kalá-úsár*, malarial diseases, and cholera are the most prevalent forms of sickness. The nature of *kalá-úsár* was for long a source of conflict amongst medical men, and it was at one time said to be due to the attacks of the *dochmius duodenalis*, a worm which lives in the small intestine. It is now generally held to be a severe form of malarial fever, the only difference between the two diseases lying in the rapidity with which the former produces a condition of severe cachexia, and the ease with which it can be communicated from the sick to the healthy. The heavy mortality from this cause was first noticed in 1882 in certain villages along the northern terai of the Garo Hills, and in 1884 the number of deaths became so great that special relief work was organised. The disease then spread through the Goalpara subdivision, the Kamrup and Nowgong districts and the subdivision of Mangaldai, and made its appearance in Tezpur and Bishnath. The mortality attending its progress has been terrible, and tracts, which before its advent were covered with thickly-peopled and prosperous villages, have been left by it deserted and uncultivated. Whole villages have thus disappeared, and large areas of land have been thrown out of cultivation. Between 1881 and 1891 the population of Kamrup decreased by 1·6 per cent., and during the next ten years by 7·1 per cent., while in the neighbouring district of Nowgong the population declined by more than one-fourth owing to this and other causes. It was impossible to segregate the sick who seldom died in less than three months and sometimes lingered on for a couple of years, and little or nothing could be done to check the terrible progress of the disease. Fortunately, however, it never gained a foot-hold in Sibsagar and Lakhimpur, and it is now dying out in Lower and Central Assam. Malaria lurks chiefly in the broken country forming the skirt of the Assam Range, where the long low valleys are seldom stirred by the strong winds which blow on the southern face. In the open country away from the hills it is seldom severe; and the plains of Sibsagar and Dibrugarh, with the southern portion of Sylhet, are probably throughout the whole of India, outside of the hills, the tracts which are most suited for habitation by Europeans, who generally enjoy excellent health. Notwithstanding the great water surface of Sylhet, and the deep flooding which it undergoes in the rains, it is generally a healthy district, though of recent years the North and South Sylhet subdivisions have been suffering from a peculiarly malignant form of malarial fever which has had a most prejudicial effect upon the health of the people. Cachar, which is more confined by hills, is less healthy. The climate of the hills is healthy or the reverse according to their elevation. The whole of the central plateau of the Shillong Range is very salubrious, and the same is the case with the Naga Hills. The Garo and North Cachar Hills, on the other hand, are low and feverish.

Physical and Political Geography.

The copiousness of the spring rains, and the steady prevalence of moisture throughout the year, are extremely favourable to the two great crops of the province : rice and tea. The cultivation of the former resembles in its main features that of the same staple throughout Bengal. But in Assam and Sylhet, tea yields more largely, and can be plucked and manufactured more continuously, than in any other part of India.

Famine, or even general scarcity, due to drought, is unknown in the province, though unfavourable distribution of the rainfall may result in short harvests. Losses from inundation are more common, though seldom so general or permanent as to occasion serious distress.

Earthquakes.

24. Under this section may be mentioned the earthquakes to which the province is subject. A full account of the Cachar earthquake of the 10th January 1869 has been published in the "Memoirs of the Geological Survey," Volume XIX. Another severe shock occurred in September 1875, which did some damage to houses in Shillong and Gauhati; and Silchar was again visited by an earthquake in October 1882, but all previous seismic disturbances were completely thrown in the shade by the earthquake of June 12th, 1897, which was the most severe and disastrous of which there is any record in Assam, or indeed in India. The station of Shillong was levelled with the ground, nearly all masonry buildings in Gauhati and Sylhet were completely wrecked, and much damage was done in Goalpara, Nowgong and Darrang. Two Europeans and 1,540 natives lost their lives, the majority of the latter being killed by landslips in the hills and by the falling in of river banks in Sylhet. In the plains large tracts of land subsided and were covered with sand and water, and the levels of the country were so affected that the towns of Goalpara and Barpeta became almost uninhabitable during the rains. The total cost incurred on special repairs to public works necessitated by the earthquake has been over thirty-seven lakhs of rupees, but this sum falls short of what is required to restore them to the former condition. To this must be added the damage to private property of which it is difficult to form an estimate.

Chief staples - Food-grains.

25. The principal and almost the only food-grain of the plains portion of the province is rice. The production of this staple is carried on generally under the same conditions as in Bengal; but the times of sowing and reaping, and the names given to the several crops, vary much in different parts of the province.

Brahmaputra Valley.

26. In the Brahmaputra Valley generally there are only two great rice crops,—the *ahu* (*asu*, *aus*) and the *sali* (*hali*). The *ahu* or early rice is generally sown broadcast (though it is sometimes transplanted) in February and March, and is reaped soon after the setting in of the rains, from June to August. The *sali*, on the contrary, is sown first in nurseries in June, and is transplanted in July and August into fields which can be flooded in the rains; it is reaped in December and January.*

The following table shows the area, in thousand of acres, of the principal crops in the five upper districts of the Assam Valley. Reliable statistics are not available for the permanently-settled portions of Goalpara :

District.	<i>Ahu</i> .	<i>Sali</i> .	<i>Bao</i> .	Mus-tard.	Sugar-cane.	Pulse.	Tea.	Other crops.†	<i>Basti</i> .	Total.	Deduct twice-cropped.	Total cultivated area.
1	2	3	4	5	6	7	8	9	10	11	12	13
	Acres, thousands.	Acres, thousands.	Acres, thousands.	Acres, thousands.	Acres, thousands.	Acres, thousands.	Acres, thousands.	Acres, thousands.	Acres, thousands.	Acres, thousands.	Acres, thousands.	Acres, thousands.
Kamrup ...	124	211	85	57	5	20	4	32	36	574	82	492
Darrang ...	36	151	8	13	2	12	40	12	26	300	13	287
Nowgong ...	42	72	30	39	1	16	13	13	20	246	30	216
Sibsagar ...	23	283	2	20	8	16	79	51	44	526	24	502
Lakhimpur ...	17	108	2	7	5	6	69	15	18	247	8	239
Total ...	242	825	127	136	21	70	205	123	144	1,893	157	1,736

* The names in this paragraph designate harvests rather than kinds of crop. In Kamrup, for instance, the *ahu* includes (1) the *dhulia ahu*, sown early in dry pulverised fields, which gives the best outturn; (2) *asra*, sown broadcast in fields reduced to a puddle by the early rains; and (3) *kharna* (called *pharna* in Upper Assam), which is transplanted. The last two are less productive than the first. *Bao* is sometimes sown broadcast and is sometimes transplanted; in some districts the area under this crop is considerable. It is sometimes sown together with *ahu*, and if the inundation drowns the latter, the cultivator at least gets his crop of *bao*; if the rains are moderate, both crops may be reaped, the *ahu* first, the *bao* springing up after the other has been taken away; lastly, if the rains are scanty, the *bao* hollows give an excellent crop of *sali* rice. *Sali*, properly so called, is again divided into "*lahi*" and "*bor*" *dhan*: the former includes the finer varieties, which are grown on comparatively high land where the supply of water is somewhat scanty; the latter is planted on land which is liable to be more heavily flooded.

† Includes land planted with rice seedlings.

Thus, out of the total cultivation, 50·3 per cent. is late rice or *sali* and *baò*, 12·8 per cent. early rice or *ahu*, 10·8 per cent. is tea, 7·2 per cent. mustard, and 3·7 per cent. pulse. Physical and
Political
Geography.

Bao is chiefly grown in Lower Assam, 67 per cent. of the total crop being sown in Kamrup and only 3 per cent. in Sibsagar and Lakhimpur. Kamrup also grows more than half of the *ahu* and nearly half of the total mustard crop; Sibsagar and Lakhimpur, on the other hand, have nearly three-fourths of the tea and 62 per cent. of the sugar.

Of the land shown as cropped twice in the year, no portion is included in that occupied by *sali* rice or sugarcane. *Ahu* rice, mustard, and *matikalai* (*phaseolus radiatus*), the most common variety of *dal* or pulse grown in Assam to some extent occupy the same land, that cultivated in the spring with the first named yielding a winter crop of either of the two latter. But mustard is chiefly grown in the low inundated country of Nowgong, Kamrup, and Darrang, known as the *chapari mahals*, on the light soil left after the inundation has subsided.* The grass is pressed down and left to wither, after which it is burnt, the soil lightly stirred, and the seed put in. The crop is reaped about February.

27. The great crop of rice in Sylhet is the late rice, *aman* and *sail*: the first of these two names is applied chiefly to rice sown broadcast, while the latter (which corresponds in name and character to the *sali* of Assam) is transplanted. This crop is reaped from the middle of November to the end of January. The *aus* (*asu* or *ahu* of Assam) is a comparatively small crop; it is harvested between the 1st June and the middle of September. In the western and central parts of the district, which are subject to deep flooding, a cold-weather rice, called *sailbura*, is grown in marshy land, and reaped in April and May. This variety is only locally of importance. Surma Val-
ley.

In Cachar, the rice crops resemble those of Sylhet, consisting of the early and late *aus* (both minor crops), harvested between June and September, and the *sail* and *asra* (the latter answering to the *aman* of Sylhet), reaped in November and December.

28. In the hill districts, rice holds a less exclusive place among the crops cultivated. Hill districts. There are great differences in different parts of the province in the crops grown and the system of cultivation adopted; these differences are determined partly by the character of the country and partly by the degree of civilisation possessed by the tribe. Among the Khasis the system of agriculture is comparatively elaborate, and carefully adjusted to the productive powers of the soil. In the flattish valleys, with which the central plateau abounds, rice is grown in terraced and well irrigated fields, and such fields are found also on the northern margin of the district wherever the conformation of the surface admits of them. With this exception, however, the rest of their crops are grown on hill sides, the turf and scrub upon which are burnt after being previously arranged in beds, and the seed sown in the ashes, which serve as manure. In this way are raised unirrigated rice, potatoes, various kinds of millet [the three principal being *soh-riu* or Job's-tears (*Coix lacrima*), *rai-tru* (*Eleusine coracana*), *rai-shang* (*paspalum sanguinale*)], and a crop called *sohphlang* (*Flemingia vestita*), a leguminous plant with a red flower, which produces large numbers of tubers about the size of a pigeon's egg among its roots: these are eaten raw by the Khasis.

The crops just described are those of the central plateau; besides these, chiefly on the northern slopes of the hills towards Kamrup and Nowgong, cotton is grown in forest clearings, or *jhums*, where the soil is enriched by burning the felled trees and scrub. On the southern face of the hills, and on the slopes stretching into Sylhet, are produced the crops to which the wealth of the Khasis is so largely due,—oranges, betel-nuts, and pine-apples. The orange and betel-nut trees grow together, in carefully kept and regularly renewed groves, but great damage was done to this cultivation by the earthquake of 1897 and subsequent floods, many of the gardens being covered with sand and the trees destroyed. The pine-apple grows like a weed in this region, and is extraordinarily cheap and abundant. Besides these field crops, every Khasi village on the plateau has its carefully hedged homestead lands, in which fine crops of potatoes, Indian-corn, vegetables, and pulses are raised, with occasional plots of sugarcane.

No others among the hill races can compete with the Khasis in the value of their staples, or the enlightened character of their agriculture. The Garos to the west, and the Mikirs, Kacharis, and Kukis to the east, cultivate entirely by *jhuming*, clearing the forest with axe and fire, and growing in the space thus secured, among the ashes of the trees and undergrowth, mixed crops of long-stemmed rice, chillies, cotton, millets, and gourds. Some of these tribes are less untidy than others in their mode of tillage, and devote a *jhum* to a single crop, as rice, cotton, or millet: others mix their crops which come to maturity at different times during the year. Land thus *jhumed* is nowhere

* There has been a great decrease in the cultivation of mustard since the earthquake of 1897. Exceptional severity of the floods.

Physical and Political Geography.

occupied longer than three years, and often less, after which it requires from ten to twenty years to recover its fertility and to become reclothed with forest. All the cotton grown in the province is raised by the hill tribes in this manner, and is remarkable for its short staple and harsh woolly fibre; indeed it so much resembles wool that it has found a demand in Europe for mixing with wool for the manufacture of carpets.

One exception to this barbarous system of agriculture is found among the Angami Nagas. The powerful villages of this people, which lie about the skirts of the central mass of Japvo, are surrounded by admirably-constructed terraced rice-fields, not, as in the Khasi Hills, cut in the gentle slope of the valleys and embanked with earthen dykes, but built up with stone retaining-walls at different levels and irrigated by means of skilfully-engineered channels, which distribute the water over each step in the series. These remarkable works appear to be peculiar to the group of villages mentioned, their neighbours following the ordinary system of cultivation by *jhum*. They have doubtless been produced by the necessity of the position. Living in constant warfare with one another and with their neighbours and maintaining their supremacy by military force, these ruling villages were formerly compelled to keep their food-supply in the immediate vicinity of their habitations, and thus to make the utmost of the productive powers of the valley bottoms, instead of carrying their tillage over the wide hill-sides in a rotation of many years as is done by hillmen elsewhere. Another reason for their resort to irrigation appears to be that their hills are too densely peopled to admit of *jhum* cultivation, as, although the latter seems to yield a larger outturn for the years during which the cultivation is carried on, the land rapidly becomes exhausted, and, after two or three years' cultivation, requires a long rest before it recovers its fertility; a tribe cultivating on the *jhum* system thus requires a much greater area of land for its support than one resorting to irrigation.

Average outturn of crops.

20. For a series of years, numerous experiments have been made annually with a view to ascertaining the average outturn of the different crops grown in Assam. The following statement shows the normal outturn in pounds per acre of the principal crops in the different plains districts, and the average normal outturn for the entire plains portion of the province, as estimated from the results of these experiments :

Crop.	Whole province.	Cachar.	Sylhet.	Goalpara (whole district).	Goalpara (Eastern Dvare).	Kamrup.	Darrang.	Nowgong.	Sibsagar.	Lakhimpur.
1	2	3	4	5	6	7	8	9	10	11
Sail or sail	950	1,000	1,000	1,000	1,200	900	1,000	1,000	800	1,000
Ahu or aus	810	800	800	850	900	800	850	800	750	800
Bao, aman, or arra	920	850	950	...	...	650	...	700	...	...
Satibura	1,050	...	1,050	...	...	...	...	...	...	...
All kinds of rice	910	940	1,000	950	1,130	820	970	880	800	970
Mustard	520	500	450	...	550	500	500	550	550	950
Sugarcane (<i>gur</i>)	2,200	2,200	2,400	...	...	1,800	1,800	1,800	2,200	2,400
Linseed	450	...	450	...	...	...	...	...	...	...

NOTE 1.—The outturn of rice is given in terms of cleaned grain.
 „ 2.—Column 2, “ Whole province.”—There are no data for the hill districts, which are therefore excluded. As regards linseed, it is grown only in Sylhet.
 „ 3.—There is no irrigated land in the province.

The above estimates must be accepted with great reservations, as they depend on estimates of the area under different crops in the important permanently-settled districts of Sylhet and Goalpara, for which complete returns are not available.

Commercial staples—Tea.

30. The most important commercial staple of Assam is tea. The plant is indigenous to the province, being found wild in the forests south of the Dihing, in the Naga Hills to the south of Sibsagar, and in Manipur, North Cachar, and the Lushai Hills. The following paragraphs, extracted from a memorandum written by the late Sir John Edgar in 1873, give in a brief and convenient form a sketch of the growth and progress of the tea industry in this province from its commencement down to that year :

There have been lively disputes as to the first discoverer of tea in Assam, and the date of its discovery. It is probable that a Mr. C. A. Bruce, who commanded a division of gunboats in

Upper Assam during the first Burmese war, brought down from Upper Assam some plants and seed of the indigenous plant in 1826, and he actually received a medal from the English Society of Arts. But his claim to have been the first discoverer of tea was disputed by a Captain Charlton, who asserted that the existence of tea in Assam had been first established by himself in 1832. In 1834, a committee was appointed to enquire into and report on the possibility of introducing the cultivation of tea into India. In 1835, the first attempt was made by Government to establish an experimental plantation in Lakhimpur, but it failed and the plants were afterwards removed to Jaipur, in the Sibsagar district, and a garden established, which was sold to the Assam Company in 1840. This Company, which was formed about 1839, was the first, and is still very much the greatest, concern for the cultivation of tea in Bengal. It was not, however, very prosperous during its early years, and in 1846-47 its shares are said to have been almost unsaleable. Its prospects began to improve about 1852, and in 1859 it was reported officially to have a cultivated area of about 3,967 acres, with an estimated outturn of over 760,000 pounds of tea. Meantime, tea cultivation had been commenced in many other districts. In 1850 a garden was started by Colonel Hannay near Dibrugarh, and in 1853, when Mr. Mills of the Sudder Court visited Assam, he found three private gardens in Sibsagar and six in Lakhimpur. In 1854 the first gardens were started in Darrang and Kamrup. In 1855 indigenous tea was found in Cachar, and the first garden in the district was commenced in the cold season of that year. In the following year (1856) tea was discovered in Sylhet, but no attempt at cultivating it was made for some time after.

*Physical and
Political
Geography.*

It may be said generally that the foundations of the present tea industry were laid between 1856 and 1859. In the latter year the labour difficulty began to be seriously felt in Assam and Cachar; but, although Colonel Jenkins, Commissioner of Assam, recorded a serious warning, no one else seemed able to foresee the formidable dangers into which the too rapid progress of the industry would bring it. Later still, in 1862-63, officials as well as planters seem to have indulged in visions of fabulous prosperity, which only deepened the gloom of the miserable time that was so soon to come on them. The Land Revenue Administration Report for that year contains extracts from reports from Assam, Cachar, Sylhet, and Darjeeling, written in the most hopeful spirit; indeed, the two former are written in an exalted tone that contrasts curiously with the usual sobriety of official reports. But even at the time of publication of these reports suspicions had begun to arise about the soundness of this condition of affairs, which was apparently so brilliant. An Act for the regulation of the transport of native labourers emigrating to Assam and Cachar, passed in 1863, was expected to remedy many hideous evils which were discovered to exist in the importation of labourers required to supplement the scanty local supply. But it soon came to light that the condition of these labourers on many gardens in both districts was most deplorable, while the mortality among them was appalling. The evil first fruits of the reckless way in which waste lands have been dealt with, in the belief that Government was fostering tea cultivation thereby, were being gathered in the shape of increasing hostility to Government and its officials, caused by difficulties about surveys, boundaries, title-deeds, and the like, which all had arisen out of the mistaken policy of giving vast tracts of land to any one choosing to ask for them, without enquiry and without precaution of any kind.

In 1865, an Act was passed for the regulation of the relations of employers and imported labourers after the arrival of the latter in the districts of Assam, Sylhet, and Cachar. Here I shall only say that, though at first at least it did little to improve the condition of the labourers, I am convinced that it had not the slightest connection with the temporary collapse of the tea industry which took place in the following year. The cause of the crash of 1866 was the utterly unsound foundation on which the fabric of the tea industry had been based, and not directly the action of Government, as at the time it was the fashion of even usually well-informed persons to assert. At the same time, we should never lose sight of the fact that the industry might never have got into the ruinous state of inflation that it was in previous to 1866, had it not been for the unwise attempts of Government to foster it at the outset by sacrificing the most necessary safeguards in dealing with land. The depression of the industry consequent on the collapse of so many concerns in 1866 was, of course, intensified by the ignorance of the general body of proprietors of tea shares who, as was remarked by me in a paper written in 1867, showed as much folly in their hurry to get out of tea as they had a few years before in their eagerness to undertake the speculation.

This depreciation of tea property continued during the years 1866, 1867, and 1868; but about 1869, things began to look brighter. It was seen that people who had worked steadily for years with a view to make gardens that would yield a profit had been rewarded, while much of the property of the collapsed companies had turned out well under careful management. In fact, it was again found out that tea would pay, and ever since it has been steadily progressing in popular estimation, and, as a general rule, in profit to those engaged in it.

There cannot be the slightest doubt that the industry is in an infinitely better and safer position now than it was ten years ago. The existing gardens are, as a general rule, well filled with plants, highly cultivated, and carefully managed. The amount of tea produced per acre, although falling far short of the sanguine expectation of the first days of tea planting, is satisfactory in all the more important districts, while the prices obtained this season show that the average quality must be very good. There is every reason to hope that the labour difficulty is disappearing in Cachar, and, in spite of the complaints from Assam, there are evident signs of improvement in that province.

Tea is now cultivated in all the plains districts of the province, though in Goalpara there are only 670 acres planted. The following figures give the total area under tea

Physical and Political Geography. in each district, and the estimated outturn in pounds, according to the last returns, those of 1901 :

	Area, in acres.			Approximate outturn, in pounds (thousands).
	Mature plants.	Immature plants.	Total.	
<i>Brahmaputra Valley.</i>				
Goalpara	495	175	670	150
Kamrup	3,405	293	3,698	629
Darrang	37,412	3,025	40,437	13,943
Nowgong	11,972	568	12,540	4,470
Sibsagar	72,530	6,787	79,317	26,800
Lakhimpur	57,847	10,843	68,690	26,538
Total	183,661	21,691	205,352	72,530
<i>Surma Valley.</i>				
Sylhet	66,575	5,713	72,288	31,278
Cachar	58,352	2,194	60,546	31,087
Total	124,927	7,907	132,834	62,365
Grand total	308,588	29,598	338,186	134,896

When the industry was first undertaken, the land which was supposed to be best suited for the plant was hill or undulating ground, such as the spurs of the Khasi Hills, in South Kamrup, and the *tilas* of Sylhet and Cachar. Now, however, it has been found in the Surma Valley that, with good drainage, the heaviest crops of tea can be raised from low-lying land, even such as formerly supported rice cultivation. In the Assam Valley, the most suitable soil is considered to be the old alluvium, or *bhángar*, such as is found in the south of Sibsaigar district and in the north of Darrang. This is a rich loam, capable, by reason of its undulating surface, of excellent drainage, and very heavy crops are obtained from such gardens. The average outturn per acre in 1901, when a system of fine plucking was in force, was returned as 499 pounds for Sylhet and Cachar and 395 pounds for the Assam Valley. In the previous year the average outturn per acre was about 30 pounds higher.

31. *Prospects of the tea industry.*—Between 1893 and 1898 there was a great extension of tea cultivation, with the result that the industry began to suffer from the congestion that follows over-production. In 1891 there were 241,000 acres under the plant; in 1901 there were 338,000 acres, and the output had risen from ninety million to one hundred and thirty-four million pounds. This increase in the supply was out of proportion to the expansion of the demand for Assam tea, rapid though this has been, and prices, which in 1894 averaged 10 annas 5 pies per pound for the Brahmaputra and 8 annas 8 pies for the Surma Valley teas, had fallen in 1900 to 5 annas 9 pies and 4 annas 6 pies, respectively. To meet the requirements of the industry, an enormous number of coolies have to be brought into the province from other parts of India, and in recent years the supply of labour has begun to fall off, and the cost of procuring it to increase. Every effort has been made to reduce the cost of production, and new markets are being opened out; but, though some of the best companies continue to pay good dividends, many concerns are passing through a critical stage.

Silk.

32. There are four varieties of domesticated silkworms in Assam. The smaller or multivoltine *pát* worm (*bombyx crassí*), and the larger or univoltine worm of the same name (*bombyx textor*); both feed on the mulberry, and produce a white silk, which was in considerable demand in the days of the Ahom kings. The cultivation of these silkworms is, however, decreasing, and there is little prospect of its revival. The *muga* worm (*antheræa Assama*) feeds on the *sum* tree (*machilus odoratissima*) and on the *sualu* (*tetranthera monopetala*), as also on a variety of other trees, but the silk yielded by the *sum*-fed worm is the best. The worm is a multivoltine, yielding as many as five broods in the year, but usually only three of these are used for the manufacture of silk; and in Upper Assam breeding is discontinued during the rainy season, and is resumed on the approach of the cold weather with cocoons imported from Kamrup and Nowgong. In Upper Assam, the worms are frequently fed on patches of natural forest, but in the western districts land is planted out with *sum* trees for this purpose. The worms are placed on the trees as soon as they are hatched, and are watched night and day during the whole period of their life in the open air. When ready to spin their cocoons they descend the tree, and are removed by the cultivator. The cocoon is about $1\frac{1}{2}$ inch long by $\frac{3}{4}$ ths of an inch in diameter,

and yields a soft silk of a bright yellow colour, with a beautiful gloss. The silk ^{Physical and Political Geography.} is wound off the cocoon by an extremely primitive process of reeling. In 1837, Mr. Hugon calculated that an acre of trees would support worms yielding 50,000 cocoons, capable of being reeled into 12 seers of silk; but a careful estimate prepared by the Deputy Commissioner of Sibsagar in 1882 places the outturn per acre at only a quarter of this quantity,—a difference which may partly be explained by supposing that Mr. Hugon was speaking of plantations, while the Sibsagar estimate relates to natural *sum* forest, where the trees grow much more sparsely. The area of such forests in the Assam Valley (where alone the *muga* is produced) is believed to be about 300 square miles; but this great area is used for breeding silkworms only as the alluvial lands of the Brahmaputra are used for growing mustard, that is to say, parties of men make clearance of the undergrowth in patches, and cultivate silkworms for a year or two, after which they move to another spot. The fourth and commonest kind of silkworm reared in Assam is that called *eri*, from its feeding on the *eri* (*endi*) or castor-oil plant. This worm being regarded as of doubtful purity by Hindus is bred chiefly by tribes of non-Hindu origin, such as Kacharis, Meches, and Rabhas, in Lower Assam, but in Upper Assam it is reared by all except the highest castes. It is also cultivated largely by the Mikirs, Garos, and Kukis, on the northern and southern skirts of the central range of Assam, and in the low hills to the south of Sylhet and Cachar, but only to a small extent in the plains of the Surma Valley. It is a multivoltine worm, reared entirely indoors, and yielding five broods in the year. The cocoon is smaller than that of the *muga*, and its colour is either white or a deep brick-red, both red and white cocoons being produced indifferently by worms of the same brood. The silk is never reeled, but is spun off by hand.

Although there is a considerable demand for *eri* silk, all attempts at producing it on a commercial scale have hitherto failed, the main reason being that the castor-oil plants, on which the worm feeds, are peculiarly liable to destruction by caterpillars when grown in large quantities. As regards the *muga* cocoon, no method of reeling it has yet been introduced which will enable it to be sold at remunerative prices, and its chief sale continues, as heretofore, to be for the purpose of embroidering the hand-made muslins manufactured at Dacca.

33. Cotton is grown in large quantities along the slopes of the Assam Range, especially in the Garo and Mikir Hills; it is also grown in the hilly country in South Cachar and Sylhet. It forms, except in the Khasi Hills, almost the only produce which the hillman has to barter for the necessaries which he buys at the submontane markets, where a large business in it is done. The staple is, as already mentioned, short and harsh. About forty-eight thousand maunds were exported on the average during each of the last three years. Cotton.

34. One of the most valuable products of Assam is India-rubber which is Rubber. obtained almost exclusively from *Ficus elastica*, the outturn from other local species being inappreciable. The rubber trees in the unclassified and reserved forests of Lakhimpur, Darrang, and the Khasi Hills have become almost exhausted, and further revenue cannot be expected from them at present. With rest, however, at some future date and if a more systematic method of working is introduced, they may still become an annual source of revenue in Darrang and Lakhimpur; the quantity in the Khasi and Jaintia Hills is insignificant.

Of recent years there has been a great increase in the value of rubber, and the duty was accordingly raised from Rs. 12 to Rs. 17 per maund in the year 1900. The average quantity on which duty has been paid annually during the past eight years has been 3,726 maunds and the amount realised Rs. 57,130. The greater portion is imported from beyond the frontier, the outturn of home rubber being on an average a little less than one-third of the whole. The former system of leasing cut the right to collect rubber in certain forest areas in British territory, known as *mahals*, was reintroduced in the Darrang district from 1896-97, and in Kamrup from 1901-1902. The home forests now yield very little rubber, but passes to cross the frontier for the purpose of procuring foreign rubber are issued to the lessees, and herein lies the principal value of the *mahals*.

Not long after forest conservancy was started in the province it was seen that the wild *Ficus elastica* trees would soon be exterminated owing to the reckless treatment they were receiving at the hands of the tappers, who, not content with hacking at the root and branches, uncovered the roots in the ground and cut them across every three or four yards to obtain root rubber. In order to maintain the supply and also to meet the rising demand, the Forest Department started planting operations at Charduar in the Darrang district in 1873, and a few years later at Kuli in the Kamrup district. Nothing was at that time known of the

Physical and
Political
Geography.

habit of the *Ficus elastica*, and the experiments were confined to imitating nature by planting small seedlings on the forks and branches of other trees and by means of cuttings. The first method was soon abandoned, as it was seen that it took many years for the little epiphyte to grow into a tree, but the method of propagation by cuttings was continued until eventually it was found that seedlings planted on mounds did best, and this system is now generally followed. The seed which is contained in a small fig-shaped fruit about the size of a pea, after being broken up between the hands, is sown in beds or boxes in the same manner as vegetable or flower seeds which require transplanting after germination. The seed is sown during the rains and germinates in a few days. When the seedlings are one or two inches high, they are pricked out and placed 2' X 2' in nurseries raised above the ground and drained carefully, and there they remain till the following rains, when they may be planted out on mounds 33' X 33'. After this a little fresh earth or rubbish thrown on three or four times a year is all the attention required. A properly cared for artificially grown *Ficus elastica* tree will yield in the twelfth year for the first tapping one pound of rubber, and if tapped every second year after that will give more. The tapping should be done with a V shaped gouge which removes only the bark without doing much injury.

With proper care in tapping a good sized mature *Ficus elastica* tree will yield 80 lbs. of rubber at the first tapping, and if its roots in the ground are not interfered with, it will after this give 20 lbs. of rubber every second year, one year's rest being allowed to enable the tree to recover itself and the wounds or taps to heal up by formation of new bark.

The Government Kulsis and Charduar plantations have now got beyond the experimental stage, and tappings are made annually. The rubber is specially cleaned by hand-picking, and, when last shipped to England, fetched Rs. 2-10-9 per pound.

The quantity of rubber exported during the last five years has been as follows:

1896-97	...	4,047	mds.	|	1898-99	...	3,637	mds.
1897-98	...	2,846	"	|	1899-1900	...	5,558	"
			1899-1901	...			3,592	mds.

Lac.

35. Indigenous lac is found in the Assam forests, but the staple is also largely cultivated by artificial propagation. The lac insect is chiefly reared on two kinds of fig (*Ficus cordifolia* and *Ficus laccifera*), which are planted on a large scale near villages in the Kamrup and Darrang districts. The form in which the great bulk of the lac is exported is stick-lac, the crude product, consisting of small twigs surrounded by cylinders of translucent orange yellow gum, in which the insects which deposited it are embedded. A small export exists of shell and button lac, and of lac-dye, the result of a process of purification applied to the stick-lac. The twigs are first separated, and the gummy envelope is then scraped and rubbed by hand under a stream of water till the colouring matter has been thoroughly extracted; this consists of the dead bodies of the insects buried in the gum, and gradually precipitates itself to the bottom of the water when left to settle. The water is then drained off, and the sediment, after being strained, pressed, and dried, becomes lac-dye, ready for the market. The gummy exudation is meanwhile dried in the sun, and then melted, in bags of cotton cloth, over a charcoal fire. It is then squeezed out, either in thin sheets upon an earthen cylinder, when it becomes *shell-lac*, or in dabs upon a plantain stalk, when it is called *button-lac*. The exports of lac and lac-dye during the last three years have averaged 21,000 maunds.

Mustard.

36. Mustard forms an important commercial staple in the Assam Valley, where it is largely grown in the inundated country of Kamrup and Nowgong. It is manufactured to a small extent into oil within the province; but this product is consumed almost exclusively by the immigrant population. Of recent years there has been a great decline in the mustard trade due, it is said, to injury done by the earthquake to some of the best mustard tracts in Lower Assam. The average annual exports from the Brahmaputra Valley during the last triennium have been only 4¼ lakhs of maunds, as compared with 12¼ lakhs in 1891-92.

But little mustard is exported from Sylhet and Cachar, and the average annual exports during the last three years were less than 16,000 maunds.

Jute

37. Jute is grown for export on a considerable scale in Goalpara, and to a less extent in Sylhet and the plains portion of the Garo Hills district. There is also a small export from Kamrup. The fibre is grown in small quantities for domestic purposes in all the other plains districts of the province. The average annual exports during the last three years were 228 thousand maunds. The quantity exported in 1896-97 was 398,169 maunds, and it appears that the cultivation of jute has fallen off since that year, chiefly, no doubt, owing to the effects of the great earthquake in Goalpara.

38. Potatoes are very largely grown in the Khasi Hills, but in no other part of the province as a commercial staple. They were introduced into this district by Mr. David Scott, Governor General's Agent, in 1830, and are now cultivated throughout the upper plateaux of the Khasi Hills Proper, though not in the Jaintia country. Two crops are produced yearly, the first being sown in February and March and reaped in July, and the second put down in August and taken up in November and December. The latter crop is chiefly used for seed, and the export is wholly derived from the former. Large quantities are carried down by cart to Gauhati for the supply of the Assam Valley, but the main channel of export to Bengal is *via* Cherrapunji and Sylhet, whence the potatoes are conveyed by boat. The exports reached their highest point in 1881-82, when they amounted to 127,000 maunds. In 1886-87, they were returned at 104,000 maunds, but in that year the tubers were attacked for the first time by a disease due to the presence of a fungus (*Phytophthora infestans*), and in the following year the crop was reported to have rotted in the ground. There was a steady decline in the export trade which in 1837-38 was only 41,000 and in 1899-1900 had sunk to less than 4,000 maunds. In this year, however, bottom was reached, and during the past two years the exports have amounted to 21,000 and 37,000 maunds.

Physical and
Political
Geography.
Potatoes.

39. Another article of considerable traffic, which is exported from the Khasi Hills, consists of oranges. These are produced in great abundance, and of excellent quality, on the slopes of the hills bordering on Sylhet, where before the earthquake of 1897 there was a continuous fringe of orange-groves belonging to the Khasi proprietors from the Bogapani river to the exit of the Piyain at Dauki Bazar. The higher plateaux produce lemons of the best quality in profusion, but these are not largely exported. The orange groves were much damaged by the great earthquake of 1897, but the industry has revived again and the exports in 1901-1902 exceeded 74,000 maunds.

Oranges.

40. As might be expected from the character of its surface and climate, the area of forest in Assam is very extensive. The head of the Assam Valley, including the Lakhimpur district and part of the Sibsagar and Darrang districts, is a forest country, the greater portion of the land not under cultivation being stocked with dense and chiefly evergreen forest. The middle and lower portion of the valley, on the other hand, is a comparatively open tract with vast expanses of grass savannah, and forest only in the vicinity of the hills, on the extensive tracts of high land and on the isolated hills which are found in this part of the valley. In the Surma Valley there is little forest in Sylhet, except on the southern hills stretching up from Tippera, and in the great valley of the Langai and Singla rivers, in the south-eastern corner, where there is a forest tract of 103 square miles. In Cachar the whole of the south of the district bordering on the Lushai Hills is a forest reserve, whence the populous district of Sylhet draws its timber supply. Much of the reserved forest is, however, of little value, and as in the Surma Valley there is a keen demand for land for cultivation, and pressure of population on the soil is beginning to be felt, it has recently been found advisable to disforest and throw open to cultivation extensive areas in the south of the Cachar and Sylhet districts. In this way 22 square miles have been disforested in Cachar, and 67 in Sylhet. On the other hand, two important new reserves of 80 and 35 square miles, respectively, have been formed in the North Cachar Hills, the exploitation of which will, it is hoped, be facilitated by the construction of the Assam-Bengal Railway. In the hill districts there is less good forest than might be expected, though there is no lack of wooded country; the habits of the hill races do not permit, except in isolated spots to which their *jhums* have not extended, of the growth of valuable timber. Forest fires and *jhuming* have denuded the interior of the hills, where the people chiefly live, of most of its forests; but along the northern and southern skirts there are large areas of natural forest still untouched. The following is a statement of the area of reserved forests as it stood in each district on the 30th June 1901 :

Forest reserves.

Sq. miles.

Cachar	...	...	...	...	...	...	807
Sylhet	...	...	...	...	...	...	103
Goalpara	...	...	...	...	...	...	721
Kamrup	...	...	...	...	...	...	149
Darrang	...	...	...	...	...	...	321
Nowgong	...	...	...	...	...	...	142
Sibsagar	...	...	...	...	...	...	876
Lakhimpur	...	...	...	...	...	...	340
Garo Hills	...	...	...	...	...	...	134
Khasi and Jaintia Hills	...	...	...	...	...	...	51
Naga Hills	...	...	...	...	...	...	63

Physical and
Political
Geography.

The felling of timber on the large areas of waste land outside the boundaries of reserved forests is also regulated by rules, and royalty is realised on the more valuable trees.

The most valuable trees in the forests of Assam are *ajhar* (*lagerstrœmia reginæ*) and *sam* (*artocarpus chaplasha*), which are found throughout the Assam Valley, *nahor* (*mesua ferrea*), which does not grow in the plains of the Brahmaputra Valley west of the Mikir Hills, though common in the evergreen forests of the Garo and Khasi Hills, *sâl* (*shorea robusta*), which is found only in the lower part of the valley, in Goalpara, Kamrup, Darrang, and Nowgong, and the Garo and Khasi Hills, *sissu* (*dalbergia sissoo*), which is not found east of the Manas river, and *khair* (*acacia catechu*), which extends eastwards to Charduar in Darrang. In the Surma Valley, *nahor* (there called *nagesar*), *ajhar* (there called *jarul*), and *cham* (the *sam* of Assam) are the most important trees.

The only trees which are important articles of export are *sâl*, *sam*, and *ajhar*, which are largely floated down the Brahmaputra into Bengal, and from Cachar into Sylhet, chiefly for boat building. The exploitation of the Cachar forests for the service of Sylhet has always been active and is extending, while that of the forest in Goalpara and Kamrup does not show any marked advance. *Sâl* sleepers have, however, been recently supplied from the Goalpara forests to the Eastern Bengal State Railway, and it is hoped that, with the extension of the line towards Gauhati, this demand will be further developed. The upper part of the Assam Valley is too remote from a market for its timber resources to be yet regularly exploited; the chief use made of the forests hitherto has been to yield posts and beams for house building, trees for *dugouts* (the only kind of boat made in the Brahmaputra Valley), charcoal, and soft woods for tea boxes. It was hoped that the trade in the boxes might develop *pari passu* with the extension of the tea industry, but foreign made boxes are much in favour with the Calcutta Agents. The bulk of the sleepers used on the Assam-Bengal Railway were obtained outside the province, but the Company has recently begun to use *nahor* sleepers extracted from the Assam forests, and this may develop into a regular demand. The average receipts and expenditure of the Forest Department during each of the past five years were Rs. 4,71,590 and Rs. 3,15,985, respectively.

Elephants.

41. Among the "commercial staples" of Assam, elephants should also be mentioned. These valuable animals abound in the forests of the Assam Valley, on the lower slopes of the Assam Range, and are found in South Cachar and South-Eastern Sylhet. The Government khedda establishment from Dacca, who had for several years previously hunted the Garo Hills forests, in 1899 transferred their operations to the districts of Kamrup, Nowgong, Sibsagar, and the Naga and the Jaintia Hills. Large numbers of elephants have been captured in the province by this agency. Elephant *mahals* (or the right of hunting within certain defined tracts not required for the purposes of the Government khedda) are leased by auction sale to the highest bidder. Besides the price of the *mahal*, the lessee has to pay a royalty of Rs. 100 on each animal captured. The average number of elephants annually caught by lessees in the four years 1897—1901 was 205.

Mines and
minerals.

42. In the section dealing with the geology of the province some account has been given of the most important minerals found in Assam, *viz.*, coal and limestone. Iron occurs in the metamorphic and sub-metamorphic rocks of the Shillong plateau and in the South Mikir Hills, and is found in small quantities, in the form of nodular masses of clay ironstone, in the neighbourhood of the coal of the Makum field. Petroleum springs exist in the same locality. Gold was once washed in the rivers of Upper Assam, but the industry is not now found to be worth pursuing. Salt springs exist in several parts of the Barail-Patkoi section of the Assam Range.

Coal,
Upper Assam,

43. The mineral of the first economic importance to Assam is undoubtedly the coal which is found on the north-western face of the Eastern Naga Hills. Situated as these fields are near the upper terminus of steam navigation on the Brahmaputra, it had long been recognised that their successful exploitation would effect a revolution in the carrying trade by steamers on that river, which formerly depended on Raniganj for their fuel supply. The existence of coal here has been known since 1825. The question of opening out the fields was reported on by a coal committee, assembled at Calcutta in 1840 and 1845. The localities were summarily examined by Mr. Medicott, of the Geological Survey, in 1865, and in the seasons 1874-75 and 1875-76 Mr. Mallet, of the same Survey, made a careful inspection of all the coal outcrops from the Tirap to the Desoi river. His report, which contains a detailed description of the several fields, will be found in Volume XII of the Memoirs of the Geological Survey. The coal measures extend along a distance of about 110 miles, but are exposed only where the river valleys have cut into them. Five coal-fields have been described and named by Mr. Mallet, *viz.*, the Makum, Jaipur, Nazira (Dikhu and Safrai), Jhanzi, and Desoi

fields. Besides these, in the further extension of the Naga Hills up the Dihing Valley to the frontiers of Burma, there are other known, but not regularly-explored, localities where coal occurs. The most important is the Makum field on the Dihing river, where the seams reach an immense thickness. Several desultory attempts had, from time to time, been made to work the coal there, but, owing to difficulties of labour and transport due to the uninhabited character of the country, and the difficult navigation of the Dihing river, no large quantity had, at any time, been brought out, until 1881 when the mine was leased to the Assam Railways and Trading Company, and a railway was constructed from the Brahmaputra at Dibrugarh to the coal measures on

Year.	Output, in tons (thousands).
1889-90	118
1898-99	207
1899-1900	242
1900-1901	243

the Dihing. Since that time the mines have been vigorously worked, and the output of coal has risen steadily. The coal is of good quality and is exclusively used by the steamers navigating the Brahmaputra and by a large number of tea gardens in Assam. Considerable quantities are also exported to Bengal.

A portion of the Dikhu or Nazira field, situated a short distance within the hills south of Sibsagar, whence that river issues, is held on lease by the Assam Company, but, except for the needs of the lessees, has not yet been worked to any extent. The other outcrops, the Jaipur field in the Dihing, which is very favourably situated for working, and the Jhanzi and Desoi fields, which are less accessible from the plains, have not yet been exploited.

44. Coal has also been found in the Garo and Khasi and Jaintia Hills. As already noticed, this coal is of two very distinct kinds, the older or cretaceous coal and the newer or Tertiary in the nummulitic limestone. The largest deposits are those of the former, *viz.*, the cretaceous coal found in the neighbourhood and east of the Darranggiri field (which has been described in the "Records of the Geological Survey," Volume XV, page 175) and are situated north of the main axis of the Garo Hills, on either side of the gorge through which the Someswari river makes its way to the plains. This field was originally estimated to contain 76 million tons of good workable coal, but recent discoveries have proved that there must be at least some 300 million tons. It is reported to be a good hard coal of a high calorific value. A syndicate has taken a prospecting license of this area and is surveying for a tramway to be laid to the river Surma for the transport of the coal.

There are two other cretaceous coals known in the Khasi Hills, namely, the Maobehlarckhar field near Maoflang and the Langrin field on the Jadukata river. The former has been worked several years by the native villagers in a primitive way for the local supply of the Shillong station which is some twenty miles away. It is an excellent quality of coal similar to that found in the Garo Hills, but the seam extends over a small area only. The Langrin seam extends over an area of some 30 square miles, and, being at the foot of the hills, is in a very accessible situation; the seam is, however, only some 3 feet thick. Coal is also found at Longlai and on the Nambor river in the Mikir Hills, but it is poor in quality and would hardly pay to work.

The following coal-fields have been discovered in the south Khasi Hills in the lower tertiary formation lying in the nummulitic limestone:—Cherrapunji, Lakadong, Thanjinath, Nongkredem, Maolong, and Mustoh. The Maolong field has lately been taken on lease by a Limited Company. It is estimated to contain some 15 million tons of good workable coal.

The Cherrapunji coal-field has been estimated by Mr. LaTouche (*vide* Records of the Geological Survey, India, Volume XXII, Part 3) to contain 1,300,000 tons. This is the same coal as that found in the Maolong field, but owing to its high elevation (4,560 feet), it is difficult to arrange means of transport from this field.

The Lakadong field is situated some way to the east and has also been surveyed and reported on by Mr. LaTouche (*vide* Volume XXIII, Part I, page 14). It is said to contain some 1,164,000 tons, but a considerable outlay would be required in this field also to bring the coal to any large market, the field being 7 miles from the foot of the hills and at an elevation of 2,200 feet above the plains.

Coal-beds have recently been discovered in the vicinity of the Shillong-Gauhati road, 8 miles north of Shillong, but the geological system to which they belong has not been reported.

45. Iron exists in Assam, as in most other parts of India, in great quantity and in various forms; but the competition of English iron, with the exhaustion of the supplies of fuel which supported the native furnaces, has almost extinguished the indigenous industry in the Khasi Hills; while in Sibsagar, where in the days of the Assam Rajas, iron-smelting was extensively practised, and the great iron cannon for which Assam was once famous were forged, the art has completely ceased to exist.

Physical and
Political
Geography.

The Khasi Hills iron, which is still made in small quantities and exported to the submontane bazars, is derived from the minute crystals of titaniferous iron ore, which are found in the decomposed granite on the surface of the central dyke of that rock, near the highest portion of the plateau. The decomposed granite is rolled down into a stream, where it is washed to separate the iron-sand, which is collected in wooden troughs, dried, and reduced with charcoal in small furnaces. The quality of the iron is excellent, and it is still sought after to some extent for manufacture into hoes and *daos*; but it cannot be doubted that the industry must soon die out. Its great extension in former times is evidenced by the remains of smelting furnaces which cover the surface for many miles, from the brow of the hill below Cherrapunji as far north as Myllem and beyond. The slag from these workings supplied a considerable portion of the metal for the cart-road between Cherra and Shillong.

In Upper Assam, clay ironstone occurs in nodules of various sizes, and sometimes in thin beds, interstratified with shales and sandstones, in the coal measures of the Naga Hills; but it is believed that the ore is not in sufficient abundance to afford a supply for a blast furnace on the English principle; while the scarcity of limestone required to form a flux would, even if the ore were in greater quantity, probably form an insuperable obstacle to operations on a large scale. Iron ore is also of widespread occurrence in the South Mikir Hills, but no attempt has been made to work the deposits. The company who have the concession of the Makum coal-field have also the monopoly of the iron of that region, but have hitherto made no attempt to work it. The iron ore formerly smelted in Sibsagar was derived both from the clay ironstones in the coal measures (chiefly those of the Nazira field), and from the impure limonite which occurs in great abundance in the Tipam rocks south of the Dhodar Ali; the former was the source most used.

Alum. 46. Pyritous shales are also found associated with the coal measures of Upper Assam; and it may perhaps hereafter be found profitable to use them for the manufacture of alum and copperas.

Petroleum. 47. Petroleum is found in the neighbourhood of the coal of Upper Assam. It is a heavy oil, containing a comparatively small proportion of the light illuminating hydro-carbons, but has excellent lubricating qualities and yields a large proportion of paraffine wax. The earliest experiments in working it were made at Nahor Pung, in the Jaipur field (where they were a failure) and near Makum where a considerable amount of oil was extracted in 1868. A concession for working petroleum in the Makum field was granted to the Assam Railways and Trading Company in 1882-83, and two similar concessions in the same neighbourhood were granted in 1892—one to the company already mentioned, and the other to a syndicate. The concession in the Makum field expired in 1901, and a lease of an area of four square miles for 25 years was then issued to the concessionaires. The three oil-bearing tracts were subsequently acquired by a separate company formed for the purpose, who have constructed large refineries at Digboi, and have started a considerable business in lubricating and illuminating oils, candles, and wax. The output of crude petroleum amounted to 882 thousand gallons in 1900-1901.

Besides the petroleum of Upper Assam, this mineral is also found in the Khasi and Jaintia Hills and in Cachar. It occurs on the banks of the Barak, at Masimpur, where the Tilain range crosses the river, and near Badarpur, where the Sirispur hills run up to the stream from the south; it has besides been detected at various places along these ridges, which are part of the prolongation into the Surma Valley of the Arakan meridional ranges. It has also been found north of the Barak, on the Larang, a small stream issuing from the Barail range north of Kalain, and joining the Surma near Lebharpota. The natural oil springs, which have long been known to exist in the Khasimara Valley on the southern slope of the Khasi and Jaintia Hills, will possibly prove to be of great importance, recent analysis showing that this oil is free from wax and of high lubricating power.

Salt. 48. Salt-springs are found in conjunction with petroleum in the Upper Assam coal area, at Borhat, Jaipur, and other places. In former times their brine was largely used for conversion into merchantable salt; and to this day a small quantity of salt so made (the brine being boiled down in joints of bamboo) is imported by the Nagas into Jaipur. Salt-springs exist in Cachar, both in the southern ranges (Sirispur and Bhuban hills) and in the Barail. Those in the Hailakandi Valley, in mauzas Bansbari and Chandipur, are the only ones which are now worked, though formerly the industry was more extensive. The springs are leased annually for a trifling sum; the brine is not boiled down, the water being disposed of in *gharas* to the people of the neighbouring villages. Several salt-springs are worked in Manipur, where they are highly valued.

Lime. 49. Next in importance to coal in this province are the vast stores of limestone which exist on the southern face of the Khasi and Jaintia Hills, where the downward bending

strata of the nummulitic rocks have been worked as a lime-supply from a period long anterior to British rule. "Sylhet lime" was a monopoly of the Mogul Governors of Bengal, and, as such, figures in the early *sanads*, *farmans*, and treaties by which the East India Company acquired command over that province. The limestone is found from the exit of the Someswari river in the Garo Hills to that of the Hari river in Jaintia; but it can only be economically worked where special facilities exist for its transport from the quarries to the kiln. The most important of these quarries are those situated on the Jadukata and Punatirth rivers, which debouch near Laur in Sylhet; the Dwara quarries to the east of these; the Cheyla or Shella quarries, on the Bogapani; the Maolong, Byrang, Sohbar, and Borpunji quarries, which lie immediately under Cherrapunji; and the Utma quarries a little to the east on an affluent of the Piyain. Those beyond have rarely been worked, the advantages possessed by the quarries nearer the great limestone marts of Chhatak and Sunamganj enabling the latter to undersell them. Altogether there are 34 limestone tracts which are separately treated as quarries in the Khasi and Jaintia Hills, one in Sylhet, and one in the Garo Hills. The Government is the sole proprietor of all the quarries in the Jaintia and Garo Hills and the one in Sylhet, as well as of four in the Khasi Hills; the remainder (with one exception) are the joint property of the Khasi rulers or communities and the British Government, the latter administering the estates and reaping half the profits.

Owing to competition from other sources of supply, the Sylhet lime trade has declined from its former importance, and in 1901, only four quarries (Shella, Sohbar, Byrang, and Maolong) were worked under the permit system, and three (Borpunji, Langrim, and Nongstoin) were leased. The Maostoh quarry, over which Government has no control, was also worked by its proprietors, and the remaining 27 were closed. The exports of lime and stone during the last three years have averaged annually over 19 lakhs of maunds, while the revenue received by Government varies from thirteen to twenty thousand rupees per annum.

The stone is quarried chiefly during the dry months, and either carried by rail to Companyganj, whence it is taken by boat to Chhatak, or rolled down to the river banks and conveyed over the rapids, which occur before the rivers issue on the plains, in small boats when the hill streams are in flood during the rains. Below the rapids it is generally reloaded on larger boats, and carried down to the Surma river, on the banks of which it is burnt into lime during the cold weather. The kilns are of a primitive description, being mere excavations in the river bank, faced and roofed with clay. The fuel used consists of the reeds and grasses of the swampy tract which stretches along the foot of the hills. This industry gives employment to a great number of people, the quarriers being generally Khasis, and the boatmen and lime-burners Bengalis of Sylhet. A certain quantity of limestone is also exported to Calcutta to be burnt there.

Limestone is also extracted in small quantities from the Doigrung, a tributary of the Dhansiri, a few miles south of Golaghat. A description of this formation, which has not yet been systematically worked, will be found in the "Records of the Geological Survey," Volume XVII, page 31. There are also considerable deposits of good limestone on the Deopani, Hariajan, and Jamuna rivers in the Mikir Hills, but they are too inaccessible to repay the cost of extraction.

50. The rivers of Assam which have yielded gold are those of the Darrang and Lakhimpur districts north of the Brahmaputra, the Brahmaputra itself in its upper course, the Noa and Buri Dihings and a small stream called the Jaglo, which rises in the Tipam Hills and falls into the Buri Dihing. In the Sibsagar district the Dhansiri, Disoi, and Jhanzi rivers are said to have been auriferous. Of these streams, the Bhareli, Dikrang and Subansiri in Darrang and Lakhimpur appear to have formerly given the largest quantities. The gold in these rivers is probably doubly derivative, being washed out of the tertiary sandstones of the sub-Himalayan formations, themselves the result of the denudation of the crystalline rocks in the interior of the chain. The industry was maintained in the time of the Assam Rajas by the peculiar system of taxation which then prevailed, each class of the population being bound to contribute in kind or labour to the State. The *sonwals*, or gold-washers, were taxed at four annas' weight, or four rupees' worth, of gold per annum. Since the British occupation of the country, the pursuit of the precious metal has dwindled almost to nothing, and the lease of the gold-washings in North Lakhimpur has of late years been sold for Rs. 5 or Rs. 6 a year. In 1882, a European speculator obtained a monopoly for ten years of the right of seeking gold in the Subansiri and its tributaries, but his operations were not attended with success. In 1894, a syndicate was formed and considerable sums of money were expended on the exploration of the rivers of the Lakhimpur district, but gold was not found anywhere in paying quantities, and no return was obtained on the capital embarked in the venture.

Physical and Political Geography. Traces of gold have also been found at Maoflong and near Laitlyngkot in the Khasi Hills.

Platinum. 51. Platinum has been noticed with samples of gold obtained from washings in the Noa Dihing river, and it is possible that, if specially searched for, it might be found in large quantities ("Records of the Geological Survey," Volume XV, page 54).

Manufactures Tea. 52. Tea is the most important article of manufacture in Assam. The total quantity of tea produced in 1901 is returned as nearly 134 million pounds, of which 72 million pounds were manufactured in the Brahmaputra and 62 million pounds in the Surma Valley. A sketch of the tea industry has been given in paragraphs 30 and 31. There are fourteen saw-mills in the province which turn out during the year tea boxes and scantlings worth nearly six lakhs of rupees, and there are brick and pipe works at Ledo, the annual output of which is valued at about a quarter of a lakh. A large refinery has recently been erected near the oil-wells at Digboi, and a trade is now growing up in petroleum oil and candles.

Native manufactures generally. 53. The native manufactures of Assam are not of great importance, and the peculiar conditions under which they are carried on render it difficult to form an accurate estimate of their progress or decline. The indigenous social organization of the Brahmaputra Valley reflects that imperfect division of labour which marks a primitive community, and handicrafts which in other parts of India are confined to special castes, are practised as household industries in Assam Proper. This is true to an even greater extent of the hill districts, while the industrial development of the Surma Valley resembles more closely that of the neighbouring districts of Eastern Bengal. The province possesses no large cities where artisans can find scope for employment, and carpenters, blacksmiths, wheelwrights and masons have, for the most part, to be imported from other parts of India and paid at extremely high rates. The list of indigenous Assamese manufactures comprises silk thread and fabrics, cotton fabrics woven mostly from imported thread, brass utensils, oil expressed from the seeds of mustard and *tul*, coarse sugar, a few kinds of jewellery, some ornamental articles in ivory, and common domestic pottery and agricultural implements.

Silk. 54. The silk fabrics are the produce chiefly of the Assam Valley. The various kinds of silk have been described in paragraph 32. The white cloth made of *pât* silk is an article of luxury; most respectable families in Upper Assam possess *pât* silk cloths, which are worn at marriages and other festivities, but specimens cannot easily be obtained except on order. The price of the *muga* and *eri* silks has also risen fourfold within the last fifty years; but this circumstance is probably due in part to the influx of money into the province, while it is by no means certain that these silks were at any time more easily procurable than they are now. The earliest mention of them is to be found in Muhammad Kasim's chronicle of Mir Jumla's invasion of Assam in 1662, and it was then observed that the silks, though good, were produced in quantities sufficient only for domestic consumption, which is very much the case at the present time. The *muga* silk, which has a bright yellow colour and a pretty gloss, is used as an article of dress by the wealthier classes in the Assam Valley, and is exported to the southern hills, where it is much sought after by the Garos, Khasis, and other hill tribes. *Muga* thread is also exported to Bengal. *Eri* silk which is more extensively manufactured than *muga* is generally worn in the cold months by the peasantry of the Assam Valley. The cloth is of a drab colour, and is often extremely coarse, but always very durable. A superior piece of *eri* cloth is nearly as white as linen, and fine enough to make a travelling dress for a lady. The cloth is purchased in considerable quantities by Bhutia traders, and by the hill tribes to the north and north-east of Sadiya, and is also exported to Bengal. By the Kukis and Mikirs in the lower parts of the central range of Assam, the thread is woven into the striped cloths which form the ordinary dress of all the tribes inhabiting those highlands. It is impossible to give even an approximate estimate of the quantity of *muga* or *eri* produced annually in any part of the province. The value of *eri* thread is Rs. 5 to Rs. 7 per seer; of *muga* thread, Rs. 8 to Rs. 12; while good *eri* cloth sells at Re. 1-8, and good *muga* at Rs. 2-4 per square yard. The manufacture of both *muga* and *eri* silk is purely domestic. There are no large filatures, nor is there any system of breeding the worms on an extensive scale. The raiyat breeds silkworms enough to yield him a few chhataks of thread, which he either weaves himself, or disposes of at the village fair. There is no regular trade in silk yarns or fabrics, nor any stated market where they can be bought in large quantities. But a very large proportion of the Assamese ryots wear silk in place of the cotton cloths used elsewhere in India.

Cotton. 55. The weaving of cotton cloth is very generally practised as a home industry by women in the Assam Valley. Weaving among the Assamese forms part of a girl's

education, and of a woman's ordinary household duties, and in former times the women generally made their own clothes, and those of the men as well. In recent years there has been a change in the habits of the people in this respect. Cotton fabrics imported from Europe and from other parts of India can be purchased at a moderate price, and these, though less lasting, are much finer in texture than those usually made by the Assamese. Accordingly, among the richer classes, the women have given up weaving for ordinary wear, and confine themselves to the production of cloths delicately and tastefully ornamented with borders and patterns of silk, or gold or silver thread. These are made for private use only, and cannot be purchased. The poorer classes still, to a large extent, weave their own coarse clothing. In the Surma Valley weaving was never a household industry, but was confined to the Tantis and Jugis (or naths), professional weaving castes. In both valleys the thread used is almost all imported, and cotton-spinning has practically become a lost art. The hill tribes, however, spin their own cotton. Among them weaving occupies much the same position as in the Assam Valley, and the cloths they make exhibit great variety of pattern, being often gaily coloured with native dyes.

Physical and
Political
Geography.

56. Brass utensils are made by the Morias, a low Muhammadan caste found chiefly in the districts of Sibsagar and Nowgong. These are of the rudest kind, without any attempt at finish or ornamentation. A style of vessels somewhat superior to these is made at Gauhati and at Sarthibari in Kamrup.

Brass.

57. The manufacture of mustard oil is of modern introduction. The mill used is the ordinary bullock-mill of Upper India, and is gradually supplanting the domestic oil-press, which consists simply of a short beam loaded with a heavy stone. Of recent years there has been a considerable extension of sugarcane cultivation with a corresponding fall in the price of *gur* or jaggery which is generally produced by the most primitive methods. A beginning has, however, been made in the introduction of improved iron sugar mills.

Oil and sugar.

58. The most artistic jewellery produced in Assam is the gold filigree work made at Barpeta and the enamelled ear-rings and lockets of Jorhat. The Khasi bracelets, necklets, and ear-rings in gold and silver are handsome ornaments, though somewhat heavy in design; and the Manipuri jewellery, of similar patterns, is imitated in Sylhet.

Jewellery.

59. The district of Sylhet is noted for its ivory mats and fans, and the manufacture of shell bracelets gives employment to a large number of artificers in the town of Sylhet. These bracelets are cut out as solid rings from large white conch-shells obtained from many places on the sea coast in and near India. They are of graceful appearance, and command a ready sale. In pargana Patharia, in this district, there is a considerable manufacture of *agar attar*, a perfume distilled from the resinous sap of the *agar* tree (*aquilaria agallocha*). This perfume is much esteemed by Oriental nations, and is exported, *viâ* Calcutta, to Turkey and Arabia. Ironwork inlaid with brass, *talwars* and *daos*, and such like articles, are manufactured in Rajnagar and Lashkarpur in Sylhet. Boat-building is also carried on to a considerable extent in that district.

Sylhet manu-
factures.

60. The boat-making of Barpeta ought, perhaps, to be mentioned in a catalogue of provincial industries. The roughly-hollowed logs are floated across from the Garo Hills, and, after being further excavated till the thickness of the outer skin is reduced to about an inch and a quarter, they are subjected to a steaming process in the boat-builder's hands, being smeared with liquid mud and inverted over a line of burning embers. While thus softened, the future boat is widened by the insertion of thwarts. If, as usually happens, it splits in the process, the rent is patched with a piece of wood fastened in by clamps holding its bevelled edges to those of the aperture. In this way boats sixty feet long by six or seven feet in breadth are constructed, capable of lasting, if the wood be good forest timber, for ten years or even longer. The same process is followed elsewhere in the valley where boats are made.

Boats.

61. The trade of Assam is carried on in two different directions: first, and chiefly, with the neighbouring province of Bengal; and, secondly, with the foreign States and tribes which surround British territory on three sides. Both descriptions of trade are registered, the first at the stations of Dhubri on the Brahmaputra and Bhairab Bazar on the Surma, by which channels the greater part of the merchandise from or for Bengal enters or quits the province: and the second, either by special agency on the channels of communication or by the collection of statistics at the various fairs or marts in the frontier districts to which the neighbouring tribesmen resort.

Nature of
Trade in
Assam.
Trade routes.

The traffic conveyed by the boats and steamers that ply on the Brahmaputra and Surma still represents the most important part of the trade between Bengal and Assam. In the Surma Valley the Assam-Bengal Railway has already succeeded

Physical and
Political
Geography.

in securing about 22 per cent. of the trade, but 99 per cent. of the trade of the Assam Valley still goes by water and will probably continue to do so till there is through railway communication between that valley and Bengal. A certain amount of road traffic also takes place, but this is not large enough to justify the retention of a special establishment for the purpose of registering it. Figures are collected by the police at Sidli and Baida, but these are not very reliable. The river traffic is carried on by boat and by steamer. Mail steamers run daily on the Brahmaputra river, between Dibrugarh and Goalundo, and on the Surma between Goalundo and Silchar during the rainy season and between Goalundo and Fenchuganj in the cold weather. A considerable amount of cargo is carried in these steamers, but special cargo steamers with large flats also run, and carry goods the bulk of which renders them unsuitable for carriage by the smaller and more speedy mail steamers. Statistics of the goods carried by these vessels are transmitted by the companies to which they belong, through the Government of Bengal.

The boat traffic is registered by special establishments, which were located in 1879 at the two points already mentioned. The quantity of the goods carried is all (except in a few instances) that these establishments record; values are applied to these quantities in the offices of the Deputy Commissioners of Dhubri and Sylhet, according to the prices ruling for the articles at those stations. The figures furnished by the steamer companies are treated in the same way.

The great bulk of the foreign trade of the province is carried on with Manipur and Hill Tippera, and the most valuable imports are rubber, the greater part of which comes from the Himalayan forests, timber and bamboos from Hill Tippera and Manipur, and husked rice from the last-named States. The main exports are cotton, yarn, and piece-goods, silk, and betel-nuts.

Trading
classes.

62. The classes who conduct the trade of the province are different in the two valleys. In both, tea, the great export of Assam, is consigned straight from the gardens where it is produced to Calcutta, either to be sold there or shipped to England for sale. A small but increasing proportion of the tea crop of the Surma Valley is exported from Chittagong, where it is conveyed by the Assam-Bengal Railway. A considerable share of the export trade in mustard from the Assam Valley is in the hands of a class of traders who are natives of the Kamrup district, but almost all the rest of the export traffic, and nearly the whole of the import traffic, of the valley is carried on by Marwari traders, commonly called Kaiyas. Besides these, there are a few Muhammadan merchants from Dacca, who have settlements in the chief centres; but their transactions are small compared with those of the Kaiyas. It is very remarkable to notice the complete mastery of the internal commerce of the valley which these strangers possess. The Marwari is found, keen to buy and sell, wherever money is to be made; he settles himself not only in the populous villages of the inhabited region, but in the midst of the jungle, on the paths leading to the mountains from which the wild tribes come; and it is exclusively with him that these visitors do business.

In the Surma Valley the conditions are different. Here there are comparatively few Marwaris, though they are not altogether absent. The native population contains a large trading element, and merchants from Dacca are more numerous than in Assam.

In the hill districts there are considerable differences in the extent to which the tribesmen engage in trade. In most of these tracts, traffic is a necessary of life, the hills not producing sufficient food for the people to live upon; but in most also it takes the simple form of barter, the exports consisting chiefly of cotton, wax, ivory, and forest produce, and the imports of rice, salt, dried fish, and cloth. But in the Khasi and Jaintia Hills there is a much more active commerce. The valuable staples of this tract have already been mentioned, and the trade in them is kept by the people almost entirely in their own hands. Many of them are adventurous merchants, travelling as far as Dacca, or even Calcutta, during the cold season. In the Naga Hills, too, the Angami Nagas, who occupy the central region, though producing nothing of commercial importance themselves, do a thriving business as carriers between Manipur and Assam, and spend much money in the markets of the plains in the purchase of articles of use or luxury for themselves.

Trading
centres.

63. All over the province there are weekly *hāts*, or markets, on stated days, where buyers and sellers meet, and most of the business is done. Except at a few places, there are no permanent *bāzārs*. During the cold weather, fairs are held along the foot of the hills which mark the frontier, and to these the hillmen come down with their produce. The most important permanent centres of commerce are Goalpara, Barpeta, Rangia, Gauhati, Tezpur, Nowgong, Bishnath, Golaghat, Jorhat, Lakhimpur, Dibrugarh, and Sadiya in the Assam Valley; and Habiganj, Ajmiriganj, Sunamganj, Chhatak, Balaganj, Sylhet, and Silchar in the Surma Valley. The cold-weather fairs for frontier

trade are held at Udalguri, Kherkheria, and Daimara in the Darrang district for the Bhutias; and at Sadiya in the Lakhimpur district for the Abors, Mishmis, Khamtis, and Singphos. Besides these places, the Bhutias resort largely to various marts in North Kamrup, the Akas and Daflas to Tezpur, the Daflas and Miris to Lakhimpur, and the southern Nagas to Jaipur and Golaghat. In the Surma Valley, Barkhola is the chief mart for North Cachar, Jaintiapur for the Jaintia Hills, and Lakhat, Bholaganj, and several other smaller markets to the east for the Khasi Hills. The Manipur trade is chiefly carried on at Lakhipur, and that with Hill Tippera down the rivers which emerge from that country into Sylhet.

Physical and
Political
Geography.

Political.

Political.

SECTION 2.—HISTORICAL SUMMARY.

64. The different portions of territory included in the province of Assam were formerly quite distinct, and have different histories; they were brought under British Administration at different times and in different ways, and it is, therefore, necessary to treat them separately before proceeding to describe the present organization of the province. This section accordingly gives separately the history of the following areas: Introductory.

- I. Assam Proper, that is, the five districts of Kamrup, Darrang, Nowgong, Sibsagar, and Lakhimpur.
- II. Goalpara, including the Eastern Duars.
- III. Cachar.
- IV. Sylhet, including Jaintia.
- V. The hill districts, *viz.*,—

(1) The Garo Hills.	(3) North Cachar.
(2) The Khasi „	(4) The Naga Hills.
(5) The Lushai Hills.	

65. The history of so much of the valley of the Brahmaputra as belongs to the modern province of Assam may be said to begin with the growth of the Koch power upon its western frontier, and the invasion of the Ahoms in the east. From such hints and glimpses of the country as can be gathered from the *Tantras* and *Purans*, and other ancient writings, it appears certain that, while the bulk of the inhabitants have always been of non-Aryan origin, the colonisation or conquest of parts of the valley by Aryan settlers began at an early date. Krishna is said to have carried away his bride Rukmini from her father Bhisuaka, king of Kundilya, the name of whose kingdom survives in the Kundil river to the east of Sadiya, while the memory of the monarch is still preserved in Upper Assam. Krishna's son, Anirudha, captured Sonitpur, now called Tezpur, the capital of Raja Ban, and carried off his daughter Usha.* Still more famous than Raja Ban was his contemporary, Narak, who ruled in Gauhati, and is famed in Hindu mythology as the guardian of Kamakhya and the conqueror of Ghatak, the king of the Kirats. He is said to have been the son of the earth by Vishnu, and for a long time enjoyed the favour of his celestial progenitor. But success turned his head, and his pride and waywardness at length gave such offence to Vishnu, that he was slain by him in the incarnation of Krishna. His son Bhogdatta is renowned for his zeal in propagating the Hindu religion, and is said to have given his daughter in marriage to Duryodhana, and to have fallen in the battle of Kurukshetra, fighting on the Kauravas' side. Later on, we find a king of Kamarupa sending a present of elephants to the hero of the *Raghuvansa*, and again when Hiouen Tshang visited India, Kamarupa is mentioned as a country famous for these animals. Kamarupa is described in the *Jogini Tantra* as extending from the Karatuya to the eastern boundary of the Brahmaputra Valley.† Its ancient divisions were Kampith, from the Karatuya to the Sankosh, Ratnapith, from the Sankosh to the Rupohi in the present district of Kamrup, Suvarnapith, from the Rupohi to the Bhoroli, and Saumarpith, from the latter river to the eastern end of the valley. The name Kamarupa, however, varied greatly in its territorial signification from time to time. Between these legendary notices of Assam and the beginnings of what may be called history, a gap of about a thousand years intervenes; but the Hindu religion would seem to have existed uninterruptedly during

Assam proper—The ancient Kamarupa.

* The adventures of Krishna and the life of Narak are described in Chapters 36-42 of the *Kalika Puran*, and on page 81 of the *Jogini Tantra*. *Raghuvansa*, IV—81.

† *Jogini Tantra*, page 76.

Physical and Political Geography. this interval at various points in the valley, whether professed by pure Aryans, or as is more likely, by communities of mixed descent, or by converted non-Aryan tribes. A Sudra king, named Debeswar, reigned in Gauhati, a place which the proximity of the sacred hill Nilachal has always rendered notable. The temple of Kainakhya on its summit is of comparatively modern origin, but rests on foundations reputed to be as old as the first introduction of the Hindu religion into the valley of the Brahmaputra. In Tezpur we find Raja Nagasankar, who built the temple of Biswanath, and whose descendant, Jongal Balahu, was defeated in battle by the Kachari Raja, near Roha on the Kopili.*

Political.

When Hiouen Thsang visited the country in 640 A.D., a prince named Kumar Bhaskara Barman was on the throne. The people are described as being of small stature, with dark yellow complexions; they were fierce in appearance, but upright and studious. Hinduism was the State religion, and the number of Buddhists was very small. The soil was deep and fertile, and the towns were surrounded by moats with water brought from rivers or banked up lakes.†

Pal rulers.

66. Subsequently, we read of Pal rulers in Assam. It is supposed that these kings were Buddhist, and belonged to the Pal dynasty of Bengal. The latter supposition is strengthened by the recent discovery at Benares of a copper plate, on which is inscribed a deed of gift of some land in the neighbourhood of Pragjyotisha (Gauhati) by Kumara Pal, son of Rama Pal and grandson of Vighraha Pal, the name of the two latter being synonymous with those of two of the later kings of the Bengal line of Pals.‡ The fact that Deva Pal (who ruled from about 895 to 915 (A.D.) conquered Kamarupa§ furnishes another reason for supposing that the Assam Pals were a branch of the royal family ruling in Bengal, even if they were not lineal descendants of that dynasty. It should, however, be noted that "Pal" was not an uncommon title at the period under discussion; it was the designation of many of the Baro Bhuiyas, and was also borne by an Aryan dynasty reigning over Kundilya, or the country about Sadiya.

Khyen dynasty.

67. After the fall of the Pal dynasty, the Khyen tribe under Niladhvaj rose to power, and thus became worthy of the attention of the Brahmans.¶ Niladhvaj became a Hindu, and ordered that his caste should thenceforth be known as "High Sudra." He was succeeded by his son Chakradhwaj, who was followed by Nilambar, the last king of this line. Nilambar quarrelled with his councillor, a Brahman named Suchi Patra, and the latter fled to the Nawab of Gaur, and persuaded him to invade the country. The result was Husan Shah's invasion, and the fall of the capital, Kamatapur, in 1498 A.D.¶¶ The remains of this old city are still traceable, near the Dharla, in the State of Koch Bihar.**

Baro Bhuiyas.

68. Although the whole of Kamarupa appears from time to time to have been united into one kingdom under some unusually powerful monarch, it was more often split up into numerous petty States, each of which, under its own chief, was practically independent of the rest, and this was once more the condition of the country after the defeat of Nilambar. About this time, two brothers, Chandan and Madan, ruled for a few years at Maralavas, some miles north of Kamatapur,†† and the twelve chiefs, known as the Baro Bhuiyas, were exercising sovereign rights in Kamrup and Goalpara.

The settlement of the Bhuiyas in Assam is detailed in the *Guru Charitra*, in which work it is said that they were introduced by a king named Durlabh Narayan, who appears to have held sway in Goalpara and Kamrup, but whose lineage is still uncertain. This king engaged in war with a Hindu prince, who called himself Gaureswar, or "the ruler of Gaur." Durlabh was victorious, and on the conclusion of hostilities obtained seven families of Brahmans and seven of Kayasthas under twelve acknowledged heads, the chief of whom was a Kayastha, named Chandibar, *alias* Debidas. These people were settled by Durlabh Narayan in the country between Hajo and the Bornadi, and soon became powerful feudatories. The date assigned to their advent in Assam corresponds to the year 1220 A.D.††† Their leader Chandibar was the lineal ancestor of the celebrated Assamese religious reformer Sankar Deb.

* Gunabhiram's *Asam Buranji*, page 48.

† Beal's "Buddhist Records of the Western World," Volume II, page 196.

‡ This copper plate, which bears a date equivalent to 1105 A.D., was deciphered by Professor Venis of the Government Sanskrit College at Benares.

§ "Journal of the Asiatic Society of Bengal," 1878, page 407.

¶ Gunabhiram's *Asam Buranji*, pages 52-54.

¶¶ The Musalman accounts of the fall of Kamatapur have been reproduced by Blochmann in the "Journal of the Asiatic Society of Bengal" for 1872, pages 79 and 336, and 1874, page 281.

** The ruins are described by Buchanan Hamilton, whose account is reproduced in Dr. Hunter's "Statistical Account of Koch Bihar," page 362.

†† Hunter's "Statistical Account of Koch Bihar," page 407.

††† This seems too early. Chandibar was Sankar Deb's great-great-grandfather, and we have every reason for believing that the tradition that Sankar Deb was born in 1440 A.D. is approximately correct. Allowing twenty-five years to a generation, it would seem that Chandibar could not well have come to Assam before 1300 A.D. at the earliest.

69. Nearly three centuries before the fall of Kamatapur, an event occurred at the eastern extremity of the valley, which was destined to change the whole course of Assam history.* This was the invasion of the Ahoms. The Ahoms were Shans, from the ancient Shan kingdom of Pong, whose capital, Mogaung, still exists in the upper portion of the valley of the Irrawaddy. A quarrel as to the right of succession to the throne is said to have been the cause of the secession of Chukapha, one of the rival claimants, who, after wandering about the country between the Irrawaddy and the Patkoi mountains for some years, at length crossed the range and entered Assam with a small following. This was in the year 1228 A.D. The Ahoms found the country into which they descended peopled by small settlements of Morans and Borahis, people of the Bodo race, whom they had no difficulty in subduing. There was, however, a Chutia kingdom of considerable power in the back-ground, which had absorbed the ancient Pal dynasty of Sadiya, and in so doing had adopted the Hindu religion, and imported an Aryan strain into the royal blood by the marriage of the Pal king's daughter with the Chutia prince who succeeded him. The Chutia dynasty at that time reigned at Sadiya and at Rangpur in the Sibsagar district, but their dominions did not extend uninterruptedly between the two places, nor did they reach very far back towards the southern hills, and the Ahoms consequently had room in which to develop themselves, for a considerable time, before coming into collision with the actual possessors of Upper Assam. Within the narrow limits of a territory corresponding to the south-eastern portion of Lakhimpur and part of the Sibsagar district, the Ahom kings succeeded each other with great regularity, governing through the means of their chief officers of State, whose names and the dates of their appointments are duly chronicled in the native histories of Assam, together with the names of the kings and their dates of accession. We read that in 1350 A.D. the Chutia king invited his Ahom neighbour to a boat race on the Safrai river, and there treacherously captured and murdered him; but the final struggle between Ahom and Chutia for the supremacy of Upper Assam did not take place until a century and a half later. Meanwhile, the Ahoms, extending their power along the south bank of the Brahmaputra, drove the Kacharis back to the Kopili and Dhansiri Valleys, and thus touched the Koch power on the west, as they touched the Chutia power on the north-east. The three powers between which the contest for the Assam Valley lay were the Koch, the Ahom, and the Chutia.

*Physical and
Political
Geography*
Political.
The Ahoms.

70. We have seen that, after the fall of Nilambar, the eastern portion of Kamarupa was split up into numerous petty States, each of which was ruled by its own chief. Amongst these, the Koch kings rapidly forced their way to the front.† The legend runs that Hajo Koch had two daughters, Hira and Jira, whom he married to Haria Mandal, a Mech. Hira was an incarnation of Bhagavati, and was visited by Siva in the guise of Haria Mandal. The offspring of this intercourse was a son, Bisu, who consolidated the power of his tribe, and defeated the Baro Bhuiyas, who had become powerful during the reign of Nilambar. He became a Hindu, taking the name of Biswa Singh, and imported Baidik Brahmans from Sylhet in the place of the Kalitas, who were previously the priests of his tribe. He made an abortive attempt to invade the country of the Ahoms, but was more successful in the internal management of his kingdom. He settled the different offices of State, and established his army on a secure basis. During his reign, the Ahoms attacked the Chutias, and, after several campaigns of varied fortune, defeated and slew the Chutia king, seized his capital, and overthrew the Chutia dominion in Upper Assam for ever. His son, Nar Narayan, succeeded him about 1528 A.D., and at once commenced a series of expeditions against the neighbouring powers. He defeated the Ahoms, and made them tributary to him; and his brother Sukladhwaj, *alias* Silarai, subsequently conquered the kings of Hiramba (Cachar), Jaintia, and Sylhet, but was defeated and made prisoner by the Musalman ruler of Gaur. Silarai's son, Raghu, was adopted by Nar Narayan as his successor. Then Silarai died, and Nar Narayan begat a son of his own, named Lakshmi, whereupon Raghu, fearing that he would lose the succession, broke out in rebellion. The armies met, but a peace was concluded without bloodshed; the kingdom was divided into two parts, Raghu taking the portion east of the Sankosh, while the part west of that river was reserved for Nar Narayan's son Lakshmi. This division of the kingdom took place about 1581 A.D.

*The
Kings.* Koch

* The above account of the Ahoms is taken from Kasinath Tamuli Phukan's *Asam Buranji*, which was compiled about 1840 A.D. under the orders of Raja Purandar Singh. The Ahoms appear to have possessed the historical faculty to a very considerable extent, and many of their leading families maintained chronicles of important events. Our information regarding Ahom history would have been much fuller than it is but for an act of literary iconoclasm in the reign of Rajeswar Singh (1751-1768), when many of these family histories were destroyed, owing to some remarks adverse to the Prime Minister having been made in a history produced by Numali Bar Phukan.

† The story as related here follows the *Bangsabali* of Raja Lakshmi Narayan Kuar of Howli Mohanpur. This *Bangsabali* is inscribed on oblong strips of *Sachi* bark, each strip being illustrated. It is supposed to have been written under the orders of Raja Sumudra Narayan about 1806 A.D. This version differs in some respects from accounts given elsewhere, but seems, on the whole, to be the most trustworthy narrative available.

Physical and
Political
Geography.

Political.
Musalman in-
vasions.

Raghu was succeeded by his son Parikshit, who fought with and defeated Lakshmi. The latter then invoked the aid of the Emperor of Delhi, by whose troops the former was in his turn defeated and made prisoner. His brother, Balit Narayan, fled to the Ahom Raja Swarga Narayan, who sent an army against the Musalmans, and drove them across the Karatuya. From that time, the independent rule of the Koch kings ceased. Balit Narayan became a tributary of the Ahoms, and the western branch succumbed to the Musalmans.

71. The Musalman invasions of the Brahmaputra Valley all bear the character of temporary success due to superior arms and discipline, and ultimate failure induced by the unfavourable nature of the climate, ignorance of the country, want of communications, and the impossibility of repairing losses by reinforcements.* The first expedition of the kind was despatched after the overthrow of the kingdom of Kamatapur, under a leader recorded in Assamese history as Turbuk, who fought his way as far as Kohabar, and was then defeated and destroyed. A second invasion occurred about the middle of the sixteenth century. The leader of this expedition was Kala Pahar, an apostate from Hinduism, whose chief object appears to have been the destruction of Hindu temples, and to him is ascribed the spoliation of the old temples at Hajo and Kamakhya. The next invasion was that already referred to, in which Parikshit was overthrown, and this was followed later by another (in 1637) in which Balit Narayan was slain, and the rule of the Musalmans was extended as far as Gauhati. The last and greatest invasion was that undertaken by Mir Jumla in 1660-62. He captured the capital of the Ahoms, and is said to have sent word to the Emperor that the next campaign would carry him to the confines of China; but his force melted away in the rains, and he was obliged to retreat with the loss of all his guns. The ultimate result of this disastrous invasion was to strengthen the hold of the Ahoms on Lower Assam, and their rule was shortly afterwards extended to Gauhati, at which place an Ahom Governor was stationed, until near the end of the eighteenth century, when it became the headquarters of the Ahom kings.

Fall of the
Ahom king-
dom.

72. It is said that the Ahoms brought no women with them in their invasion and took to wife girls of the country. This may explain their loss of individuality as a race of Burmese origin. At the present time few of them retain any knowledge of their own language. They had been largely converted to Hinduism before the last Muhammadan invasion. The reigning monarch became a convert in 1655 A.D., and adopted the name of Jayadwaja Singh, and henceforward all the Ahom kings bear both Ahom and Hindu names. There were now no rivals to the Ahoms in the Assam Valley. The Kacharis had been defeated just before Mir Jumla's invasion, and the Rajas of Darrang and Bijni had become tributary to the Ahom power on the fall of the Koch monarchy. In 1695, Rudra Singh, the greatest of the Ahom kings, ascended the throne. His dominions comprised the whole of the Brahmaputra Valley, so far as it was inhabited, except a strip of submontane territory claimed by the Bhutias. In 1780, Gaurinath Singh succeeded to the throne. His reign was marked chiefly by a formidable rising of the Moamaras, a powerful religious sect. Gaurinath, being hard-pressed, applied in his extremity to Mr. Rausch, a salt farmer at Goalpara. Mr. Rausch, it is said, sent a body of 700 sipahis to Gaurinath's aid, but these sipahis were cut to pieces by the Moamaras. The Raja of Manipur also sent an armed force to Gaurinath's assistance, but the Manipuris were likewise defeated. At this juncture, the king of Darrang, Krishna Narayan, taking advantage of Gaurinath's distress, made an attack upon Gauhati, whither Gaurinath had retired. Gaurinath again applied to Mr. Rausch for help, and also sent a deputation to Calcutta. At the close of 1792 the British Government sent a detachment, under the command of Captain Welsh, to assist Gaurinath.† Captain Welsh defeated Krishna Narayan, put down the Moamaria insurrection, and reduced the whole valley to obedience. He was, however, recalled in 1794. A few months later Gaurinath died. He was succeeded by Kamaleswar Singh, who was a mere puppet in the hands of his minister. He died in 1809, and was succeeded by his brother, Chandra Kanta Singh. The reign of this prince was marked by the appearance of the Burmese in Assam. Chandra Kanta, having quarrelled with his minister, the Bura Gohain, applied for aid to the Burmese. The Burmese entered Assam with a force with which the Assamese were utterly unable to cope. Shortly afterwards, however, the Burmese retired, when the Bura Gohain deposed Chandra Kanta and set up Purandar Singh. Chandra Kanta again applied to the Burmese, who sent an army and reinstated him. In 1819, Purandar Singh applied for aid to the British Government, but was refused. Chandra Kanta, however, quarrelled with the Burmese,

* The accounts of these invasions, furnished by Musalman historians, have been collected by Blochmann in an article in the "Journal of the Asiatic Society of Bengal" for 1872.

† A full account of Captain Welsh's expedition has been given by Sir J. Johnston in a pamphlet published by the Foreign Department some years ago.

who finally expelled him from Assam, and he sought refuge with the British officers at Goalpara. But at this juncture matters had come to a crisis between the British and the Burmese, and on the 5th March 1824 war was declared against Burma.* A British force, advancing with a gunboat flotilla, conquered the valley as far as Koliabar, and during the next cold season completed the subjugation of the rest. Finally, on the 24th February 1826, the Burmese, by the treaty of Yandaboo, ceded Assam to the East India Company.

*Physical and
Political
Geography.*
Political.

73. For some time after the conquest, it was still doubtful whether the Company would retain in their hands or not the province they had won. Mr. Scott, the Commissioner of North-East Rangpur, administered the country, Captain White being appointed in 1827 to assist him in Lower Assam, and Captain Neufville in 1828 to have charge under him of Upper Assam. The Moamarias, who had contributed so largely to the downfall of the Ahom power, and whose country (known as Matak) was the present district of Dibrugarh south of the Brahmaputra, were left under their own ruler, styled the Bor Senapati, who in May 1826 executed an agreement of allegiance to the British Government. And the Khampti chief of Sadiya, called the Sadiya-khoa, on the 15th of the same month, was confirmed as the Company's feudatory in possession of that district.

*Commence-
ment of
British rule.*

At first, the civil and criminal duties of Assam Proper were performed by councils of the Assamese gentry, called *panchayats*, of which there were two or three in each district of the province. In judicial cases Captains White and Neufville were both Magistrates and Judges, trying the accused with the assistance of a *panchayat*, but referring all heinous cases, with their opinions, to Mr. Scott for final judgment.†

34. In 1833 the districts of Sibsagar and Lakhimpur north of the Brahmaputra were placed under the administration of Raja Purandar Singh, who executed a treaty binding himself to administer the country upon the principles of justice established in their territories by the East India Company, to act according to the advice of the Political Agent stationed in his principality, and to pay an annual tribute of Rs. 50,000. Thus, of Assam Proper there remained British in 1833 only the districts of Kamrup, Nowgong, and Darrang (which then only extended to and included Bishnath, beyond which was Lakhimpur, subject to Purandar Singh).

*Rule of Pu-
randar Singh
in Upper
Assam.*

75. In 1835, Act II of that year was passed, which placed all functionaries in British Assam under the control and superintendence, in civil and criminal cases, of the Sadr Court, and in revenue cases under that of the Board of Revenue, Lower Provinces, and further declared that such superintendence should be exercised in conformity with the instructions which these functionaries might receive from the Government of Fort William in Bengal. Under this Act, rules for the administration of Assam were framed by the Commissioner, revised by the Sadr Court, and finally issued by the Court with the sanction of Government in 1837. They applied not only to Assam Proper, but also (*vide* the next section) to Goalpara. These rules consisted of extracts from the Bengal Regulations of all that was considered at that time suitable to the circumstances and necessary for the proper administration of Assam. They were, however, merely rules of judicial procedure. They declared what courts, civil and criminal, should be established, and the mode of appointing officers thereto; they declared the jurisdiction of these courts, and provided for appeals; they prescribed a period of limitation for the institution of civil suits and a procedure to be followed in mortgage cases; they provided also for the appointment of *vakils*, the establishment and remuneration of process-servers, and the keeping of judicial registers and records. They established in each district a summary suit court, to be presided over generally by the Assistant in charge of the district (now called the Deputy Commissioner) in his capacity of Collector; they also established an office for the registry of deeds. Lastly, in all cases not specially provided for in the rules, officers were directed to conform, as nearly as the circumstances of the province would permit, to the provisions of the Bengal Regulations, and in all doubtful matters of a judicial nature to refer for instructions to the Sadr Court. The Police Law of Assam was at the same time declared to be Regulation XX of 1817 with certain modifications.

*The Assam
Code.*

In 1839, a few supplementary civil rules were issued by the Sadr Court with the sanction of Government, the effect of which was to give to Junior Assistants (now called Assistant Commissioners) and Sub-Assistants (now called Extra Assistant Commissioners) a greater share in the judicial administration of the country than was

* A full account of the Burmese war, so far as Assam is concerned, will be found in Robinson's "Descriptive Account of Assam," published in 1841, pages 180-188.

† The information in this and the next paragraph is taken from Robinson's "Descriptive Account of Assam," pages 207-211.

*Physical and
Political
Geography.*

Political.

*Resumption
of Upper
Assam.*

allowed to them by the rules of 1837; and in the same year an officer, styled Deputy Commissioner (whose designation was in 1861 changed to that of Judicial Commissioner), was appointed to relieve the Commissioner of his duties as Civil and Sessions Judge.

76. In October 1838, the territories which had been placed in charge of Purandar Singh were resumed by the Government of India. The Raja had fallen deeply into arrears with his tribute, and declared himself unable any longer to carry on the administration. At first, the officers placed in charge of this tract acted under the direct orders of the Government of India in the Foreign Department; but in July 1839 a proclamation was issued by the Governor General in Council annexing the territory to Bengal, dividing it into two districts, Sibsagar and Lakhimpur, and directing that these two districts should be administered in the same manner as the districts of Lower Assam. In August 1842 another proclamation was issued, annexing the territory of the Bor Senapati, who had died in 1839, and whose son refused to accept the management of the country on the terms offered to him. Sadiya, the district of the Khampti chief, was, by the same proclamation, incorporated with the rest of the province. This place had been the scene of a rising of the Khamptis in 1839. They treacherously attacked the station of Sadiya, and killed the Political Agent, Colonel White. The combination was not broken up and dispersed till many lives had been lost. The son of the Sadiya-khoa, for his complicity in this rebellion, was exiled with his followers to Narayanpur, on the Dikrang, in the west of the Lakhimpur district, where the colony still exists.

Thus, from 1842, the whole of Assam Proper was under the same system of administration, save that in Lakhimpur, including Matak and Sadiya, an establishment of *panchayat* courts was, for special reasons, maintained, to which persons of rank and influence in the district were appointed, without much regard to their judicial qualifications. This special *panchayat* system was abolished in 1860.

*Extension of
general laws
to Assam.*

77. In that year, Act VIII of 1859 (the Civil Procedure Code) and the Limitation Act (XIV of 1859) were extended to the whole of Assam Proper and Goalpara. In 1861 the Criminal Procedure Code of that year was extended to the province, and in 1862 the Police Act (V of 1861). In 1862, also, the Penal Code came into force in the province without special extension. By these measures the Assam Code of 1837 (which had been meanwhile revised in 1847) was superseded. In 1861 the designations of the officers serving in the province under the Commissioner were changed, with the sanction of the Government of India, as follows: the Deputy Commissioner became Judicial Commissioner, the Senior or Principal Assistants Deputy Commissioners, the Junior Assistants Assistant Commissioners, and the Sub-Assistants Extra Assistant Commissioners. Side by side with these officers, there existed in the province a separate judicial establishment, consisting of one Principal Sadr Amin, two Sadr Amins, and ten Munsifs. In March 1872 this branch of the service was entirely abolished; several of the Munsifs were created Extra Assistant Commissioners, and the ordinary district staff were invested with civil judicial powers, the Deputy Commissioner becoming Subordinate Judge and the Assistant and Extra Assistant Commissioners Munsifs. This arrangement is substantially that which now exists.

*Goalpara.
Early history.*

78. The Goalpara district consists of two very distinct portions: the permanently-settled part, comprising the three thanas of Goalpara, Dhubri, and Karaibari; and the temporarily-settled part, called the Eastern Duars. The first tract was originally a portion of the district of Rangpur, and, as such, was included in the province of Bengal, which, by the Mogul Emperor's *farman* of the 12th August 1765, became part of the dominions of the East India Company. Like the neighbouring district of Kamrup, this tract was inhabited chiefly by Koches, Meches, or Kacharis. It formed part of the dominions of the Koch dynasty, the rise and fall of which have already been described, and passed out of their hands on the defeat of Parikshit, when it became a Musalman province.

On its southern border, the Goalpara district marches with the Garo Hills, and the thana of Karaibari, which stretches southwards from Dhubri, is almost wholly composed of hilly country inhabited by Garos. These mountaineers were, in the early period of our rule, a terror to the people of the plains; and the chiefs of the border country, who had to restrain their incursions, were allowed in return for this duty to hold their estates at a very light revenue. Thus, it happened that when the decennial settlement of Bengal was made, the few great zamindars among whom the permanently-settled portion of Goalpara was divided were assessed at an almost nominal amount. It is somewhat doubtful whether this assessment was ever formally converted into a permanent charge; but these estates have uniformly been treated as covered by the permanent settlement of Bengal.

79. Shortly after this settlement, however, it became manifest that the zamindars of the plains country, instead of proving guardians of the peace of the border, were rather likely, by their oppressions and exactions, to foster strife with the Garos of the hills, whose raids were constantly provoked by the treatment they received from the landholders to whose markets they resorted. In order to check these exactions, and to promote the growth of order and civilisation amongst the hill people, it was deemed necessary to place this tract under a special form of administration. Then in 1822, a Regulation (No. X) was passed by the Governor General in Council, exempting the three thanas of north-eastern Rangpur from the operation of the General Regulations, and placing them under the control of a Special Civil Commissioner. Mr. David Scott was the first official entrusted with the charge; and he took into his own hands the collection of the rents claimed by the zamindars from the Garo villages, paying over to them the proceeds, after deducting the costs of collection and administration. At the same time, the duties levied by the zamindars on the hill produce (chiefly cotton) were commuted to an annual payment by Government, and abolished, Government recouping itself by imposing a special house assessment upon the Garo villages.

*Physical and
Political
Geography.*

Political.

*Regulation X
of 1822.*

80. When Assam Proper was conquered from the Burmese in 1826, Mr. Scott became Commissioner of the new province, with which Goalpara was incorporated as a separate district; and from that date until 1866 it remained a portion of Assam, and was administered on the same system as the rest of the province.

*Incorporation in Assam
Proper.*

81. In 1866, the Eastern Duars, a thinly-peopled but extensive tract along the base of the Himalayas north of permanently-settled Goalpara, which had previously been under the rule of the Deb Raja of Bhutan, was annexed by the British Government on the conclusion of the Bhutan war. For some little time these Duars were a separate district; but in 1867 the Bengal Commissionership of Koch Bihar was formed, and from the 1st January of that year the Eastern Duars were joined to Goalpara, and the entire district was included in that Commissionership, the Commissioner having the powers of a Civil and Sessions Judge within his jurisdiction. In October 1868, the judicial administration of Goalpara and the Garo Hills was taken away from the Commissioner of Koch Bihar, because of the inconvenient distance of this tract of country from his headquarters, and placed in the hands of the Judicial Commissioner of Assam. The executive control, however, remained, as before, with the Commissioner of Koch Bihar. In 1869, the Garo Hills were formed into a separate district by Act XXII of that year, which repealed Regulation X of 1822, but still exempted the hills from the operation of the General Regulations. In the same year the Eastern Duars were similarly deregulationised by Act XVI of 1869.

*Transfer to
Koch Bihar.*

Finally, when the Chief Commissionership of Assam was formed in February 1874, the district of Goalpara and the Eastern Duars and the district of the Garo Hills were retransferred to Assam.

82. The early history of Cachar, or Hiramba, is extremely obscure. Although it bears the same name as a section of the Bodo population of Assam, the part of the district south of the Barail was not until some two hundred years ago in the possession of the race now called Kacharis. It would appear that it belonged to the kingdom of Tippera, or Tripura, since it is stated to have been acquired by the Kachari king, who had his capital at Maibong, as a dowry upon his marriage with a Tippera princess. The Tipperas, however, are undoubtedly, as is proved by their language, themselves of the Bodo stock, and very near kinsmen, not only of the Kacharis of North Cachar, but also of those of the Brahmaputra Valley and of the Garos of the Garo Hills. Their true history, like that of the Kachari kings of Dimapur, Maibong, and Khaspur, has been lost in the fugitive memory of a barbarous people, unacquainted with letters, and has been further darkened by the fictitious genealogies which have been invented for them by Brahman priests on their reception within the pale of Hinduism.

*Cachar—
Early history.*

It is, however, certain that the last native king of Cachar was the descendant of a line of princes who came originally from the Assam Valley. Their deserted capital, Dimapur, on the Dhansiri river, beneath the Angami Naga Hills, contains some very striking monuments, the meaning and purpose of which have much perplexed explorers, and a number of large and fine tanks. From this site, now buried in dense jungle, the Kachari kings were forced, by the aggressions of the Ahoms and of the Angami Nagas on the south, to remove into the interior of the hills, and took up their abode at Maibong, on the Mahur river. While settled there, about the beginning or middle of the seventeenth century, the Kachari king married a daughter of the Tippera Raja, and received the valley of Cachar as her dowry. And some time between 1700 and 1750 the court was transferred from the hills, across the Barail, to Khaspur, on the Madhura river in the plains. Here the Kachari rulers found themselves in presence of an already settled population of

Physical and
Political
Geography.

Political.
Taken under
British pro-
tection.

Hindus and Musalmans from Sylhet, who had overflowed from that district into the valley. The process of Hinduisation had probably already commenced at Maibong, at least among the royal family and the court, if not among the Kachari population. At Khaspur it proceeded rapidly; and in 1790 the formal act of conversion took place, the Raja Krishna Chandra and his brother, Govind Chandra, entering the body of a copper image of a cow, and emerging therefrom as Hindus and Kshatriyas. A genealogy of a hundred generations, reaching to Bhima, the hero of the *Mahabharata*, was composed for them by the Brahmans, only the last nine or ten names in which have probably any claim to represent real personages.

83. In the beginning of the present century the valley of Cachar became the scene of a struggle for supremacy between the Manipuri brothers Marjit, Chaurjit, and Gambhir Singh, who had been driven from their own country by the Burmese. Krishna Chandra had died in 1813, and Govind Chandra succeeded him. The Manipuri invaders speedily overran the country, and set at naught the feeble authority of the Kachari king. In 1823 Marjit held the Hailakandi valley, and Gombhir Singh the rest of South Cachar. The Burmese were then in Assam, and as lords of Manipur (which they had conquered from Marjit in 1819), threatened to annex Cachar. This the British Government, seeing the danger which it would cause to Sylhet, decided to prevent. Negotiations were first entered on with a view to an alliance with the Manipuri brothers. These overtures fell through, and it was resolved to take up the cause of Govind Chandra, who was, with the Raja of Jaintia, taken under British protection. The Burmese armies, which had advanced both from Assam and Manipur, were driven out, and Govind Chandra was replaced on the throne. A treaty was executed on the 6th March 1824, by which the Raja placed himself under British protection, and agreed to pay a tribute of Rs. 10,000.* Govind Chandra's reign after his restoration was very short; he was assassinated in 1830, and, as he left no heir, either natural or adopted, the country was annexed by proclamation on the 14th August 1832.

British rule.

84. In its subsequent history Cachar much resembles Assam. Act VI of 1835 (like Act II of that year in the Assam Valley) placed it under the control of the Sadr Court and Board of Revenue. It was administered from the first by a Superintendent, who in 1833 was vested with the powers of a Magistrate and Collector; and in the same year it was transferred from the supervision of the Commissioner of Assam to that of the Commissioner of Dacca. It differs from Assam in never having had any special code of administrative rules drawn up for it; the officers in charge applied "the spirit of the Regulations" in dealing with judicial matters. The Civil Procedure Code and Limitation Act were formally extended to the district in 1859; in 1862 the Criminal Procedure Code was extended, and the Penal Code came into force. A special peculiarity of the Cachar revenue system, which is a survival from native rule, will be noticed in section 4 of this Chapter.

Since Cachar became British territory, the only important political events which have marked its history have been the Lushai raids of 1849 and subsequent years, which will be discussed in the paragraph dealing with the Lushais. In the Mutiny of 1857 the sepoy of the 34th Native Infantry, who mutinied in Chittagong in November of that year, were met in Cachar, and were defeated and dispersed by the Sylhet Light Infantry.

Sylhet.

85. Of Sylhet under its early Hindu rulers hardly anything is known. It is believed that its native population is largely made up of non-Aryan tribes, probably of the same race as the Bodo Tipperas who now inhabit the hills on its southern margin. The Rajas who held the country at the date of the Musalman conquest, the chief of whom was Gaur Govind, who ruled the south and centre, while the Raja of Laur, under the Khasi Hills, governed the north, had evidently, from their names, been taken up into Hinduism, and the country colonised by Brahmans, who gradually extended their proselytising operations. The district was conquered by the Muhammadan kings of Bengal in 1384 A.D., the invaders being led by a spiritual chief named Shah Jalal, whose shrine at Sylhet is still famous. Laur and Jaintia, under the hills, retained their independence during the rule of the Bengal kings. After the absorption of that province in the Mogul Empire under Akbar, Laur became a dependent principality. The last Hindu Raja of Laur embraced Muhammadanism at Delhi in Aurangzeb's reign. Todar Mal assessed Sylhet (excluding Jaintia, which was never conquered by the Moguls, and Laur) at Rs. 1,67,040, and it was ruled continuously from that date, until it passed into the hands of the East India Company with the rest of Bengal in 1865, by a succession of *amis* subordinate to the Nawab of Dacca.

* It is commonly asserted that the Burmese were driven out of Cachar in the course of the first Burmese war. These events, however, occurred before the formal declaration of war (5th March 1824).

The district was included in the decennial settlement of Bengal, which afterwards became permanent in 1793, but the operation of assessment was conducted in an exceptional manner, each holding being separately measured and settled upon fixed rates. Thus, in Sylhet, the permanent settlement assumed a form which it bears nowhere else except perhaps in Chittagong. It was the policy of the Collector, Mr. J. Willes, to put aside the *chaudhuris* or zamindars, who elsewhere obtained settlement, and to deal direct with the better class of raiyats or *mirasdars*. The result is that the settlement is in great part a permanent *raiyatwari* one, the area which each holding should contain being (so far as the records have been preserved and can be trusted) accurately known. All land not included in the permanent settlement, or not subsequently settled in perpetuity, is held on temporary leases.

*Physical and
Political
Geography.*
Political.

The history of Sylhet since the permanent settlement has not been eventful. The depredations of the Khasis on the north were brought to a close by the occupation of the station of Cherrapunji in 1828; and those of the Lushais on the south were stopped, so far as Sylhet is concerned, by the expedition of 1871-72.

86. The Raja of Jaintia, a Chief of Khasi lineage, was found by us, on the annexation of the Sylhet district, in possession of a tract of plains country lying between the town of Sylhet and the Cachar border and measuring about 450 square miles, in addition to his hill territory stretching from the foot of the hills overlooking the Surma Valley to the Kalang river in Nowgong. At the same time that Cachar was taken under British protection, in March 1824, a treaty was made with Ram Singh, the Raja of Jaintia, by which he acknowledged allegiance to the Company, and promised to aid in the military operations then commenced against the Burmese in Assam. In 1832 four British subjects were seized by Chattar Singh, chief of Gobha, under the orders of the heir-apparent, Rajendra Singh, and three of them were sacrificed to Kali, the tutelary goddess of the Raja's family. One escaped, and gave information of the outrage, which led to a demand by the British Government for the surrender of the culprits. Negotiations went on for two years without any result. In November 1832 Ram Singh died, and Rajendra Singh succeeded him; and it was finally resolved to punish this atrocious crime (which had been preceded by similar outrages in 1821, 1827, and 1832) by dispossessing the Raja of his territory in the plains, and confining him thenceforth to the hilly tract. On the 15th March 1835 formal possession was taken of Jaintiapur, and the annexation of the plains territory to Sylhet proclaimed by Colonel Lister; in April the district of Gobha was similarly annexed to Nowgong in Assam. Upon this, the Raja declared himself unwilling to continue in possession of his hill territory, over which he had but little control, and it thus also became included in the Company's dominions. The population of the plains of Jaintia, like that of Cachar, is made up of Sylhet raiyats, with but a slight leaven of settlers from the hills.

Jaintia.

87. The history of the Garo Hills has already been touched upon in the account given of the Goalpara district, in which, up to 1866, they were, so far as British administration extended, included. These hills, peopled by a wild race nearly akin to the Meches or Kacharis of the plains, were surrounded on all sides except the east by the estates of the great frontier zamindars or *chaudhuris* of Rangpur and Mymensingh. The Garos were in the habit of resorting to the markets in the plains estates of these zamindars for the sale of their cotton and the purchase of the supplies they needed; and the police of the border was maintained, and taxation levied on the hill produce, by the zamindars by means of *barkandazes* whom they established at these marts. The chief of these *chaudhuris* were those of Mechpara, Kalumalupara, and Karaibari in Rangpur, and Sherpur and Shushang in Mymensingh. The Garos, like most of the wild tribes of the north-east frontier, lived in a state of constant internecine warfare, and it was a necessary ceremony at the funeral of a great chief to bury with him as many human heads as could be procured for the purpose, and, if possible, to put to death on the occasion living captives. The border was thus vexed by constant raids for the purpose of obtaining heads or prisoners; and the exactions of the plains zamindars at the submontane *hats* likewise furnished frequent occasions for quarrel.

*The Garo
Hills.*

Under the Moguls, the *chaudhuris* of the border paid their assessment in elephants, cotton, and *agar* wood to the *faujdar* of Rangamati, midway between Goalpara and Dhubri. After the Company obtained the *Diwani*, a *sazawal*, or contractor, was annually appointed who took the place of the *faujdar*, and made his own arrangements with *chaudhuris*. Until 1787 the revenue of these landlords continued to be paid, as before, in kind. Cash payments were introduced in 1788, and the permanent settlement shortly afterwards followed.

Physical and
Political
Geography.

Political.

Part of
the Garos
brought with
in zamindars'
estates.

88. In 1775 the *chaudhuris* of Mechpara and Karaibari, to avenge some Garo raids of more than usual severity, invaded the hills bordering on their respective estates and entered on a career of conquest. They remained two or three years in the hills, and brought the tribes of a large tract entirely under their control. The zamindar of Karaibari, Mahendra Narayan, was especially successful in establishing his influence over the south-western portion of the hills, and when the Company called his proceedings in question, defied them from his fastnesses. After a long course of warfare with other *chaudhuris* and with the chiefs of the interior, Mahendra Narayan's estates were at last sold by the Company for arrears of revenue, and his influence gradually dwindled.

Mr. Scott's
proposals,
1816.

89. Meantime the raids of the Garos on the plains continued, and in 1816 Mr. David Scott was deputed to report on the best means of preserving the peace of the frontier. He found that at that time the frontier zamindars had for the most part succeeded in reducing a greater or smaller area on their borders to a state of subjection, the largest conquest being those made by Karaibari and Mechpara; beyond these areas thus incorporated in their zamindaris, the *chaudhuris* had so far established their influence that several villages in the interior paid them tribute. Beyond these, again, in the heart of the hills, were the independent or *bemalwa* Garos. Mr. Scott proposed to separate all the tributary Garos (from whom, and from the independent villages beyond, the raids proceeded) from the zamindar's control, and take them under Government management, compensating the zamindars for any losses which they might show that they had sustained; to appoint the chiefs of the villages thus brought under our jurisdiction to be responsible for the peace and the collection of revenue; and to bring the submontane *hâts* under Government control, all duties being abolished there, except upon independent Garos frequenting them. These proposals were approved by Government, and afterwards embodied in Regulation X of 1822, which gave Mr. Scott, who was appointed Special Commissioner, authority to extend British administration over other Garo communities which might be still independent, and exempted the whole tract (together with the district of Goalpara) from the operation of the General Regulations. After the passing of the Regulation, Mr. Scott proceeded to conclude engagements with the independent chiefs, and no fewer than 121 of those living west of the Someswari are said to have entered into terms with him.

Affairs subse-
quent to Re-
gulation X of
1822.

90. Mr. Scott was shortly afterwards called away from his work among the Garos to assume the administration of Assam and the Eastern Frontier generally, and his place was taken by the Principal Assistant of Goalpara, who was aided by a Garo Sarbarahkar with his headquarters at Singhimari, situated nearly opposite the middle of the western face of the hills. For many years the British Government maintained a policy of non-interference with the interior of the hills. The tributary Garos within paid with great irregularity the tribute which they had agreed upon. Raids were frequent, and were followed either by expeditions or by blockade of the submontane markets—measures which were found to be quite ineffectual to stop them. Some little influence was occasionally brought to bear upon the tributary Garos through visits paid to them by the Principal Assistant of Goalpara; but these annual tours were not regularly carried out, as designed by Mr. Scott, and any intermission in them was followed by an increase in the number of raids.

Establish-
ment of a De-
puty Com-
missioner
within the
hills.

91. For all these years it was believed that the climate of the hills was so deadly that no European could survive within them, and that it was impracticable to attempt any establishment of a permanent post in their midst. At last, in 1866, after two expeditions to punish raids on the side of Mymensingh of more than usual atrocity, the Government for the first time resolved to appoint a special officer to the charge of the hills. Lieutenant Williamson was selected for this purpose, and was established on a spur of the Tura mountain, with a special armed police force. Shortly after, in 1869, Act XXII of that year was passed, which enabled the Lieutenant-Governor to make special provision for the administration of the district, and to prevent the collection by zamindars or other persons of tributes, cesses, or other exactions in the hills. By this Act, Regulation X of 1822 was repealed. That Regulation had applied only to North-East Rangpur, afterwards the Goalpara district. The Act of 1869 included Mymensingh, on which side also zamindari influence had been pushed into the hills, and had provoked retaliation by the hillmen.

This experiment proved completely successful. The Deputy Commissioner of the Garo Hills and his police force brought almost instant quiet to the district. Hearty aid was given to him by the Garos, and the headmen, relieved from the dread of retaliatory feuds, at once began to perform their duty, to deliver up offenders, and to enforce the payment of revenue. Raids ceased, and numerous villages, theretofore independent, voluntarily became tributary.

92. In 1870 the survey, which had been carried through the neighbouring Khasi Hills, entered the district, and it was resolved to explore as much of the independent Garo country as was possible in the course of surveying that which acknowledged British authority. During that year no opposition whatever was offered by the independent villages, of which about 60 still remained in the heart of the district; but in March 1871 a survey coolie, who had been sent to clear a station on the top of a hill, was seized by some Garos of Rongmagiri, and was tortured and murdered. This put a stop to survey operations for the time, and in the ensuing cold weather (1871-72) an expedition was led against the offending village. In the summer of 1872 some independent villages raided upon protected Garo villages which had afforded assistance to the expedition against Rongmagiri, and were attacked and occupied by the Deputy Commissioner. It was eventually resolved that the whole of the country which had hitherto been left to its independence should be brought under the same management as the rest; and in the cold weather of 1872-73 three detachments of police, from Mymensingh on the south, from Tura on the west, and from Goalpara on the north, marched through the country which it had been decided to annex. All resistance was easily overpowered, *lashkars* or headmen were appointed, the heads taken in recent raids were surrendered, and peaceful administration was established.

Physical and
Political
Geography.
Political
Subjection of
the last
independent
Garos.

93. Since the expedition of 1872-73, the history of the district has been one of profound peace. In February and March 1881, a slight disturbance took place near Bangalkhata, at the north-western corner of the hills, in consequence of the construction of a road through that tract; but it was speedily suppressed without bloodshed. The whole of the district, with the exception of a small tract of plains land on the north, is now under the exclusive management of the Deputy Commissioner, and is free from the exactions of zamindars, the greater part of whose interests in the area formerly included in their zamindaris or tributary to them have been bought out and extinguished.

Recent his-
tory.

94. The Khasi Hills were first brought into direct relations with the British Government in 1826, after the conquest of Assam.* The chiefs of the Khasi States on the northern border of the hills had gradually, since the decay of the Ahom power in the year 1794, established themselves in the plains of Kamrup in the tracts known as Duars, and were accustomed to pay only a nominal allegiance to the Assam kings. When Assam was acquired by the East India Company, it became an object with Mr. Scott to establish communication through the hills with Sylhet, and while the new administration of Kamrup refused to recognise the right of the Khasi rulers to encroach on the plains of Assam, Mr. Scott was able, by agreeing to allow Tirat Singh, Siem of Nongkhlaio, to rent some lands in Borduar, to induce that chief, and to persuade the other Siems, to permit a road to be made through the hills *via* Cherrapunji, Maoflang, and Nongkhlaio to Gauhati.

The Khasi
Hills.

In 1829, the insolent talk of some native servants belonging to the surveying party who were making the road led to an attack upon the party at the village of Nongkhlaio, and Lieutenants Burlton and Bedingfield, with about fifty or sixty natives, were massacred. This event was followed by a general confederacy of most of the neighbouring chiefs to resist the British, and led to a long and harassing war, in which troops from Assam and Sylhet co-operated. Eventually, Tirat Singh submitted in 1833, and was confined as a prisoner for life in the Dacca Jail. The other chiefs had either before made terms with the British Government, or did so immediately after; and since that date the establishment of a British officer with an adequate military force in the midst of the people, at Cherrapunji, which was abandoned in 1866 for Shillong, has sufficed to maintain the most absolute tranquillity.

The greater part of the Khasi Hills consists of the territories of native chiefs in subsidiary alliance with the British Government; only a few scattered villages have remained British since the conquest of 1833, or have been ceded since then under special circumstances. The people govern themselves through their elected rulers, who are bound to follow the advice of their *darbars*. They pay no revenue to the British Government, but the Siems are required on investiture to confirm the cession to the paramount power of the mines and minerals, elephants, forests, and other natural products of their States, on the condition of receiving half the profits from these sources. All petty crime committed by their subjects is dealt with by the chiefs and their *darbars*, only heinous offences, or those cases in which subjects of different States are concerned, being tried by the district authorities. The people are extremely well-to-do, and make much money by trade with the plains in the valuable staples which the hills produce.

* The Khasis had previously been known only as troublesome marauders upon the plains of Sylhet, where they were much dreaded. During the last century their ravages between 1780 and 1790 are specially mentioned as severe. A line of forts was kept up under the hills to check these incursions.

Physical and
Political
Geography.
Political.
The Jaintia
Hills.

95. It has already been related how, on the annexation of the plains country of Jaintia in 1835, Raja Rajendra Singh declined to retain the hilly portion of his principality, which thus lapsed to the British Government. This tract, inhabited by the same race of mountaineers as the neighbouring Khasi territory, was thereupon placed under the administration of the Political Agent at Cherrapunji. The Jaintia Hills were (and still are) divided into 23 petty districts, 19 of which are in charge of headmen, chosen by the people themselves, called Dollois, and the remaining 4 in that of hereditary Sardars. From 1835 to 1855 the people were left very much to themselves. The Dollois heard all civil cases, at first without exception, and after 1841 up to a certain limit, and all criminal complaints not of a heinous character in which only people of their own villages were concerned. No taxes of any kind were levied throughout the hills, the only contribution required being the annual offering of a he-goat from each village, which had been exacted by the Jaintia Raja. In 1853 Mr. Mills, of the Sadr Court, reported on the district and drew attention to the absence of administrative control in this portion of it. He suggested that a house-tax (which had been proposed by the Political Officer in 1849, and then negatived by Government) should be imposed, and a police thana posted in the hills with a view to check the lawless proceedings of the Dollois. The latter recommendation was carried out, and a thana established at Jowai; but the former, though approved by Lord Dalhousie, remained without effect. In 1858, Mr. Allen, of the Board of Revenue, again reported on the district, and strongly urged Mr. Mills' recommendation that a moderate house-tax should be imposed, but he added that a European civil officer should be stationed in the midst of the tract, to be to the people a visible representative of British authority. The latter of these proposals was neglected, the former was adopted. In 1860 the house-tax was imposed, and within a few months the people were in open rebellion. Fortunately, a large force of troops was close at hand; and before the revolt could make any head, it was stamped out and the villages were awed into apparent submission. After this rising, measures were taken to improve the administration of the Dollois, who were notoriously corrupt, but still no officer was posted to the subdivision.

In January 1862, the people of the Jaintia Hills were again in fierce rebellion. The occasion was the imposition, only a year after the house-tax had been introduced, of the income tax, to which 310 persons in the hills were subjected. This new impost, quickly succeeding the former, roused the deepest resentment among a people who had paid nothing for generations, either to their own Raja or to the British Government, and had been left since annexation entirely to themselves. The suppression of the revolt was long and tedious. Crushed apparently in four months after its outbreak, it again almost immediately burst out afresh; and it was not till November 1863 that the last of the rebel leaders surrendered, and the pacification of Jaintia could be said to be complete.

An English officer has since those events been stationed at Jowai. He is required to make himself acquainted with the Khasi language, and to be able to dispense with interpreters; the administration of the Dollois has been reformed, education (by the agency of the Welsh Mission, established in the Khasi Hills since 1842) has been encouraged, and the country has been thoroughly opened up by roads. The Jaintia Hills are now as secure and peaceable as the neighbouring Khasi States.

North Cachar-

96. North Cachar, the tract of thinly-peopled, low, undulating hills, divided from the valley of the Barak by the range of the Barail, and interposed between the Jaintia and the Naga Hills, has already been briefly referred to in the section dealing with Cachar. When the district was under native rule, during the last years of the reign of Govind Chandra, this portion of it was the scene of a struggle between that prince and one of his officers, named Kacha Din,* who rebelled and endeavoured to establish an independent government in the hills. He was captured and put to death by Govind Chandra, but his son, Tularam, a *chaprasi* in the Raja's service, immediately revived the rebellion, and in 1824 joined the Burmese in their attack on Cachar. After a series of years, during which Tularam successfully held his own, Mr. Scott induced Govind Chandra in 1829 to assign to him a tract of country in the hills, and bind himself not to molest him within these limits. After the assassination of the Raja of Cachar, Tularam was a candidate for the vacant throne, but failed to establish his title. In 1835, he entered into an agreement with the British Government, in which he resigned all the western portion of the tract ceded by Govind Chandra, retaining the tract on the east, bounded on the south by the Mahur river and the Naga Hills, on the west by the Dayang, on the east by the Dhansiri, and on the north by the Jamuna and Dayang.

* Called "Kohee Dan" by Colonel Butler.—Mills' "Assam Report," page clxiii. "Kacha Din" is the name given by Pemberton,—"Eastern Frontier," page 191.

For this he was to pay a tribute of four pairs of elephants' tusks annually, receiving a monthly pension of Rs. 50. Tularam died in October 1850. His sons, Nakulram and Braja Nath, held the country for two and half years more, when the former was killed in the Naga Hills, whither he had led an expedition to avenge an attack on his village of Semkhor; and in 1854 the tract was resumed by the British Government, the surviving members of Tularam's family receiving pensions.

*Physical and
Political
Geography.*
Political.

In 1839, the portion of North Cachar not included in Tularam's dominions was annexed to Nowgong; and in 1853 a separate officer was placed in charge of the subdivision, with his headquarters at Asalu, near the northern skirts of the Barail, whose business it was to keep order among the Kukis and Kachcha Nagas dwelling in this neighbourhood, and to protect them against the Angami Nagas to the east, who were constantly making raids into this country and that held by Tularam. In 1854, that officer's charge was augmented by the addition of Tularam's principality.

97. The defence of North Cachar and the Mikir Hills in Nowgong, lying to the north of that subdivision, from the attacks of the Angami Nagas was a task, however, which experience proved could not be successfully effected from Asalu. These turbulent neighbours led yearly expeditions into the hills and the valleys of the Jamuna, Dayang, and Dhansiri rivers. Outposts throughout the hills held only the ground they covered, and the Nagas were able to creep by them with impunity. Ten military expeditions were led into the Naga Hills between 1835 and 1851, the greater number of which were to punish raids. In 1846, a police post, under Bhogchand Darogha, was established at Samaguting on a hill overlooking the Dhansiri Valley south of Dimapur. In 1849 Bhogchand was killed at Piphima in the hills by the men of Khonoma and Mezuma. In 1850 Lieutenant Vincent led a force to Mezuma to avenge Bhogchand's death, and remained there for six months, burning Khonoma during his stay. In the winter of 1850-51, the tenth expedition, the greatest British force which had entered the hills, advanced to complete the work of punishment; and on the 10th and 11th December 1850 the strong fort of Khonoma was taken under almost the same circumstances as attended its capture twenty-nine years later, in November 1879. Paplongmai was burnt, and the Nagas of Kekrima, who challenged our troops, lost 300 killed in a hand-to-hand fight, which was long remembered in the hills.

*The Naga
Hills.
Early history.*

After this successful expedition the Government of India decided upon a complete withdrawal from interference with the internal concerns of the Angami Nagas. The Governor General, Lord Dalhousie, wrote in his minute of the 20th February 1851:

Hereafter we should confine ourselves to our own ground; protect it as it can and must be protected; not meddle in the feuds or fights of these savages; encourage trade with them as long as they are peaceful towards us; and rigidly exclude them from all communication, either to sell what they have got or to buy what they want, if they should become turbulent or troublesome.

These are the measures which are calculated to allay their natural fears of our aggression upon them, and to repel their aggression on our people. These will make them feel our power both to repel their attacks, and to exclude them from advantages they desire, far better, at less cost, and with more justice than by annexing their country openly by a declaration, or virtually by a partial occupation.

In March 1851 our troops were withdrawn, and in that year twenty-two Naga raids were reported, in which 55 persons were killed, 10 were wounded, and 113 were taken captive. In 1853, as already related, an officer was stationed in the North Cachar Hills at Asalu; but he was instructed to regard the Angamis as persons living beyond the jurisdiction of the British Government, although in 1841 the watershed of the Barail range to the south of the Angami country had been authoritatively laid down as the boundary of jurisdiction between Manipur and Assam. A line of outposts, with regular patrols, was established between Asalu and Barpathar, in the Nambur forest; but in 1857 these outposts were reduced and gradually withdrawn.

98. Raids continued to be numerous between 1853 and 1865, during which years 19 occurred, in which 232 British subjects were killed, wounded, or carried off. In 1864 and 1865 the policy to be followed towards the Angami Nagas again came under review, and the concurrent opinion of the local officers, of the Commissioner, Colonel Hopkinson, and of the Lieutenant-Governor, Sir Cecil Beadon, was that it was necessary for the credit of our administration to advance into the hills, "to re-assert our authority over the Nagas, and bring them under a system of administration suited to their circumstances, and gradually to reclaim them from habits of lawlessness to those of order and civilisation."

*Formation
of the Naga
Hills district.*

The Government of India, in 1866, agreed to the proposal that a new district should be formed, with its headquarters at Samaguting, Asalu being abolished as a subdivision, and North Cachar being divided between the Khasi and Jaintia Hills, South Cachar, and Nowgong, that portion lying to the west of the Dhansiri and the country on both banks of the Dayang forming, with the Angami Naga Hills, the new district. But they

*Physical and
Political
Geography.*

desired that the main object to be kept in view should be not to extend our rule into the interior, but to protect the low lands from the incursions of the Nagas.

Political.

Captain Gregory, the first officer in charge of the new district, was succeeded in 1869 by Captain J. Butler, whose energetic administration did much to consolidate our power in the hills. Acting in the spirit of his instructions, he received the allegiance of those villages which freely tendered it, but made no effort to include those who were not willing to become British subjects. Much of his time was given to exploration with survey parties; and in 1876 he met his death in a fight with the Lhota Nagas of Pangti, a village in the hills east of the Dayang river.

*Advance to
Kohima.*

99. In February 1877, the Angami Nagas of Mezuma raided upon the Kachcha Naga village of Gumaigaju, in the heart of North Cachar, killing 6 and wounding 2 persons. The cause of the attack was a feud thirty years old. With this exception, no raid had been committed by Angami Nagas within British territory since 1866, although there were numerous complaints of their depredations in Manipur; and their internal feuds were, as always, incessant. The village of Mezuma refused to give up the raiders, and in the cold weather of 1877-78 an expedition was sent against it, by which the village was burned. Mr. Carnegie, the Political Officer, was accidentally killed by a sentry of his own party while occupying Mezuma. These events led to a review of the position which we occupied in the hills; and in 1878, it was determined by Colonel Keatinge, after a visit to the country, to abandon Samaguting, a low and unhealthy site on the extreme edge of the Angami country, and to fix the future headquarters of the Political Officer at Kohima in the midst of the group of powerful villages which it was specially necessary to control. This selection was approved by the Government of India in March 1878, and by the end of the next cold weather the transfer from Samaguting to Kohima was completed.

In the course of the rains of 1879, indications of coming trouble began to present themselves, but no serious apprehensions were entertained by the Political Officer, Mr. Damant, who had planned an expedition during the cold weather into the Hatigoria country to the east of the Dayang. Before starting on this, however, he resolved to visit the powerful villages of Jotsoma, Khonoma, and Mezuma, to ascertain their disposition, and whether he might safely leave Kohima. On the 14th October he arrived at Khonoma, and leaving half his escort of 21 sepoy and 65 police with his baggage at the foot of the hill, he advanced with the other half up the narrow path leading to the strongly-fortified village site. The gate of the village was found closed, and as Mr. Damant stood before it, he was shot dead. A volley was then poured into his escort, who turned and fled down the hill. The Nagas followed, and dispersed the troops and police, who endeavoured by twos and threes to escape to Kohima. Of the military accompanying Mr. Damant, 10 were killed and 5 were wounded; of the police, 25 were killed and 14 were wounded.

When this news reached Kohima, preparations were made to resist the attack. The Subdivisional Officer was summoned from Wokha, 57 miles distant, and arrived with his force of sepoy and police on the 19th October. The stockade was besieged by the Nagas from the 16th to the 27th, when the garrison, who were reduced to great straits for want of food and water, were relieved, and the siege was raised, by the arrival of Colonel Johnstone, Political Agent of Manipur, with a force of 2,000 Manipuri troops, and his own escort of 30 sepoy and a few police.

A campaign against the Nagas then ensued, in which the 42nd and 44th Regiments, with a wing of the 18th Native Infantry, and a detachment of the 43rd Native Infantry, took part, and which lasted till March 1880. Khonoma was taken on the 22nd November 1879, but the defenders retreated to a very strong position above the village on a spur of Japvo, where they maintained themselves until the end of the campaign. Jotsoma was captured on the 27th November, and every one of the 13 villages which had entered into the coalition against us was either occupied or destroyed. The most notable event of the war, however, was the daring raid made in January 1880, by a party of Khonoma men from the fort above the village, at the time beleaguered by our troops, upon the tea garden of Baladhan in Cachar, more than 80 miles distant, where they killed the manager, Mr. Blyth, and 16 coolies, plundered what they could, and burned everything in the place.

On the 27th March, the fort above Khonoma submitted, and the war was at an end. Fines in grain, cash, and labour were imposed upon those villages which took part against us. The Nagas were made to surrender the firearms they were known to possess, and in some instances the removal of a village from a fortified inaccessible crest to a site below was directed. Khonoma was razed to the ground, and its site occupied by an outpost. From all villages an agreement was taken to pay revenue in the shape of 1 maund of rice and 1 rupee per house, to provide a certain amount of

labour annually for State purposes, and to appoint a headman who should be responsible for good order and for carrying out the wishes of Government.

After the close of this, the twelfth and last, expedition, the question of the policy to be adopted in dealing with the Nagas was submitted by the Chief Commissioner to the Government of India, who in February 1881 finally decided that our position at Kohima should be retained, that a regiment should be permanently stationed in the hills, and that the district should be administered as British territory. Since that date the history of the district has been one of the progressive establishment of peace and good order, and the quiet submission of the Nagas to our rule.

100. In 1875, a subdivision was opened at Wokha, which is situated in the country of the Lhota Nagas, who are separated from the Angamis by the Rengmas and Semas. The village of Wokha had on several occasions attacked survey parties sent into the hills, and it was determined to occupy the site to secure our position there. The Lhotas have no connection with the Angamis, who do not pass through their country in visiting the plains. This tract has been in charge of a tahsildar since 1889, when the Mokokchang subdivision was formed, as the Lhotas had by that time become so amenable to authority that it was considered unnecessary any longer to retain a European officer in their midst.

101. The reasons for the formation of this subdivision were the difficulty of protecting the Aos from raids by trans-Dikhu tribes unless a garrison was permanently established in their midst, and the fact that the leading Ao villages had petitioned the Deputy Commissioner for their incorporation in British territory. The necessary measures were successfully carried out, and the tract in question is now known as the Mokokchang subdivision of the Naga Hills district. In 1898 the detached mass of mountains known as the Mikir and Rengma Hills, which formed the most northerly portion of the Naga Hills district as originally constituted, with the level tract separating it from the Naga Hills Proper, and including the extensive Nambor forest, was transferred to the districts of Nowgong and Sibsagar. On the extension of the Assam-Bengal Railway through this area it had become difficult to administer it from Kohima.

102. At the close of the Naga war of 1879-80, Sir Steuart Bayley recommended, and the Government of India approved, the re-establishment of the subdivisional charge of North Cachar, where, since 1856, no officer had been located, the hillmen being left, save for the rare cold-weather tours of the Deputy Commissioner, entirely to themselves. The subdivision was opened in December 1880, and placed in charge of an Assistant Superintendent of Police, who was stationed at Gunjong, in the centre of the tract, a point connected by easy hill paths with Nowgong to the north, Silchar to the south, and Jowai to the west. A bridle path to Kohima, *via* the Kachcha or Arung Naga country, was subsequently constructed. In this hitherto isolated and thinly-peopled region, in the cold weather of 1881-82, an event occurred which cost the life of a valued officer, Major Boyd, the Deputy Commissioner of Cachar. A Kachari, named Sambhudan, declared himself inspired, claimed to work miraculous cures, and with his followers, who, like himself, took the title of *deo*, or god, levied contributions on the villagers about Maibong, the old capital of the Kachari kings, where he took up his abode. The matter came under the notice of the Subdivisional Officer, who reported it, and the Deputy Commissioner, Major Boyd, immediately started for Gunjong with 30 police, and reached that place without impediment. On the 15th January he left Gunjong with Mr. Soppitt, the Subdivisional Officer, for Maibong, which is six or eight hours' march distant; Maibong was reached and found deserted, and the party encamped in the huts of the *deos*. On the same day, Sambhudan and his party, some 20 men, countermarched him, and about noon fell upon Gunjong, where only a weak police guard, composed mainly of Kachari constables, who shared in the superstitions of their people, had been left. They were panic-stricken, and fled without firing a shot; and the *deos* burned down all the houses at Gunjong, killed two servants and a sick policeman, and left precipitately for Maibong. On the morning of the 16th, soon after dawn, Major Boyd was awakened by the shouts and drums of Sambhudan and his followers, who had passed the night in the jungle. The police formed up in line with bayonets fixed, but did not fire at first. The enemy advanced right up to them, and struck at them with their *daos*; one man was wounded on the shoulder with a *dao*, and Major Boyd received a deep cut between the forefinger and thumb. The police then fired a volley, and killed eight of their assailants; two or three more were afterwards found dead in the jungle. Sambhudan escaped for the time, but the insurrection completely collapsed at once. Major Boyd was carried into Silchar; his wound brought on tetanus, from which he died on the 30th January 1882. Sambhudan evaded capture till the end of the year, when he was surrounded by the police, who had received information of his hiding place. In endeavouring to escape, he received a wound,

Physical and
Political
Geography.

Political.

Wokha sub-
division.

Mokokchang
subdivision.

Re-establish-
ment of the
North Cachar
subdivision.

*Physical and
Political
Geography.*
Political.

from which he quickly bled to death. Four of his gang were arrested, of whom two died in jail, and two were tried at the sessions, one was acquitted, and the other was sentenced to transportation for life.

In 1896 a great change was effected in the material conditions of the subdivision by the construction of the railway through the hills. The work presented engineering difficulties of an exceptional character, and is still incomplete. The headquarters of the railway administration were fixed at Haflong on the summit of a hill round the foot of which the line runs in a loop, and the headquarters of the subdivision were transferred from Gunjong to this place in 1896.

*The Lushai
Hills.*

103. From the earliest period of which we have any knowledge, the hills lying to the south of Manipur, Cachar, and eastern Sylhet have been inhabited by various tribes known to the Bengalis by the common name of Kukis. These tribes have always, so far as we know, been divided into numerous families, each family acknowledging a chief or ruling house, and these houses being generally engaged in warfare with one another. Each village had its chief, whose object it was to extend the fame and power of his village by fighting with his neighbours, and whose leadership gave the Kukis a distinct advantage over the democratic villages of the surrounding Nagas. During the weak rule of the last Rajas of Cachar, the valleys in the south of that district were almost depopulated by attacks from these hillmen, and at the same time the district began to be invaded by refugee bodies of Kukis, who had been driven out of their own country by more powerful chiefs, and sought protection from the rulers of Cachar. Many of these communities settled across the Barail in North Cachar, where they were comparatively safe from pursuit. Those who settled in the southern hills were often followed up by their conquerors and massacred. The older immigrants of this period (none of whom probably date from before the beginning of the present century) are known to the Cacharis as "old Kukis," those who have immigrated since British rule began being called the "new Kukis." Govind Chandra is said to have employed Kukis in his contest with Tularam Senapati, and this no doubt increased their numbers in North Cachar.

The Kuki families whose feuds first attracted most attention, and from whose raids we suffered during the first years of British rule, were the Tlangams, Changsels, Thadois, and Poitus. The Lushais were not heard of until about 1840, when they made their appearance on the Chattachura range, from which they were driving the Poitus. Their chiefs are all descendants of Chunglunga, whose successor, Lallula, had four sons,—Lalpuilena, Lalienvunga, Mangpor, and Vuta. The descendants of the first mentioned are the Eastern chiefs, of whom Lengkam, Lalbura, and Poiboi are names of note in our recent relations with the Lushais. Of the descendants of Lalienvunga, Lahlai may be mentioned; of Vuta-Laleya and of Mangpor-Lenkhunga, Khalkam, Lengpunga, Thanruma, Lalrima, and Thangula, all of whom, with the exception of the last mentioned, are sons or grandsons of Sukpial, who died in 1880, and who at the time of his death was ruler over the whole of the Western Lushais.

The first attacks upon British territory made by the Lushais after their advance northwards were in November 1849, when almost at the same time a party of woodcutters was massacred, a village of Tipperas was burnt, and another village was plundered in the Singla valley in Sylhet, west of the Chattachura range, and an attack was made by Mora, son of Lalienvunga, on three villages of refugee Thadoi Kukis within ten miles of the station of Silchar. To punish these outrages, the first expedition was led against the Lushais by Colonel Lister, who in January 1850 surprised and destroyed Mora's village, situated a little way south of the great peak of Nisapwi, between the Dhaleswari and the Sonai rivers. This expedition secured peace for many years. The Lushais gradually withdrew their advanced posts southwards, and we ceased to have much communication with, or information about, them. A raid was committed in 1862 on Hill Tippera and South Sylhet near Adampur, which two years later was discovered to have been perpetrated by Sukpial; but this was followed only by negotiations. A meeting was held between the Deputy Commissioner of Cachar and Sukpial's agents, and it was arranged that the captives taken should be surrendered, and that Sukpial should receive an allowance for keeping the peace of the frontier. A similar arrangement was made with Vonpial, son of Mora. But, although four of the captives were surrendered, these arrangements were never actually carried much further. In November 1868 the Eastern Lushais began a series of attacks on Manipur. In December of the same year Sukpial carried his feuds with the Poitus into Sylhet. In January 1869, the tea garden of Noarband in Cachar was plundered and burned, several coolies being killed by Lalruma, son of Lalpunga and brother of Poiboi. On the 14th January, Dantau, son of Vonolel and brother of Lengkam and Lalbura, attacked the garden of Monierkhal, which he burned and plundered. In February a combined attack was made upon the Kala Naga stockade in Manipur. It was determined to punish these outrages by an expedition, one portion of which was to go up the Dhaleswari river to attack Sukpial,

and another up the Sonai, while a Manipuri force was to march south and join the second. The season, however, was too late for effective measures, and the expedition was practically a failure. Emboldened by this result, a new series of attacks was planned by the Lushais in the cold weather of 1870-71. A new family now appeared on the scene. While the Eastern Lushais of the family of Vonolel (Lalbura and Lengkam, his sons, and his nephew Thondong) led an attack on the Monierkhal stockade, the Bengali village of Nagdirgram, and the Nagas in Manipur; the Howlongs of Lalpitang's house, who dwelt south of Sukpilal's Lushais, and the western Poitu Kukis raided down the Hailakandi valley, and attacked the tea garden of Alexandrapur, where they killed a number of coolies and the Manager, Mr. Winchester, and carried off his daughter and several other captives, besides much plunder. A subsequent attack on a neighbouring garden, Katlacherra, was repulsed. Upon this, it was determined to send a thoroughly effective expedition to march through the hills and exact reparation. Two columns were despatched in the cold weather of 1871-72, one from the Chittagong side, which marched northwards through the country of the Sylus and Howlongs and recovered the captives taken from Alexandrapur; and the other, which advanced, *via* Tipaimukh, southwards into the country of Vonolel and his sons. This expedition was completely successful in procuring the submission of the chiefs and satisfaction for the outrages; and from its termination down to 1892, no raid was made on territory under the Assam Administration.

*Physical and
Political
Geography.*
Political.

In 1889, however, a raid was made in the Chengri valley on the Chittagong frontier, and a number of captives were taken, whom the chiefs concerned (Lengpunga and his brother Zarok) declined to release, and an expedition was accordingly undertaken in the cold weather of 1889-90. The main column marched through the Lushai Hills from Chittagong, and were met by a detachment of 400 Military Police from Silchar. The captives were surrendered, but Lengpunga escaped for the time. His village was burnt, and the troops then left the country. Previous to this raid, the policy of Government since 1872 had been to maintain a line of outposts connected by patrol paths, and, while cultivating, as much as possible, friendly intercourse with the chiefs, to abstain from interfering in their internal affairs. It was now decided to endeavour to put down raids once for all by proving our power to occupy their country and establishing military outposts in their midst. Two such outposts (at Aijal and Changsil) with a garrison of Military Police were established in the portion of the Lushai Hills bordering on the Cachar district, and Captain Browne was deputed thither as Political Officer. For a time, the Lushais appeared to have accepted the situation, and amongst other proofs of friendship, the leading chiefs attended a *darbar* held by Captain Browne, and killed a *metna* and swore an oath of friendship to the British Government. But the hopes thus raised were soon dissipated. Suddenly, without a word of warning, they rose in a body, attacked simultaneously the stockades at Aijal and Changsil, and killed Captain Browne, who was marching from Sairang to Changsil with a small escort of four sepoy. This was on the 10th September 1890. Three days later a relieving force of 200 Military Police left Silchar under Lieutenants Swinton and Tytler. Lieutenant Swinton was killed on the passage up the river Dhaleswari, whereupon Lieutenant Tytler assumed command, and reached Changsil and relieved the garrison under Lieutenant Cole, on the 28th September. The force at Changsil was further augmented by a detachment of 200 men of the 40th Bengal Infantry under Lieutenant Watson, who arrived at Changsil on the 30th. Mr. McCabe, who had been deputed to Cachar on special duty, reached Changsil on the 5th October 1890, and on his arrival offensive operations were at once commenced, with such success that within two months all but one of the Western Lushai chiefs had been arrested. The three ringleaders, Khalkam, Lengpunga, and Thangula, were deported, and the others were released on payment of the fines imposed on them. A few months later Khalkam and Lengpunga put an end to their existence by hanging themselves with ropes, which they had surreptitiously manufactured from their clothes.

These operations resulted in the complete pacification of the Northern Lushai villages west of the Sonai river and the unconditional surrender of all the chiefs implicated in the rising, with the exception of Thanruma, who fled for refuge towards the east. At the commencement of 1891, the Lushais were peacefully employed in *jhuming* and in rebuilding their villages, many of which had been destroyed by our troops as a punishment. The feeling of insecurity which our operations had occasioned was beginning to wear off, and Lushais came readily to trade at the newly re-opened bazar at Changsil and to barter vegetables and live stock with the garrison of Fort Aijal. Requisitions for the supply of coolies to work on roads and carry stores and baggage, etc., were promptly complied with by all the chiefs so requisitioned except Lalbura, and in consequence of his non-compliance, Mr. McCabe, with an escort of 100 Military

*Physical and
Political
Geography.*
Political.

Police under Lieutenant Tytler, marched to his village, where he halted for the night. Next day, as Lalbura refused to come in, Mr. McCabe commenced collecting supplies and making other arrangements for halting in the village. Shortly afterwards 300 armed Lushais were observed to advance towards the north crest of the hill commanding his camp. The Political Officer promptly ordered them to be fired on, and at once commenced to make dispositions for the defence of the camp. Before they could be completed, however, the Lushais attacked the camp from all directions, and set fire to the village. They were driven off, and the fortification of the camp was then proceeded with. Stores of paddy were collected from the jungle, where they had been hidden by the Lushais; a bridle-path from Aijal to the Sonai was pushed on with great rapidity; and a reinforcement of 100 Military Police was at once sent to Mr. McCabe's assistance from Aijal. The fact was recognised that it would be impossible to undertake punitive measures in a satisfactory way with the small force then available, and it was therefore decided to bring up 300 men of the 18th Bengal Infantry from Silchar to hold Aijal and Changsil, and thus enable the whole of the Military Police stationed at those places to join the force with Mr. McCabe. In the meantime, skirmishing parties were sent out daily to disperse the Lushais in the neighbourhood of the camp and search for further stores of paddy. The Lushais soon found that it was hopeless to try to take the camp, and confined themselves to ambuscading small parties.

Enquiries showed that Lalbura was assisted in his rising by all the Lushais east of the Sonai, and also probably by the Howlongs; but that the Western Lushais had profited by the lesson taught them in the previous year, and had stood aloof. The attack at Lalbura took place on 1st March 1892. On the 10th April, the punitive force, consisting of 225 men of the Military Police and 75 of the 18th Bengal Infantry under Captain Loch, left Aijal. Lalruya, Poiboi, Lalhai, Bungteya, Maite, and other villages were occupied in turn, and all the chiefs submitted, except Lalbura, who fled, accompanied by only twenty followers, to the impenetrable jungles on the Manipur frontier. These operations were followed by the complete submission of the Eastern Lushais.

During the cold weather of 1892-93 a column from Aijal under Mr. Davis co-operated with a column from Lungleh to complete the punishment of the Howlong villages. No opposition was offered, and the two columns met at Kairuma's village. This chief complied with the demands then made upon him, but was subsequently recalcitrant, and it was necessary to make a military demonstration in his sphere of influence in the cold weather of 1895-96, before he would consent to pay up a fine which had been imposed upon him by the Political Officer for disobedience of orders.

In the course of the operations against the Eastern Lushais in 1892, the inconvenience resulting from the division of control over the Lushai country between the three Administrations of Assam, Bengal, and Burma had been found to be considerable, and after a lengthy discussion it was finally decided to transfer the Southern Lushai Hills, which had been previously controlled from Bengal, to Assam. The transfer was not actually effected till the 1st April 1893, when the North and South Lushai Hills were amalgamated as a district of the Assam Province, and placed in charge of an officer who is styled the Superintendent of the Lushai Hills. At the same time rules were framed, introducing a suitable and simple system of administration, in which the internal management of the Lushai villages is left to the chiefs, subject to the general control of the Superintendent and his assistants, in whom the administration of civil and criminal justice is vested. Since the formation of the district, satisfactory progress has been made in the development of communications and the civilisation and pacification of the Lushais.

*Formation of
the Chief
Commissionership.*

104. By a proclamation dated the 6th February 1874, the districts of Goalpara, Kamrup, Darrang, Nowgong, Sibsagar, Lakhimpur, the Khasi and Jaintia, Naga, and Garo Hills, and the district of Cachar were separated from the administration of the Government of Bengal, and taken under the immediate authority and management of the Governor General in Council; and by a notification of the same date they were formed into a Chief Commissionership, Lieutenant-Colonel R. H. Keatinge, V.C., C.S.I., being appointed the first Chief Commissioner. On the 12th September of the same year by another proclamation and notification Sylhet was incorporated with the province, and the only extensions of territory that have since taken place have been in the Naga and Lushai Hills. The territory included in the Mokokchang subdivision was annexed to the former district in 1889. As narrated in the preceding paragraph, the Northern Lushais were gradually brought under the control of the Assam Administration, and the South Lushai Hills were formally transferred from Bengal to Assam in 1898, when the Lushai Hills district was constituted and added to the province.

The following statement shows the officers who have filled the post of Chief Commissioner since the formation of the Chief Commissionership :

*Physical and
Political
Geography.
Political.*

Name.	From	To	Remarks.
1	2	3	4
Colonel R. H. Keatinge, V.C., C.S.I.	7th February 1874 ...	21st June 1878.	
Sir S. C. Bayley, K.C.S.I....	22nd June 1878 ...	1st March 1881.	
Mr. C. A. Elliott, C.S.I. ...	2nd March 1881 ...	7th July 1883.	
Mr. W. E. Ward ...	7th July 1883 ...	7th October 1883...	Officiating.
Mr. C. A. Elliott, C.S.I. ...	7th October 1883 ...	23rd February 1885.	
Mr. W. E. Ward ...	23rd February 1885 ...	31st October 1887	Officiating.
Mr. D. Fitzpatrick, C.S.I....	31st October 1887 ...	15th July 1889.	
Mr. J. Westland, C.S.I. ...	15th July 1889 ...	22nd October 1889.	
Mr. J. W. Quinton, C.S.I....	22nd October 1889 ...	24th March 1891.	
Brigadier-General Sir H. Collett, K.C.B.	24th March 1891 ...	27th May 1891 ...	Officiating.
Mr. W. E. Ward, C.S.I. ...	27th May 1891 ...	15th July 1894.	
Mr. C. J. Lyall, C.S.I. ...	17th July 1894 ...	4th October 1894...	Officiating.
Mr. W. E. Ward, C.S.I....	4th October 1894 ...	27th November 1896.	
Mr. H. J. S. Cotton, C.S.I.	27th November 1896 ...	1st May 1900.	
Mr. J. B. Fuller, C.I.E. ...	1st May 1900 ...	1st August 1900...	Officiating.
The Hon'ble Mr. H. J. S. Cotton, C.S.I.	1st August 1900 ...	29th April 1902.	
The Hon'ble Mr. J. B. Fuller, C.S.I., C.I.E.	29th April 1902 ...	...	Officiating till 29th October, when he was confirmed.

SECTION 3.—FORM OF ADMINISTRATION.

105. The province of Assam is administered by a Chief Commissioner on behalf of the Governor General of India in Council. His general executive staff consists of (1) members of the Assam Commission, (2) members of the Provincial Service, and (3) members of the Subordinate Civil Service. General administrative system and staff.

The following are the cadre posts reserved for members of the Commission :

Administration	{	Chief Commissioner	}	4
		Secretary to the Chief Commissioner ... ..	...	...
		One Assistant Commissioner, as Under Secretary ... ..	...	...
		Commissioner of the Assam Valley Districts ... ..	...	...
District and Sessions Judges	2	
Deputy Commissioners (Heads of districts)	12	
Assistant Commissioners	8	
General	{	Inspector General of Police, Jails, and Registration, and Superintendent of Stamps	}	3
		Director of Land Records and Agriculture ... ..	...	...
		Political Agent, Manipur ... ..	...	...
Total	29

The number of appointments sanctioned to fill these posts is 41 (a reserve of 12 being allowed to provide for officers on leave, and for temporary appointments and deputations), and under standing orders, three-fourths of these appointments should be filled by members of the Indian Civil Service, who are transferred from the Bengal list, and one-fourth by officers of the Indian Staff Corps.

The sanctioned strength of the Provincial Civil Service comprises 36 Extra Assistant Commissioners, who are selected according to rules approved by the Government of India and the Secretary of State. Four of these appointments are reserved for officers of European descent, the remainder being filled by natives of India.

The Subordinate Civil Service is composed of 40 Sub-Deputy Collectors, distributed in five grades, and 12 tahsildars, who do not belong to a graded list but draw the fixed pay attached to their respective posts. The Sub-Deputy Collectors are

*Physical and
Political
Geography.*
Political.

recruited from among natives of the province, who fulfil a certain educational standard. These officers are chiefly employed on duties connected with the administration of land revenue, and since 1898 the policy has been followed of placing Sub-Deputy Collectors in charge of tahsils, an addition being made to the list of Sub-Deputy Collectors whenever a vacancy occurs among the non-graded tahsildars.

*Powers of the
Chief Com-
missioner.*

On the first constitution of the province, Act VIII of 1874 was passed to provide for the exercise by the Chief Commissioner of executive powers. In September of the same year, on the addition of the district of Sylhet to the Chief Commissionership, Act XII of that year made the same provision in regard to that district. By these Acts, the powers which, on the date of the formation of the Chief Commissionership, and on that of the transfer to it of the district of Sylhet, were, by virtue of any law or regulation vested in, or exercisable by, the Lieutenant-Governor of Bengal or the Board of Revenue, Lower Provinces, were transferred to, and vested in, the Governor General in Council; and it was enacted that the Governor General in Council might from time to time delegate to the Chief Commissioner all or any of the said powers, and withdraw any powers so delegated.

By notification dated the 16th April 1874, the Government of India delegated to the Chief Commissioner all powers which were vested in the Lieutenant-Governor of Bengal by the direct operation of any Act of the Governor General in Council, which also conferred the same powers on the Chief Commissioners of Oudh, the Central Provinces, and British Burma. By Act I of 1868, section 2, clause 10, all powers conferred upon a Local Government by any Act of the Governor General in Council in force in Assam, and passed subsequently to the constitution of the Chief Commissionership, vest in the Chief Commissioner. By the operation of this clause and the notification of the 16th April (and, in regard to Sylhet, a similar notification of the 12th September 1874) the Chief Commissioner has, in respect to all the general Acts of the Governor General in Council, the powers of a Local Government.

Other powers have, from time to time been delegated to the Chief Commissioner under Acts VIII and XII of 1874 [or assumed under section 6 (c) of Act XIV of the same year], which, generally speaking, place him in the position of a Local Government in regard to most of the Regulations and Acts, whether of the Legislative Council of India or that of Bengal, in practical operation in the province.

*General exe-
cutive staff.*

106. From the constitution of the province in 1874 down to 1880 there were no Commissioners in Assam. But in June of the latter year the Judge of the Assam Valley Districts was invested generally with the powers of a Commissioner of Division in Bengal. It was subsequently found necessary to relieve the Commissioner of his judicial functions, and in 1902 the separate appointment of Judge of the Assam Valley was created. In the other districts of the province, that is, in the Surma Valley and hill districts, the Chief Commissioner continues to perform himself the duties of a Commissioner of Division.

As in the other provinces of India, the unit of administration is the district, but the subdivision is of more importance as an administrative unit than in Bengal, the revenue, for instance, being paid into the subdivisinal treasury, and each subdivision having its independent Local Board. Each of the twelve districts of the province has a Deputy Commissioner as its chief executive officer. The Deputy Commissioner in charge of the Lushai Hills is styled the Superintendent. Every district, except the smallest, comprises two or more subdivisions. The Deputy Commissioner, aided by one or more Assistant Commissioners or Extra Assistant Commissioners, holds direct charge of the sadr or headquarters subdivision, and each outlying subdivision is in charge of an Assistant or Extra Assistant Commissioner subordinate to the Deputy Commissioner. Some of the subdivisions in hill districts, which are administered under special rules, are in charge of police officers.

Judicial staff.

107. The six districts of the Brahmaputra Valley, and the districts of Sylhet and Cachar are subordinate to the High Court of Fort William in Bengal. For the whole of the Brahmaputra Valley there is one District and Sessions Judge whose headquarters are at Gauhati, but who holds sessions at the various district headquarters when required. The Deputy Commissioners of the six districts have the civil powers of Subordinate Judges, and exercise the special powers conferred by sections 30 and 34 of the Criminal Procedure Code of trying all offences not punishable with death and awarding a sentence of seven years' imprisonment. In view of the separation of the offices of Judge and Commissioner, it is now proposed to relieve the Deputy Commissioners of these powers. The Assistant and Extra Assistant Commissioners have the ordinary powers of Magistrates of the first, second, and third classes, and in the Brahmaputra Valley the civil powers of a Munsif are exercised by one or more of these officers at each headquarters and subdivisinal station.

In the Surma Valley a different system prevails. In Sylhet there is a separate judicial service, at the head of which is the District and Sessions Judge, aided by a Subordinate Judge,* and a staff of Munsifs for the disposal of civil cases. The Deputy Commissioners, Assistant Commissioners, and Extra Assistant Commissioners have here no civil powers, and exercise only the ordinary magisterial powers in criminal matters. In Cachar the Sessions Judge is the Judge of Sylhet, who holds sessions at Silchar when necessary; but the Deputy Commissioner has the special criminal powers mentioned in sections 30 and 34 of the Criminal Procedure Code. The Deputy Commissioner, however, and not the Judge of Sylhet, is the District Civil Judge; there is no Subordinate Judge, and the Assistant and Extra Assistant Commissioners exercise the powers of Munsifs in addition to their functions as Magistrates and executive officers.

*Physical and
Political
Geography.*
Political.

In the hill districts and certain frontier tracts (the North Cachar subdivision, the Mikir Hills tract in Nowgong, and the Dibrugarh frontier tract in Lakhimpur), the High Court possesses no jurisdiction except over European British subjects. The hill districts were formerly under the operation of the deregulationizing Act, XXII of 1869, which was repealed by the Scheduled Districts Act, XIV of 1874. Subsequently, the Frontier Tracts Regulation, II of 1880, was passed, under which power is given to the Chief Commissioner, with the previous sanction of the Governor General in Council, to direct that any enactment in force in any frontier tract shall cease to be in force therein, and this Regulation (with the additional power of extension conferred by Regulation III of 1884) has been brought into force in all the hill districts and frontier tracts referred to above. Under its provisions, the operation of the enactments relating to Civil and Criminal Procedure, Court-fees, Stamps, Transfer of Property, and Registration, has been barred,† and a simpler system of administering justice in civil and criminal matters has been prescribed by rules framed under section 6 of the Scheduled Districts Act, XIV of 1874. By these rules the Chief Commissioner is himself the chief appellate authority in civil and criminal cases. The Deputy Commissioner exercises the combined powers of District and Sessions Judge and Magistrate of a district, and the Assistant Commissioners and Extra Assistant Commissioners the powers of Magistrates and Munsifs. The judicial administration in all petty civil and criminal cases is usually carried on by village tribunals, presided over by headmen chosen from among the people themselves, whose procedure is completely free from legal technicalities, and whose proceedings are not reduced to writing. The Criminal Procedure Code is in force in the Eastern Duars in Goalpara, and that tract is, therefore, on the same footing as the plains districts so far as the administration of criminal justice is concerned. The Civil Procedure Code, however, is not in force; its place is taken by rules under section 6 of Act XIV of 1874, which contain much the same provisions as the corresponding rules framed for the tracts which are under the operation of Regulation II of 1880.

Besides the judicial officers named above, there are a few Honorary Magistrates in nearly every district.

108. Up to the year 1886, Sylhet Proper was under the operation of the old Bengal Regulations and the other land revenue enactments in force in Bengal. In Jaintia and Cachar, and also, though to a less extent, in Goalpara, these enactments were generally followed, but they were not treated as actually in force. In the Brahmaputra Valley Proper, the settlement rules of the Board of Revenue had been replaced by local rules, which were revised and recast in 1883. In other respects the revenue law of Bengal was followed, so far as the local officers considered it to be applicable, but it was not treated as legally in force. All doubt and uncertainty were, however, removed by the enactment of the Assam Land and Revenue Regulation, I of 1886, which has been brought into force in all the plains districts of the province. It contains all the necessary provisions of the revenue law of Bengal, the whole of which it repeals, so far as Assam is concerned. The Regulation was amended in some respects as regards the recovery of arrears of revenue by Regulation II of 1889, and its provisions regarding settlements, mutations, partitions, the recovery of arrears, etc., have been supplemented by rules issued under it and deriving from it the force of law. The superior authorities entrusted with the revenue administration have already been stated. They are the Chief Commissioner (as Local Government and Board of Revenue, and, in the Surma Valley and hill districts, as Commissioner), the Commissioner (in the Brahmaputra Valley), the

*Revenue ad-
ministration.*

* A second Subordinate Judge has to be entertained from time to time to clear off the arrears of work which cannot be disposed of by the sanctioned staff.

† Except in cases when such enactments never were in force. The Civil Procedure Code, for instance, was never extended to the hill districts, and it was, therefore, unnecessary to include this in the declarations under Regulation II of 1880, which were issued in regard to these districts.

Physical and
Political
Geography.
Political.

Deputy Commissioners in each district, and the Assistant and Extra Assistant Commissioners. Below these there are different subordinate officers in different districts. Each subdivision in the plains districts, except Goalpara, has a Sub-Deputy Collector, who is employed mainly upon supervision of the revenue establishments, upon surveying waste and cultivated lands (the extent and importance of this work in Assam will be seen from the following chapter), and the compilation of the revenue records and returns.

Goalpara is, for all practical purposes, a permanently-settled tract, and there are no *mufassal* revenue establishments except in the Eastern Duars; in the other districts of the Brahmaputra Valley the whole of the revenue was formerly collected by contractors, called *mauzadars*, holding charge of the revenue assessment and collection within definite areas, called *mauzas*, into which these districts are divided. On the conclusion of the annual assessment (which will be described in a subsequent section), the *mauzadar* entered into a contract to pay into the treasury the revenue assessed, together with any additional revenue which might be assessed on lands subsequently taken up within the year for cold-weather cultivation, irrespective of whether he succeeded in realising the full amount from the cultivators or not, and was remunerated by a commission calculated at 10 per cent. on the first Rs. 6,000 of revenue and 5 per cent. on any amount above that sum. This system is still largely in vogue, but has to a considerable extent been superseded by the formation of *tahsils*, whereby from 3 to 11 *mauzas* are amalgamated and placed in charge of a *tahsildar*, who is paid by a regular salary, and not by commission. The first *tahsils* were started in 1883-84, during which year four were formed in the Kamrup district, and the system was extended so rapidly that by the close of 1892-93, 23 *tahsils* were in existence in the Brahmaputra Valley, absorbing in all 125 *mauzas*. Since that date only four new *tahsils* have been formed, and none have been opened during the last five years. Of the 27 *tahsils*, 16 are in charge of Sub-Deputy Collectors, and 11 of non-graded *tahsildars*. Twenty-five lakhs of rupees are now collected in *tahsils*, as compared with seventeen lakhs realised from *mauzadars* and waste land grantees.

At each subdivisional headquarters in Sylhet there is a collecting office, where the revenue is paid in and the accounts are made up. There are also *mufassal* collecting officers in certain temporarily-settled tracts, *vis.*, at Guyainghat and Kanairghat in Jaintia, and at Hakaluki in Karimganj. Proceedings for the realisation of arrears (which are here generally recovered by means of the Sale Law) are taken at the subdivisions.

In the plains portion of Cachar also, there are three collecting or *tahsil* establishments for receipt of the revenue. Two of these are located at the sadar and subdivisional headquarters, and the third at Katigora close to the Sylhet boundary.

In the hill districts, the general rule is that house-tax, and not land revenue, properly so called, is paid; but in the Garo Hills and a small area in the Jaintia and Naga Hills, there are tracts where land revenue is taken, and *mauzadars* are the agency employed for collection. The house-tax is, in the Garo, Jaintia, Naga Hills, and North Cachar and the few villages in the Khasi Hills which are British territory, collected and paid in by headmen, who, like the *mauzadars* of the Assam Valley are remunerated by a commission. These officers are called *lashkars* and *lakmas* in the Garo Hills, *dollois* and *sardars* in the Jaintia and Khasi Hills, *lambardars* in the Naga Hills, and *mauzadars* in North Cachar. In the Lushai Hills, the house-tax is collected and paid in by the village chiefs.

Land Records
and Agriculture.

109. The Director of the Department of Land Records and Agriculture is a member of the Commission of the standing of Deputy Commissioner. His main duty is to supervise all survey and settlement operations, but he is also entrusted with the collection of trade and agricultural statistics, the management of survey schools, and other similar matters.

Police.

110. The appointments of Inspector General of Police, Jails, and Registration, and Superintendent of Stamps are held by a single officer, who is a member of the Commission of the standing of Deputy Commissioner. The Inspector General of Police is allowed a Personal Assistant, who is on the graded list of Extra Assistant Commissioners. Two district forces are under the control of the Inspector General, namely, the Civil Police, who are entrusted with the maintenance of law and order and the prevention and detection of crime, and the Military Police, who are confined to the military duties of manning frontier outposts, and holding as a garrison the Garo, Naga, and Lushai Hills. Both forces are subject to Act V of 1861, but the Military Police are also under a special Regulation (The Assam Military Police Regulation, 1890), which makes provision for the enforcement of due discipline, and assimilates generally the terms of service to those prevailing in the Native Army. There are five battalions of Military Police, namely: (1) The Lakhimpur Battalion with headquarters at Dibrugarh;

(2) The Silchar Battalion with headquarters at Silchar; (3) The Naga Hills Battalion with headquarters at Kohima; (4) The Garo Hills Battalion with headquarters at Tura; and (5) The Lushai Hills Battalion with headquarters at Aijal. At the close of 1901, the sanctioned strength of the Civil and Armed Civil Police in Assam was 2,748 officers and men, and that of the Military Police 3,087 officers and men. The Civil Police in each of the plains districts are in charge either of a District Superintendent or of an Assistant Superintendent of Police. These officers are borne on the staff of the Bengal Police Department. The Lakhimpur, Naga Hills, and Lushai Hills Battalions are commanded by Military Officers, and the battalion last named has also two Military Assistant Commandants. The Silchar Battalion is commanded by an Assistant Commandant, who is a Military Officer. The Garo Hills Battalion is commanded by a Civil Assistant Superintendent of Police.

*Physical and
Political
Geography.*
Political.

Besides the regular Civil Police, there are a few Municipal Police entertained in towns which have been constituted "Unions" under the Bengal Municipal Act (these numbered 15 officers and men at the close of 1901), and there is a force of chaukidars, or rural police in the districts of Sylhet, Cachar, and Goalpara. Except in the last-named district, there are no village police in the Brahmaputra Valley. The *mauzadars* and mandals are required to give information and to aid in the detection of crime, and in each village or group of hamlets there is a gaonbura, or village headman, who is the recognised representative of the villagers in police matters, but who receives no remuneration from Government. The chaukidars in Goalpara and in the sadr subdivision of Sylhet are governed by the Bengal Chaukidari Act [VI (B.C.) of 1870, as amended by Acts I (B.C.) of 1871, I (B.C.) of 1886, and I (B.C.) of 1892]. Those in the outlying subdivisions of Sylhet and in the district of Cachar are governed by the Sylhet and Cachar Rural Police Regulation, I of 1883. On the last day of 1901, there were in the province 6,789 village police, of whom 5,313 were in Sylhet, 658 in Cachar, and 883 in Goalpara. Their cost for the year was Rs. 3,32,283, the whole of which was paid by the villagers.

111. The jails in Assam consist of *District Jails*, of which there is one at the headquarters of each plains station and also at Shillong, the most important being the jails at Gauhati, Tezpur, and Sylhet, and fifteen *Subsidiary Jails* at the headquarters stations of Tura, Kohima, and Aijal, at each subdivisional station in the plains, and at Haflong.

The Civil Medical Officer of the district is Superintendent of the District Jail.

The Jail Law of the province is Act IX of 1894, which was brought into force in supersession of Act XXVI of 1870. The Assam Jail Manual of 1899, consisting of rules and orders issued by the Local Administration and the Inspector General of Jails, has superseded the Bengal Jail Rules which were formerly followed in Assam.

112. As has been already mentioned, the Inspector General of Police and Jails is also Inspector General of Registration, and he holds besides the offices of Registrar of Joint Stock Companies under the Companies Act, and Registrar General of Births, Deaths, and Marriages under Act VI of 1886. All Deputy Commissioners are Registrars in their respective districts. In the Brahmaputra Valley, the Sub-Registrars at headquarters are Extra Assistant Commissioners who do this work in addition to their other duties. There are Special Sub-Registrars at Sylhet and Silchar. At subdivisions, except in Sylhet, the Subdivisional Officer, or the second officer (generally an Extra Assistant Commissioner) if there is one, is Sub-Registrar. But at all the subdivisions of Sylhet there are Special Sub-Registrars, and at Balaganj, Hingajia, Jaldhup, Madhabpur, and Jagannathpur and Kanairghat in that district, and at Katigora in Cachar, there are Rural Sub-Registrars.

113. Excise is managed under the excise laws of Bengal, which have been extended to Assam. It has recently been decided to transfer the Excise Department from the control of the Inspector General of Police and Jails, by whom it was held as Commissioner of Excise, to the direct control of the Chief Commissioner, so far as regards the Surma Valley and hill districts, and to that of the Commissioner in the Brahmaputra Valley.

114. The Education Department is managed by a Director of Public Instruction who is an officer on the Bengal list of the Indian Educational service. He is assisted by 5 Deputy and 23 Sub-Inspectors of Schools.

The Forest Department is under the control of a Conservator, assisted by a staff of Deputy and Assistant and Extra Assistant Conservators.

The staff of direction of the Public Works Department in Assam consists of a Chief or Superintending Engineer, who is also Secretary to the Chief Commissioner

Physical and
Political
Geography
Political.

in that Department, aided by an Under-Secretary. The executive staff of the Department comprises twelve Executive and Assistant Engineers and two temporary Engineers. The Public Works in the Lushai Hills are in charge of a District Engineer, who is an Upper Subordinate of the Public Works Department on deputation and works under the orders of the Superintendent, Lushai Hills. The accounts of Imperial, Provincial, and Local works are examined and audited by an Examiner.

Medical and
sanitary es-
tablishments.

115. The medical institutions of the province are supervised by the Principal Medical Officer, Assam District, who, in addition to his military duties, is the Sanitary Commissioner of the province, and is the Chief Commissioner's adviser on sanitary and medical matters generally. The civil medical staff comprises nine Civil Surgeons belonging to the Indian Medical Service, each of whom, when on duty, holds charge of a district. The remaining districts are in charge of Civil Medical Officers, who are usually either Military or Civil Assistant Surgeons. The Civil Surgeon at Sylhet is in charge of the Leper Asylum there, and the Civil Surgeon of Tezpur is also Superintendent of the only Lunatic Asylum in the province, which receives insane persons from the Assam Valley and the hill districts. Lunatics from the Surma Valley are sent to the asylum at Dacca. The Civil Surgeon of Dibrugarh is Superintendent of the Berry-White Medical School.

Imperial de-
partments in
the province.

116. The civil accounts of the province are in charge of a Comptroller, who is directly subordinate to the Financial Department of the Government of India. The Post Office Department is in charge of a Deputy Postmaster General, and the Telegraph Department in that of a Superintendent. These officers are not subordinate to the Chief Commissioner.

Local Self-
Government.

117. Besides the agency of Government officers, much assistance is given to the administration of the province by local bodies, who administer funds raised under special enactments or placed at their disposal by the Chief Commissioner. These are either municipalities for town areas, or Local Boards for the district at large.

Municipali-
ties.

118. There are nine municipalities in the province, of which four are constituted under Act III (B.C.) of 1884, and the remainder under Act V (B.C.) of 1876. In addition to these, there are two Stations and three Unions formed under Act V (B.C.) of 1876. In the Municipalities of Sylhet, Dhubri, Gauhati, and Dibrugarh the elective system is in full force, and a system of election has also been introduced, at the instance of the ratepayers, for the choice of members to sit on the Committees at Goalpara and Silchar. The official members of all municipal committees are very few in number; and although the Chairmen are officials in all cases except that of the Sylhet Municipality, the Vice-Chairmen are usually non-officials.

Municipal
income.

119. These bodies derive their income partly from taxation and partly from other sources. The taxation levied in municipalities is chiefly in the form of a tax on persons or buildings, a latrine tax and a water-rate (in Gauhati); in stations the taxation is a house assessment, and in unions a chaukidari tax. Other items of taxation are taxes on animals and wheeled vehicles. These taxes are levied under the provisions of the Act under which each municipality, etc., is constituted. No octroi or other duties are taken anywhere in the province. Of the other sources of income, the most important are the receipts from ferries [levied under the provisions of sections 148-156 of Act III (B.C.) of 1884, or sections 139-147 of Act V (B.C.) of 1876, as the case may be], from municipal pounds, the income from municipal markets, and the assignments from Provincial and Local Funds enjoyed by several municipalities. The last item consists of grants made in commutation of the land revenue of the town areas, which in the early days of the province was allowed to be appropriated to the improvement of the towns. In 1900-1901, municipalities enjoyed an income of Rs. 2,45,888, of which Rs. 1,11,228 were derived from taxation, and had an expenditure of Rs. 2,49,548, the difference being met from the balance in hand at the beginning of the year.

Local Boards.

120. The Local Boards, of which there is one for each plains subdivision, are constituted under executive orders. Each Local Board comprises from ten to thirty members, of whom three or four are officials, and the remainder non-official residents of the subdivision. In tea districts, a proportion of the non-official members are tea planters, the remainder being natives of India. The planter members are in all cases elected by the planting community, and in the three districts of Kamrup, Sibsagar, and Sylhet the native members also are chosen by election. Elsewhere, they are nominated by the Chief Commissioner. The Deputy Commissioner of the district or the Subdivisional Officer, as the case may be, is *ex-officio* Chairman of the Board. In each subdivision, the Local Board is entrusted with the maintenance of all roads in the sub-division, except a few main lines of communication, and also with the management of primary education,

subject to the general control of the Education Department. It is also empowered to make grants-in-aid to schools of higher grade, subject to rules which have been laid down. The Boards also deal with the administration of and expenditure on village sanitation, dispensaries, and vaccination, and the district post. For these purposes, the Boards have placed at their disposal the rate which is levied under the Assam Local Rates Regulation of 1879, at the rate of one anna per rupee on the annual value of lands, as well as the surplus income of pounds and ferries, and some minor receipts. This income is in most cases supplemented by an annual grant from Provincial Funds, the amount of which is fixed for a term of years. The annual budgets of the Boards are submitted to the Chief Commissioner for sanction. The estimates for all works costing Rs. 500 or over must be submitted to the Public Works Department for professional approval, and the execution of important works requiring much professional skill is entrusted to the Executive Engineer. Less important works are entrusted to the Board overseers, and in the tea districts much assistance is rendered by planters in carrying out work for the Local Boards. A draft Regulation designed to place the constitution of the Boards on a legal footing, and to extend their powers, is now under consideration.

*Physical and
Political
Geography.*
Political.

121. This section would not be complete without a reference to the system under which labour is imported from other parts of India for the Assam tea gardens and the treatment of labourers under contract is regulated and controlled. The indigenous population of Assam consists almost entirely of petty cultivators, and contains no labouring class which is compelled to resort regularly to employment for hire as a means of subsistence. The tea industry, therefore, ever since its establishment in the province, has been obliged to import labour from other parts of India. This immigration has done much towards opening out and colonising the fertile and sparsely peopled districts of Assam, while relieving other provinces of a portion of their surplus population. The principal areas of recruitment are at present the Chota Nagpur division of Bengal and the Central Provinces. In the latter area there has been a great extension of emigration since 1896, owing to the continued prevalence of famine. The classes which furnish emigrants are extremely ignorant, and the interference of Government is required to secure that they are not imposed upon; the transport between their homes and the place of labour, notwithstanding the improvements of recent years, is still long and tedious, and supervision is necessary to prevent overcrowding, disease, and consequent mortality. Under the changed conditions of life, and especially of climate and food, which the new country imposes, the immigrant is peculiarly liable to sickness, often fatal in its results, and it is thus needful that the provision of the requisite comforts, medical attendance, and other appliances for his well-being should be enforced by law. On the other hand, some regulation of the contract between the labourer and his employer, and some more effectual means of enforcing it than a civil action, is demanded by justice. It costs a large sum to import a coolie into Assam; the provisions for his comfort, which the law requires, are also expensive; and it is only equitable that the law should provide the employer with the means of obtaining the due fulfilment of the contract by the coolie, whose only capital is his labour, and who ought not to be allowed capriciously to withdraw himself from the service of the person who has paid for his introduction.

*Immigration
and Labour
Inspection.*

On these grounds it was early found necessary to legislate for the enforcement of labour contracts by special penalties on the one hand, and on the other for ensuring the proper treatment of the labourer,—a penal labour law and Government protection for the labourer being correlative terms.

122. The first Labour Act was passed in 1863, and since then the law on the subject has been changed by successive enactments. Act VI of 1901 is now in force. Under the system which it continues with certain modifications, the maximum term of the labour contract is fixed at four years, and a minimum monthly wage is laid down, the payment of which is, however, contingent on the completion of a daily task by the labourer. Labourers under contract deserting are liable to fine and imprisonment, and subject to certain restrictions, may be arrested without warrant by their employers. The law provides for the grant of subsistence allowance to weak and sickly labourers, for the provision of house accommodation, water-supply, and medical attendance, and also for the inspection of estates, the control of task rates, the cancellation of contracts in case of ill-usage by employers, and the closing of unhealthy estates to contract labour. The executive administration of the Act is entrusted to the Deputy Commissioners and Subdivisional Officers of tea districts, who are *ex-officio* Inspectors of Labourers. The Civil Medical Officers of tea districts and certain District and Assistant Superintendents of Police and Assistant Commissioners have also been appointed Inspectors and Assistant Inspectors of Labourers under the Act. The legislation embodied in Act VI

Physical and
Political
Geography.
Political.

of 1901 was undertaken in consequence of complaints received as to the prevalence of malpractices in connection with recruitment, and as to the excessive cost of importing labour, which was believed to be due to the operations of contractors for the supply of labourers, and of the recruiters employed by them.

The Act brings the operations of contractors under greater control, while favouring the employment of garden sardars, or coolies sent from the gardens to their native districts, commissioned to recruit other labourers in the neighbourhood of their homes. Another object of the Act was to raise the minimum wages payable to labourers under contract. The minimum rates are now Rs. 5 a month for a man and Rs. 4 a month for a woman for the first three years of the contract term, and Rs. 6 for a man and Rs. 5 for a woman for the fourth year. Contracts made after the 1st April 1903 will have to provide for the payment of not less than Rs. 5-8 a month for a man and Rs. 4-8 a month for a woman in the second and third years of the contract term.

In addition to the labourers engaged under Act VI of 1901, a large number are employed on the tea gardens on contracts, enforceable under Act XIII of 1859, which provides penalties for breach of the contract, but does not allow of the arrest of deserters without warrant. Neither does this Act regulate in any way the terms of the contract, nor contain any special provisions for the protection of the labourer. Many labourers, on the conclusion of their first engagement under Act VI of 1901, enter into renewed contracts under Act XIII of 1859.

SECTION 4.—CHARACTER OF LAND TENURES AND SYSTEM OF SETTLEMENT AND SURVEY.

Land
Tenures.
Division of
the subject.

123. The ordinary land tenures in Assam vary considerably in different parts of the province. Distinct systems of tenure are found in—

- | | | |
|-------------------------|--|-------------|
| (1) Assam Proper, | \| | (3) Sylhet, |
| (2) Goalpara, | \| | (4) Cachar, |
| (5) the hill districts, | | |

while several varieties of special waste land tenures granted by Government at different periods exist in all the plains districts.

Assam
Proper.
raiyatwari
tenure.

124. There are three main classes of ordinary tenure in the Assam Valley, exclusive of Goalpara, *viz.*, *raiyatwari*, *nisf-khiraj*, and *lakhiraj*. The *raiyatwari* tenure is of the simplest character: the raiyat holds an annual or decennial lease from the Government, being free to relinquish the whole or any part of his holding, provided that notice is given to the revenue officers at the proper time of the year. Any waste unoccupied land may also be taken up for cultivation without notice or application, and when so taken up, is settled with the occupant, but a prior claim to settlement of such land may be secured by filing an application for it. Large areas of land are annually relinquished and taken up in this way in those parts of the valley where fluctuating cultivation is practised. These are chiefly the inundated tracts in the neighbourhood of the Brahmaputra, which comprise extensive areas of culturable waste land, covered with high grass and reeds, which can be reclaimed without difficulty. In these areas, the most profitable system of cultivation is that under which land is cropped for not more than three years in succession, usually with *ahu* rice and mustard, and is then left fallow for a term of years. Fluctuating cultivation also occurs in the thinly-peopled submontane tracts. In the intervening regions where population is more dense, and *sali* rice is grown, settled land is seldom relinquished, and in normal times, there is a steady extension of permanent cultivation with the growth of population. Prior to 1870 all *raiyatwari* lands were held on annual leases, but in that year a set of rules for the encouragement of ten-year leases was sanctioned by the Bengal Government, expressly declaring that holdings so settled should be heritable and transferable, on condition of the transfer being registered in the Deputy Commissioner's office, while holders on annual *patta* were left without any legal assurance on these points. The principle of these rules was afterwards embodied in the Land and Revenue Regulation of 1886, which confers a permanent, heritable, and transferable right on persons holding land under a decennial lease, but recognizes no rights beyond those expressed in the lease in the case of annual tenants. The rules of 1870 remained practically inoperative until 1883, when they were recast, and a general system of ten-year settlements was introduced in all parts of the Assam Valley, where the cultivation and occupation of land are of a permanent character. In the five districts of Assam

Proper, the bulk of the more permanently cultivated land is, therefore, now held under a ten-year settlement, during the currency of which the raiyat is guaranteed against enhancement of the revenue rates. He is at liberty to relinquish any portion of his holding that consists of entire fields, and to take up new lands; while he is entitled to receive compensation from Government for any lands taken up for a public purpose. The rest of the area, where a fluctuating system of cultivation prevails, is resettled annually on the basis of actual occupation; and if dispossessed by Government for a public purpose, the raiyat is only entitled to compensation for the value of trees, houses, crops, etc., actually standing on the land at the time of its resumption, but not to compensation for the land itself.

Physical and
Political
Geography.
Political.

125. The holders of *nisf-khiraj* and *lakhiraj* lands enjoy an assignment, respectively, of half and the whole of the assessable land revenue: in addition they hold their lands in a proprietary right which is at present unlettered by any tenancy law. These tenures originated in alienations, whether of land, or the revenue or service dues upon land, that had been made by former rulers of the country for religious and other purposes. On the lands now held as *nisf-khiraj* the last Ahom ruler, Chandra Kanta Singh, imposed a tax called *kharikatana*, of 6 annas a *pura* (equivalent to $1\frac{1}{3}$ acres), which continued to be levied by the Burmese invaders after their conquest of the country. When Assam became British by conquest, all these grants were held to have lapsed; but Mr. Scott retained the moderate assessment which he found in force upon them, adding later on 2 annas a *pura*, so that the whole assessment came, as left by him, to 8 annas a *pura*. In 1834 the Government directed that a full enquiry should be made into all claims to hold land rent-free, as *debottar*, *dharmottar*, or on any other plea, throughout the districts of Assam. Captain Bogle was appointed to make this enquiry, subject to the control and orders of the Commissioner, Captain Jenkins. Another officer, Captain Matthie, was also similarly employed. At the same time the following principles were laid down for the guidance of these officers:

Nisf-khiraj
and Lakhiraj
estates.

- (1) All rights to hold land free of assessment founded on grants by any former Government were to be considered as cancelled; and it was pointed out that all claims for restoration to any such tenures could rest only on the indulgence of Government.
- (2) All lands found to be held in excess of what was held and possessed on *bond fide* grants prior to the Burmese conquest, or for services still performed, as well as all lands held for services no longer performed, were to be assessed at full rates.
- (3) All lands held on *bond fide* grants before the Burmese conquest, or for services still performed, were to be reported to Government; on receipt of the report, special orders would be issued on each case.
- (4) Captain Jenkins might in his discretion suspend the orders for bringing any particular land on full rates; but he was to submit his reasons for the consideration of Government.
- (5) Pending the *lakhiraj* enquiry, Mr. Scott's moderate rates were to be levied as before on all lands claimed as *lakhiraj* (whether as *debottar*, *brahmottar*, *dharmottar*, or on whatever plea) until brought under assessment at full rates, or until orders to the contrary were received from Government.

The work was commenced in 1834, but was not concluded till 1860, and in the lapse of time these orders were altogether forgotten. Instead of referring the cases which came before him for the orders of Government, General Jenkins dealt with them in a manner which was not authorised by his instructions. He drew a distinction between *debottar*, or temple lands, and other grants, such as *brahmottar* (personal grants to Brahmans for religious service), *dharmottar* (grants to religious communities other than temples, or for pious uses), etc. In the case of the first, when he found the grants to be *bond fide* and valid, he confirmed them as revenue-free, without, as he was ordered, referring the case to superior authority. In all other cases of *bond fide* and valid grants, he simply confirmed the grantee in possession, and directed that, as ordered in his instructions, the land should be assessed as before, *i. e.*, at Mr. Scott's favourable rates of 8 annas a *pura*, pending the final orders of Government on the whole question. Where the land held was not found to be held under a *bond fide* and valid grant, it was resumed and settled at full rates, which in those days were Re. 1 a *pura*. But no reference was ever made to Government on the conclusion of the proceedings; and thus until 1861, when the revenue rates were raised throughout Assam, the second class of lands continued to be assessed at rates which, though this was not expressly intended, were, as a matter of fact, half the rates prevailing for other lands.

The matter was then allowed to rest till 1872, when a long correspondence began, which was not finally closed till 1879. It was considered by the Government of India that the grantees having so long been suffered to hold

Physical and
Political
Geography.
Political.

at half rates, it would not be judicious to make any alteration in their status; and so General Jenkins' unauthorised action was condoned. These half-rate holders were at that time called, equally with the revenue-free holders, *lakhirajdars*. The term *nisf-khirajdar* was adopted in 1871 as a more accurate description of their status as landholders liable to be assessed at only half the current rates of revenue, whatever these may happen to be.

A *nisf-khirajdar* enjoys the further privilege of paying for the waste land of his estate at the rate of 1 anna 3 pies a *bigha*. *Nisf-khiraj* estates generally are settled for a term of ten years throughout the Brahmaputra Valley.

Three-fourths of the total number of *nisf-khiraj* estates are situated in the district of Kamrup and date from the last period of Ahom rule, when the seat of Government had been transferred from Garhgaon to Gauhati, and the Ahom kings gave away lands wholesale with all the zeal of recent converts to Hinduism. The *lakhiraj* or *debottar* grants, on the other hand, are usually of older date, the most ancient being ascribed to kings Dharmapal and Vanamala, who are said to have reigned between 1100 and 1200 A.D.

The other special tenures in Assam Proper are *chamua*, *khats*, ten-twenties, and six-pie *lakhiraj* tenures. There is now only one *chamua*, the holder of which is allowed to pay the revenue direct into the treasury instead of through the local fiscal officer, and is granted a commission of 10 per cent. on the total demand. There are four *khats*, in two of which the *khatdar* is simply in the position of the ordinary mauzadar, but in the other two the *patta* is issued to the *khatdar*, and not to the cultivators direct. Ten-twenties are tenures which expire with the death of the present holders. When the land revenue exceeds Rs. 20, half of the total demand is remitted, but when the revenue is between Rs. 10 and Rs. 20, the remission is restricted to half of the amount by which it exceeds Rs. 10. The six-pie *lakhiraj* estates consist of nine holdings covering 2,755 acres of land, which pay a revenue of 6 pies per *bigha* of cultivated land, this being the amount of blackmail originally given by the owners to the hill tribes.

The *nisf-khiraj* and *lakhiraj* estates are, like the *chamuas* and *khiraj-khats* already mentioned, ordinarily cultivated by sub-tenants, who, when their superior landlord is (as is generally the case) a religious institution, are known as *paiks* or *bhakats* of the temple or *sattra*.

Goalpara.

126. The history of the permanently-settled portion of Goalpara has been given above (paragraphs 78 and 79). It consists of nineteen permanently-settled estates and eight small temporarily-settled holdings. These between them cover the whole district, excluding the Eastern Duars. Nine of the nineteen permanently-settled estates are those of the border *Chaudhuris* described in paragraph 87. The remaining ten consist for the most part of lands held originally revenue-free on invalid titles, which were resumed in consequence, and settled at a *jama* fixed in perpetuity. The eight temporarily-settled estates include five *chars*, which are farmed yearly to the highest bidder. Of the remaining three, two are resumed *lakhiraj*, and third was acquired by Government as a free gift from the zamindar.

Eastern
Duars.

127. The Eastern Duars comprise five separate tracts, *viz.*, Bijni, Sidli, Chirang, Riphu, and Guma. The last three are the sole property of Government, and are managed on the same system as the *raiyatwari* tracts of Assam Proper, the only difference being that in all estates except one cultivation is entirely on annual leases, and that the revenue rates are lower than those prevailing in Assam. Bijni and Sidli, with the exception of the submontane forests which have been excluded from them and brought under conservancy, are the estates of the Rajas of the same names. The Sidli estate is under the management of the Court of Wards, but the Bijni Duar was settled with the Rani for ten years in 1901, at a revenue of 80 per cent. of the estimated rental of the estate in that year.

Sylhet.

128. The land tenures in the district of Sylhet (excluding Jaintia, which was not annexed to the district until 1835) present a remarkable contrast to those of all the districts of permanently-settled Bengal, except Chittagong. In no other district was the permanent settlement preceded, as in these, by a survey; in no other district were the zamindars passed over at that settlement in favour of the superior raiyats or middiemen called *mirasdars* or *talugdars** (*cf.* the Chittagong *tarafdars*). The consequence of the survey is that all lands within the surveyed portion of the district which were settled in 1791-92, the date of the decennial settlement, and

* The above statement does not apply to (1) parganas Taraf, Bamai, and Putijuri, forming zila Laskarpur in the Habiganj subdivision, which were transferred to Sylhet from the Dacca and Mymensingh districts after the assessment for the decennial settlement had been effected, and (2) certain parganas in the Sunamganj subdivision which could not be surveyed on account of difficulties with the Khasis. In other parts of Sylhet also, the settlement was occasionally made with the zamindars, and not with the raiyats.

have not since been specially settled in perpetuity, are the property of Government and held under temporary settlement. The result of the settlement having been made with a large number of middlemen is that, while in the districts of permanently-settled Bengal estates are counted by tens or hundreds, in Sylhet they are counted by thousands, and the individual revenue of each estate is generally very small. Of 49,847 permanently-settled estates at the close of the year 1901-1902, only 469 paid a revenue of over Rs. 100, and 21,621 paid under one rupee. Thus, Sylhet is distinguished (1) by the large proportion of its area which is not permanently settled, and (2) by the extremely small payments of revenue due from individual estates, which make the collection (in the absence of *mufassal* revenue establishments entertained nowhere in permanently-settled districts) a peculiarly difficult and complicated task.

Physical and
Political
Geography.
Political.

129. The permanently-settled tenures of Sylhet are all held on the same conditions, but have received the names given below with reference to their revenue history :

Permanently-
settled
tenures.

(1) *Dassana*, estates included in the decennial settlement of 1791-92, which in 1793 became permanent ; in 1892-93 these numbered 25,967, and paid a revenue of Rs. 3,16,838.

(2) *Bazyafti Daimi*, lands resumed by the Special Commissioner appointed under Regulation III of 1828, and then permanently settled. Number 23,028; revenue Rs. 39,605. Of these, 33 estates paying a revenue of Rs. 402 are in the Jaintia parganas.

(3) *Ilam* lands settled permanently (see below under temporarily-settled estates). Number 9; revenue Rs. 26.

(4) *Khas Daimi*, permanently-settled estates purchased by Government at sales for arrears of revenue and sold again as permanently-settled. Number 435; revenue Rs. 5,782.

(5) *Halabadi*.—The term *halabadi* literally means "recently cultivated," but in Sylhet it is applied to all lands not included in the decennial settlement of 1791-92. The so-called *halabadi* (also known as *abadi* or *jangal abadi*) *pattas* or *sanuds* were granted between the years 1791 and 1807. They contained no express limitation of the term of settlement, and in 1869 were held by Government to have been settlements in perpetuity. Number of estates 474; revenue Rs. 2,767.

(6) *Khas halabadi*, estates belonging to class (5) which, having been bought in by Government at sales for arrears of revenue, have been resettled permanently. Number 31; revenue Rs. 1,337.

(7) *Permanently-settled waste land grants*.—The proprietors of three *halabadi* estates paying a revenue of Rs. 9-5-3 claimed a large tract in the Raghunandan Hills. Their claims were compromised by the grant in perpetuity of two estates covering an area of 1,659 acres and paying a revenue of Rs. 9-6-0.

(8) *Dhali Mujrai, mahals* exempted from assessment on condition of the holders furnishing *dhali* servants for the Sylhet Collectorate. At present two such servants are furnished. There are 41 such estates in Sylhet, covering an area of 377 acres.

130. The temporarily-settled estates of Sylhet are also known under different names, but by far the most extensive class, excluding the Jaintia parganas referred to in the next paragraph, is that called *ilam*. In consequence of the success met with in Behar in bringing under assessment land not included in the decennial settlement which afterwards became permanent, the *pargana patwaris* were, in 1802, directed to prepare and submit schedules of lands in their respective *parganas* which had not been included in that settlement. On receipt of these schedules, the Collector issued proclamations (*ilams*) inviting claimants to any of the lands to come forward; but no one appeared to claim them. These lands have thus acquired the names of *ilam* or proclaimed lands. During the years 1829 to 1834, these *ilam* lands were surveyed, and in 1835, those that were found cultivated were settled with the occupants if willing to engage; otherwise they were farmed. The term of the first settlement was ten years for cultivated and fifteen years for jungle lands, and it was subsequently renewed on its expiry for successive further periods. In 1869, a systematic survey was commenced, and revised rules of settlement and a form of *patta* were drawn out. These rules were again revised in 1875 and modified in 1876. The resettlement commenced in 1871, and was practically concluded in 1881. On resettlement, all waste lands in excess of one-fifth of the cultivated area of an estate were, as a rule, excluded from the settlement. In order to protect the rights of Government in these excluded lands, and to prevent encroachment by the neighbouring permanent settlement-holders, a special form of farming lease was sanctioned in 1889. The settlement of *ilam* estates under the rules of 1869—1876 was made so as to expire on different dates, but with the exception of certain estates, which were settled with tea planters on special terms, and

Temporarily-
settled
tenures.

Physical and
Political
Geography.
Political.

the Pratabgarh tenures to be mentioned subsequently, all *ilam* leases in the district had run out by the 31st March 1896. The leases were, however, extended, pending the completion of resettlement operations undertaken in that year, till the 1st April 1902, from which date the ordinary *ilam* lands have been resettled on leases for 20 years. They comprise an area of 108,350 acres.

The *raiyatwari* tract of Pratabgarh in the south of the Karimganj subdivision, comprising an area of 36 square miles, was originally composed of *ilam* estates, which were settled with bodies of cultivators in 1875—1878. The settlement, however, broke down as the lessees were men of little substance, who quarrelled among themselves, and a *raiyatwari* settlement was made in 1882-83 for five years. This settlement expired in 1887, but was extended from year to year pending a fresh survey, which was not completed till 1893. Another five years' settlement was then made, which expired in 1898, but was extended till the 1st April 1902, when the tract was settled for 20 years along with the ordinary *ilam* estates.

So much of the *ilam* area as was not included in the settlements of 1835 and subsequent years has been entered in the waste land register as waste at the disposal of Government; much of it has been taken up by tea planters on the waste land tenures to be hereafter described.

The rest of the temporarily-settled area in Sylhet outside the Jaintia parganas falls apart into two divisions: first, the small tenures settled on the same principle as *ilam* lands, but different in their origin; and, secondly, the areas held *khas* by Government, in which, instead of making over definitely the use and occupancy of the land to a settlement-holder who may eventually become a middleman, the Government has retained the management in its own hands, and deals directly with the cultivators. The first class consists of 2,235 *mahals* covering an area of 27,519 acres, and technically known by the following names:

(1) *Nankar patwarigari*.—Lands formerly held by the *pargana patwaris* as *nankar*, i.e., in lieu of salary. The *patwaris* were abolished in 1833, and the lands were ordered to be assessed in 1835.

(2) *Char-bharat*.—Alluvial accretions, which in Sylhet all belong to the State.

(3) *Bil-bharat*.—The silted-up beds of *bils*, which were excluded from the permanent settlement because they were then useless.

(4) *Isad*.—Surplus lands discovered after the permanent settlement (but not formally proclaimed as the *ilam* lands were), and thus not included in it.

(5) *Resumed revenue-free land*.—Resumed because found to be held on invalid titles.

The *khas* lands in Sylhet are, for the most part, former *ilam* estates, the settlement of which has for various reasons broken down. In some cases the holders as a body refused to accept resettlement with joint responsibility; other estates have been bought in by Government at sales for arrears of revenue; in other cases, again, the settlement has been cancelled for default in payment of revenue. These estates are managed upon principles in general similar to the *raiyatwari* settlement of Assam Proper. Certain fixed rates are laid down, and raiyats are free to take up land when they please at those rates, after application to the tahsildar.

In addition to the above, the term "*khas*" includes also petty permanently-settled estates of little value, bought in by Government at sales for arrears of revenue and not resettled in perpetuity.

A full account of the estates in classes (1) to (5) will be found in paragraph 51 of the Administration Report for 1880-81. These estates were settled under orders issued in a Resolution of the Government of Bengal in 1871. The settlements were made so as to expire on different dates, the latest extending till the year 1907. Those estates of which the settlement had expired before the 1st April 1902 were resettled for 20 years from that date along with the *ilam* estates.

Jaintia par-
ganas.

131. The Jaintia parganas have, since they first came under British rule, been temporarily settled.* The first regular settlement was made in 1838-40, when the tract was professionally surveyed and measured. It was made for a term of five years, at the end of which it was further extended for ten years, and then again extended, so that the settlement of the whole area expired in 1856. In that year the tract was resettled, without remeasurement, for twenty years. This settlement expired in 1876, but revised rates were not imposed till 1879, and the settlement then made remained in force till 1898, when the parganas were resettled for a term of 15 years.

* With the exception of 33 permanently-settled and 29 revenue-free estates. The former consist of lands claimed as revenue-free, but resumed by the Special Commissioner appointed under Bengal Regulation III of 1828 and subsequently permanently settled.

132. Besides these permanently and temporarily-settled estates in Sylhet, there are, as in other districts, valid *lakhiraj* or revenue-free estates. There are in all 11,489 revenue-free estates, with an area of 41,914 acres, including—

Physical and
Political
Geography.

Political.

- (1) One hundred and seventy-eight grants, which were declared valid after resumption proceedings under Regulations II of 1819 and III of 1828.
- (2) Six thousand three hundred and forty-five petty grants, mostly under 10 *bighas* in area, which were exempted from assessment under order of the Bengal Government in 1841.
- (3) *Kasba Sylhet*.—These estates are nominally all less than 10 *bighas* in extent, but many, as a matter of fact, greatly exceed this area. This anomaly probably originated through fraud, but it is hard, if not impossible, to rectify it now. Resumption proceedings were initiated many years ago, but the cases were struck off for no apparent reason. The number of these estates has been returned as 2,554, with an area of 4,560 acres.*
- (4) Two thousand four hundred and twelve redeemed estates, consisting of *ilam* estates paying a revenue of Re. 1 and under, which were sold at auction revenue-free and other estates redeemed on payment of twenty or twenty-five times the annual revenue.

Lakhiraj es-
tates.

133. When Cachar was annexed in 1830, Government stepped into the position of the Raja as absolute owner of the soil. The great bulk of the land is held either (1) revenue-free under fee-simple and commuted grants taken up for special cultivation, or (2) on *jangalhuri* or waste land reclamation leases for periods of 20 or 30 years at progressive rates, or (3) at ordinary rates on what was formerly known as the *mirasdari* tenure, under which bodies of men often of different caste and religion combined together to break up waste land for which they received an *ijmali patta*, imposing upon them joint responsibility for the revenue. This system of joint ownership was found, however, to be a source of inconvenience to the settlement-holders, as well as to the Government, and at the resettlement of the district, which was effected in 1900 for a term of 15 years, these coparcenary *mahals* were broken up and separate leases were issued to the individual settlement-holders.

Cachar.

There are a few *lakhiraj* or revenue-free estates in Cachar, being the grants held by dependents of the old royal family, or dating from the time of native rule. These are known as *baksha* lands, and are revenue-free only so long as they remain in possession of the grantee and his heirs; when alienated, they are liable to assessment like other *mirasdari* lands. Considerable areas are also held for special cultivation under the old Waste Land Rules, the Rules of 1876, and Section I of the Settlement Rules.

134. In the hill districts there is no land revenue settlement properly so called, except in a few isolated tracts. The strip of plains land which encloses the Garo Hills on three sides is managed on the system of settlement which obtains in Assam Proper, save in one portion, where the zamindars of Mechpara hold certain land as part of their permanently-settled estates, and manage it themselves. The terms of tenure are similar to those of the annual *patta*-holders of Assam. In the Khasi and Jaintia Hills, a class of land known as *rajhali* in the Jaintia Hills subdivision, has since the year 1886 been assessed to land revenue under special rules, the rate charged being 10 annas per *bigha*. In the rest of these districts Government does not assess the land, but the houses. Each village, however, in the Garo, Khasi and Jaintia, and Naga Hills has its own known lands, in which rights of private ownership are recognised to a degree which seems surprising in so primitive a state of society. The system of cultivation by *jhum*, which prevails throughout the greater part of this area, demands long periods of rest during which the land becomes reclothed with forest; and it is often difficult to believe that what seems an uncared-for wilderness is really the jealously-guarded private property of a clan, family, or village. But the case is so; and no quarrels have been more enduring or more bitter among these people than those relating to land. The customs of land tenure among these primitive races are often strangely complicated and full of interest; but they have as yet been insufficiently explored, and it is impossible to describe them at length here. The practice of taxing houses, instead of assessing the land, prevails also in certain remote parts of the plains districts, such as the North Cachar subdivision and the Mikir Hills in Nowgong, while from the Miris in Lakhimpur and the Tipperas in Sylhet a poll-tax is collected in lieu of land revenue.

Hill districts.

135. In a province like Assam, thinly peopled and sparsely cultivated, with a boundless extent of waste, inviting new settlers, the terms upon which land is allotted

Waste Land
Tenures.

* These figures, which are taken from a *chitha* drawn up by a former Collector for the purpose of assessing chaukidari tax, are only approximate.

Physical and
Political
Geography.
Political.

for extension of cultivation have naturally always been a subject of much consideration. The discovery of indigenous tea in Assam and of the possibility of growing this important staple on a large scale in the plains portion of the province, has given a special impetus to the taking up of waste, and special rules have from time to time been issued with a view to encouraging the extension of tea cultivation.

Special
tenures.

136. The following is an account of the special terms under which waste land grants for the cultivation are held from Government in the various districts of the province. Only one of these systems, *vis.*, the Thirty years' Lease Rules, is now actually in force for new applications; but grants made under all of the prior rules actually exist, and are governed by the conditions in force at the time when they were given.

I. The first special grant rules were those of the 6th March 1833, and related to Assam Proper only. No grant was to be made of a less extent than 100 acres, or of a greater extent than 10,000 acres. One-fourth of the entire area was to be under cultivation by the expiration of the fifth year from the date of grant, on failure of which the whole grant was liable to resumption. One-fourth of the grant was to be held in perpetuity revenue-free. On the remaining three-fourths no revenue was to be assessed for the first five years if the land was under grass, ten years if under reeds and high grass, and twenty years if under forest; at the expiry of this term, revenue was to be assessed at 9 annas per acre for the next three years, after which the rate was to be for twenty-two years Re. 1-2 an acre. At the close of this period (the thirtieth year in the case of grants of grass lands, thirty-fifth in the case of reed lands, and forty-fifth in the case of forest lands), the three-fourths liable to assessment were to be assessed, at the option of the grantee, either at the market value of one-fourth of the produce of the land, or at the average rate of revenue paid by rice lands in the district where the grant was situated; the revenue was thereafter to be adjusted in the same manner at the end of every term of twenty-one years.

Very few grants under these rules still exist. There are now only two in Kamrup and sixteen in Sibsagar, with a total area of 5,225 acres.

II. The next rules were those for leasehold grants of the 23rd October 1854, commonly called the Old Assam Rules. Under these rules, no grant was to be less than 500 acres in extent (afterwards reduced to 200 acres, or even 100 acres in special cases). One-fourth of the grant was exempted from assessment in perpetuity, and the remaining three-fourths were granted revenue-free for fifteen years, to be assessed thereafter at 3 annas an acre for ten years, and at 6 annas an acre for seventy-four years more, making a whole term of ninety-nine years; after which the grant was to be subject to resurvey and settlement "at such moderate assessment as might seem proper to the Government of the day, the proprietary right remaining with the grantee's representatives under the conditions generally applicable to the owners of the estates not permanently-settled." One-eighth of the grant was to be cleared and rendered fit for cultivation in five years, one-fourth in ten years, one-half in twenty years, and three-fourths by the expiration of the thirtieth year; and the entire grant was declared to be liable to resumption in case of the non-fulfilment of these conditions. The grants were transferable, subject to registration of transfer in the Deputy Commissioner's office. These rules were extended to Sylhet and Cachar in 1856, and were in force until 1861, when they were superseded by rules for grants in fee-simple, which at the same time allowed holders of leasehold grants under the prior rules to redeem their revenue payments, on condition that the stipulated area had been duly cleared, at twenty years' purchase of the revenue at the time payable. This permission is still in force, and has been largely taken advantage of. Two hundred and seventy-one grants, with an area of 288,206 acres, have thus been redeemed, and 36 grants, with an area of 35,451 acres (most of which are in Cachar), remain upon the original terms.

III. To these succeeded a new policy, that of disposing of land in fee-simple. The first fee-simple rules were those issued by Lord Canning in October 1861. The Secretary of State took objection to some of their provisions, and a fresh set of rules was issued on the 30th August 1862. The rules issued by Lord Canning provided for the disposal of the land to the applicant at fixed rates, ranging from Rs. 2-8 to Rs. 5 per acre. The rules of August 1862 provided that the lot should be put up to auction. Grants were to be limited, except under special circumstances, to an area of 3,000 acres. In each case the grant was ordinarily to be compact, including no more than one tract of land in a ring fence. The upset price was to be not less than Rs. 2-8 an acre, and in exceptional localities it might be as high as Rs. 10. Provision was made for the survey of lands previous to sale, and for the demarcation of proper boundaries where applicants for unsurveyed lands were, for special reasons, put in possession prior to survey, and also for the protection of proprietary or occupancy rights in the lands

applied for. The purchase-money was to be paid either at once or by instalments. In the latter case, a portion of the purchase-money, not less than 10 per cent., was to be paid at the time of sale, and the balance within ten years of that date, with interest at 10 per cent. per annum on the portion remaining unpaid. Default of payment of interest or purchase-money rendered the grant liable to re-sale.

These rules were in force till August 1872, when the Lieutenant-Governor of Bengal stopped further grants under them, pending revision of the rules.

IV. Revised fee-simple rules were issued in February 1874 just before the constitution of the province as a separate Administration, which raised the upset price of land sold to Rs. 8 per acre, and made more careful provision for accurate identification of the land, and for consideration of existing rights and claims, before its disposal. These rules continued in force till April 1876.

There now exist in the province 319 fee-simple grants (excluding redeemed leasehold grants already mentioned), covering an area of 192,734 acres.

V. The existing special rules under which applications for waste land for the cultivation of tea, coffee, or timber trees are dealt with, were originally issued in April 1876, and were revised and re-issued under sections 12 and 29 of the Land and Revenue Regulation in 1887. The land is leased (for thirty years) at progressive rates, and the lease is put up for auction sale, but only among applicants prior to its advertisement in the Gazette, at an upset price of Re. 1 per acre, under the provisions of Act XXIII of 1863. The progressive rates are as follows :

For the first two years	...	...	...	revenue-free.
„ next four „	...	...	...	3 annas an acre.
„ „ four „	...	...	...	6 „ „
„ „ ten „	...	...	...	8 „ „
„ „ ten „	...	...	...	1 rupee „

After the expiration of the last mentioned term, the land is to be assessed under the laws in force, "provided that no portion of the said land shall at any time be assessed at a rate higher than that then payable on the most highly-assessed lands in the said district, cultivated with rice, pulses, or other ordinary agricultural produce." The grantee is required to pay the revenue punctually on the due date ; to devote the land only to the special crops for the cultivation of which it is granted* ; to personally reside in the district, or have an agent residing there ; to erect, and maintain in repair, proper boundary marks ; not voluntarily to alienate any portion of the land, unless the estate is transferred as a whole ; and to give notice to the Deputy Commissioner of all such transfers. On breach of any of these conditions, the concession of the favourable rates of assessment on which the land is held is liable to be withdrawn, and the estate is liable to be assessed at the ordinary district rates. There were altogether, at the end of 1901-1902, 947* estates covering 350,951 acres held on this tenure in Assam. Settlement is no longer made under these rules in Sylhet or in the plains portion of the Cachar district.

Mention should here be made of a special tenure, compounded of the lease under the rules of April 1876 and the terms on which *ilam* land is held in the district, on which certain tea planters have been allowed to hold land for tea in South Sylhet. When the *ilam* resettlement was in progress in this district, it was found that several planters had recently acquired considerable areas of waste land held under *ilam pattas*. One of the rules of the *ilam* settlement was that waste land within the boundaries of the *patta* which exceeded the proportion of one-fifth of the cultivated area should be cut off and resumed by Government. But it was precisely in order to obtain this waste land that tea planters had acquired the *ilam pattas*. A compromise was, therefore, made in 1879. The land already under tea was assessed at Re. 1-8 per acre ; of the waste, an area equal to one-fifth of the cultivated area was allowed at 8 annas an acre ; and the rest was permitted to be held on the terms and at the rates specified in the waste land rules of 1876. The settlement of these estates, known as "Modified *ilam*" estates, was made so as to expire on different dates, the latest terminating in the year 1903. Those estates of which the leases had already run out were resettled with the other *ilam* estates for 20 years from the 1st April 1902.

From the above summary it will be seen that from 1838 to 1861 the principle on which waste lands were granted for tea cultivation was that they should be held on a leasehold tenure for long terms at low rates of assessment, the cultivation of the land being secured by stringent conditions as to clearance ; from 1861 to 1876 the policy was to alienate land free of revenue demand, and without any clearance conditions ;

* Under executive orders the clause in the lease, requiring the previous permission of the Deputy Commissioner before the land included in the lease is used for ordinary cultivation, is not enforced so long as the main purpose to which the estate is put is special cultivation.

Physical and
Political
Geography.
Political.

while from 1876 to date the principle of leases has again been reverted to, but this time without any special stipulations as to the area to be brought under cultivation within the term of lease. The total area held on these special terms for tea cultivation in the province is no less than 920,580 acres, or 1,438'40 square miles.

The following statement shows the area of, and revenue assessed on, the different classes of tenures found in the plains portion of the province :

	Number of estates.	Area, in acres.	Revenue. Rs.
I. Permanently-settled	49,866	3,930,080	3,76,685
II. Temporarily-settled—			
(a) On annual leases at full assessment	464,343	798,025	16,86,058
(b) On leases for terms exceeding one year (periodic) at full assessment.	368,785	1,679,631	30,80,303
(c) Settled at half rates (<i>nisf-khiraj</i>) ...	2,458	192,450	1,70,225
(d) Town lands and other special settlements.	5,951	24,442	60,633
(e) Waste land grants other than fee-simple.	1,064	441,741	2,96,340
Total Temporarily-settled	842,601	3,136,289	52,93,559
III. Revenue-free—			
(a) Waste land fee-simple grants ...	588	478,839	...
(b) Revenue-free estates other than fee-simple.	9,797	139,664	...
Total	902,852	7,684,872	56,70,244

In the above statement, the word "estate" has the meaning assigned to it in the Assam Land and Revenue Regulation, namely, a parcel of land for the payment of the revenue, of which a separate engagement has been made. In the temporarily-settled, fully-assessed (*raiyatwari*) area, separate *fattas* are often issued for detached parcels of land belonging to the same *raiyat*, so that the number of so-called estates does not correctly represent the number of *raiyat's* holdings.

Surveys.

137. The professional revenue survey of the plains districts of the province was undertaken while these districts formed part of Bengal, and was brought to a conclusion shortly after the formation of the Chief Commissionership. In this survey village boundaries where they existed, and the boundaries of certain tea grants and revenue-free estates, as well as the geographical and topographical features of the country, were mapped usually on the scale of 4" to a mile, but, except in the Jaintia parganas and Cachar, no field survey was made, and the results were of little practical use for revenue purposes. In the permanently-settled portion of Sylhet, the survey was preceded in the years 1859-65 by a demarcation of the boundaries of villages and estates by non-professional agency, in the course of which maps of the estates were prepared by chain and compass on the scale of 16" to a mile, and these maps, inaccurate though they are in many respects, afford the most recent record of the boundaries of estates in that area. A cadastral survey, based on a regular professional traverse of the portions of the Assam Valley where most cultivation was to be found, was commenced in 1883 and completed in 1893, and similar cadastral surveys of the *raiyatwari* portions of Sylhet and Cachar have been effected for resettlement purposes in subsequent years. The field maps of these surveys are on the scale of 16" to a mile. While the cadastral survey of a portion of the Assam Valley districts was in progress, the opportunity was taken to train the local mandals in surveying with the plane table, and after the professional party had left the valley, certain additional areas were surveyed cadastrally by local agency on the basis of plane-table traverses in successive years. It was subsequently decided that all such extension surveys should be made on the basis of theodolite traverses, and since 1899 a permanent professional survey detachment has been maintained in the province, which is charged with the duty of preparing traverses for further cadastral surveys which the extension of cultivation may necessitate, as well as with correcting and bringing up to date the topographical details in the standard district maps, and with minor survey operations undertaken in the province which require professional skill. The officers in charge of the detachment also supervise the maintenance of cadastral maps. Wherever an area has been brought under cadastral survey, arrangements have been made for having the maps and other records kept as far as possible up to date and permanent marks looked after by the agency of mandals in the Brahmaputra Valley and patwaris in the Surma Valley.

The Garo, Khasi and Jaintia, and Naga Hills, and a portion of the Lushai Hills have been surveyed by the Topographical Branch of the Imperial Survey Department.

Physical and Political Geography.

138. The nature of the *raiyatwari* tenure in the Assam Valley has already been described. Estates held on annual lease are resettled every year, and the annual relinquishment and taking up of land in tracts where fluctuating cultivation prevails necessitates a somewhat elaborate annual revision of settlement, on the accuracy of which depends the correct assessment of the land revenue demand. The ten-year settlements undergo no alteration during the length of their term, save such as may be caused by the raiyat's relinquishing some fields of his holding. Every new settlement, whether annual or decennial, is preceded by measurement, which, like the assessment, is effected by the mandals under the supervision of the tahsildar or mauzadar, who is responsible for the assessment as well as for the collection of the demand. The average gross area of a mandal's circle is nearly 8 square miles.

Political.

System of Survey and Settlement—Settlements in Assam Proper.

139. The bulk of the cultivated area in the Assam Valley has been cadastrally surveyed on the scale of 16" to a mile, and where this is the case, all new fields are regularly surveyed and plotted on the cadastral sheets by the mandals, old and permanent cultivation being distinguished from land newly taken up by the use of different coloured lines. In tracts which have not yet come under survey, areas are estimated by measuring up the four sides of each field with a 30-foot chain and multiplying together the mean length and breadth thus ascertained. The registers in which the results of the measurements are recorded are two in number—a field register or *dagchitha* and a *jamabandi* or revenue roll. The former shows the number borne by each field, the raiyat's name, the area and the class of soil; in non-cadastral tracts the boundaries and dimensions are also entered. The *jamabandi* is a record of the fields constituting each raiyat's holdings, their area, soil class and assessment. Separate *dagchithas* and *jamabandis* are maintained for lands held on annual and lands held on decennial leases. In the annual measurement of new lands and revision of settlement papers the mandals are controlled by the Sub-Deputy Collectors, and in cadastrally-surveyed tracts a further supervising agency is provided in the shape of supervisor kanungos, each of whom has under his charge a number of mandals' circles varying from one to thirty.

Measurement.

140. In the five upper districts of the Brahmaputra Valley, the soil is divided into three main classes or descriptions,—*basti*, *rupit*, and *faringati*. The first mentioned is the land on which the raiyat's house stands, with the garden enclosure around it; *rupit* land is land which ordinarily grows *baou* or any species of transplanted rice; the term *faringati* is applied to all land not falling within either of the two former classes, and includes land growing *ahu* or summer rice, sugarcane, mustard, and other crops.

Assessment.

Until 1893 no attempt had been made to proceed further in the direction of classification. Advantage was then taken of the expiry of the decennial leases to revise the assessment; and, while securing to Government a share of the increased value of the produce, to introduce a more equitable system of classification. The main descriptions of soil already mentioned have each been divided into four classes, the revenue payable on each being as follows:

		First class.	Second class.	Third class.	Fourth class.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	
<i>Basti</i>	...	1 6	1 4	1 2	1 0	per <i>bigha</i> .*
<i>Rupit</i>	...	1 0	0 14	0 12	0 10	per „
<i>Faringati</i>	...	0 12	0 10	0 9	0 8	per „

Tea land held on *raiyatwari* tenure is assessed at uniform rates fixed for each district, which vary from 9 to 12 annas a *bigha*.

The resettlement of the whole of Assam Proper was effected in a single season and made no pretence to scientific accuracy. The main consideration taken into account was the demand for land in a village as shown by the density of population and the proportion of settled to total area. All land in a village of the same description was placed in the same class, this rough method of assessment being justified on the ground that the rates were low, and could be borne by the worst lands in a village without difficulty. The settlement of the five upper districts of the valley was concluded for ten years from the 1st April 1893, all existing decennial leases being renewed for that term. During the currency of the settlement all lands newly taken up are assessed according to their description at the rates fixed for the village. The settlement of lands taken up on permanent (periodic) tenure is made so as to expire on the same date as the general decennial settlement. A detailed resettlement of the districts on principles similar to those which are followed in other provinces of India has recently been commenced.

* A *bigha* contains 14,400 square feet, 3.025 *bighas* = 1 acre.

Physical and
Political
Geography.
Political.

In the Eastern Duars no attempt has yet been made to go beyond the old three-fold classification of *basti*, *rupit*, and *faringati*. The rates current in that tract are for *basti* and *rupit* 8 annas and for *faringati* 4 annas per *bigha*, except in the Guma mauza where the fourth-class village rates shown above are imposed.

Settlement
statement.

141. The settlement year begins on the 1st April, and the tahsildar or mauzadar is responsible for seeing that the settlement registers are submitted to the Deputy Commissioner (or in subdivisions to the Subdivisional Officer) on the date fixed by them (usually about July). The accuracy of the assessments is checked in the Deputy Commissioner's office, and a settlement statement is then prepared and submitted to the Commissioner for confirmation.

This annual revision of settlement is called the main or regular settlement of the year, and includes all lands taken up for cultivation in the first half of the year to which it relates. A supplementary settlement, however, is needed, in order to assess rice land taken up after the mandal has returned from the field, and the lands which are broken up for oil-seeds and pulses in September and October, when the floods subside. The measurements for this purpose are conducted during the winter months; the papers of the *dariabadi* or supplementary settlement are filed before the close of the financial year; and the settlements are reported to the Commissioner for confirmation in the same manner as the main settlements concluded in the July preceding. In the following year these *dariabadi* lands come into the main settlement.

The revenue is ordinarily payable in two instalments of three-fifths before December 15th and two-fifths before the 15th February; but in certain mauzas, where the cultivation of mustard is considerable, and in the case of *dariabadi* lands, which are settled too late for the December instalment, is paid the whole year's revenue in February.*

Sylhet.

142. In Sylhet the temporarily-settled portions, as already explained, consist of the Jaintia parganas and the *ilam* and other miscellaneous *mahals* not included in the permanent settlement.

The history of the Jaintia settlement has already been partly given. In 1838—40 a cadastral or professional *khasra* survey was made of these parganas, and the maps of this survey formed the basis, with additional surveys by amins where fresh land had been taken up, of the resettlement made in 1856. At this settlement, the rates of assessment were determined on local enquiry by the Settlement Officer and his subordinates, according to the nature of the soil and its capabilities. The rates varied from 2 annas 6 pie to Re. 1-0-3 per acre; but these rates were pitched extremely low in consequence of the successful opposition of the cultivators to the imposition of any higher assessment.

This settlement expired in 1876; but, owing to errors committed in the classification and assessment of the land, the new settlement was not finally completed until 1882 and terminated ten years later. The parganas were then surveyed and resettled for a term of 15 years with effect from April 1898, the date to which the former settlement had been extended. The assessment was made on principles somewhat similar to those adopted in the Assam Valley resettlement, villages being divided into five grades and land into four main classes, *i.e.*, *basti* or homestead and garden, the rate per *bigha* on which varied from 14 to 4 annas, rice land assessed at from 10 to 4 annas, cultivation other than rice at 8 to 4 annas, and waste at 2 to 1 anna per *bigha*. Tea land was assessed at the uniform rate of 10 annas a *bigha*.

Ilam and
miscella-
neous tempo-
rarily-settled
estates.

143. The resettlement of *ilam* and other miscellaneous temporarily-settled estates in Sylhet carried out in the years 1871—1881 has been referred to in paragraph 130 above. Before settlement, the lands were measured with chain and compass by amins, a plan of each estate on the scale of 16 inches to the mile was prepared, and the area was calculated in both *bighas* and acres. These measurements were tested by the Settlement Deputy Collector. The rates of assessment were not independently determined with reference to the advantages of situation or fertility of the soil, but were fixed in each case by the Settlement Officer with reference to the rates paid by cultivators for similar lands in the neighbourhood. From these rates, a deduction of 15 per cent. was made to cover cost of collection and risks, and the remainder was fixed as the assessment of the *mahals*. On the expiry of the ordinary *ilam* leases in 1896, these estates with other temporarily-settled estates the terms of which had expired, and certain tracts of *khas* land were resurveyed and reclassified on a different principle. Where the areas dealt with were of sufficient extent to admit of a regular traverse, they were traversed with the theodolite, and then surveyed cadastrally in blocks of convenient size, while the small detached estates scattered over the district, which it was not worth while to include in the traverse, were left to be surveyed independently

* In certain mauzas, where the cultivation of mustard is considerable, the whole revenue is payable in one instalment, on the 15th February.

with the plane table. The lands coming under resettlement were classified according to four main descriptions, *vis.*, homestead, rice land, tea land, land growing crops other than rice, and waste, and the whole area was distributed in four circles with reference to general considerations, such as liability to inundation, climate, facilities of communication, and proximity to markets. Within each circle the lands of each description were subdivided into classes with reference to broad differences of intrinsic quality. The rates assessed varied from 6 pies a *bigha* for waste to 14 annas for homestead and produced an enhancement of 46 per cent., chiefly owing to large extensions of cultivation.

144. The *raiyyatwari* tract of Pratabgarh was cadastrally surveyed for the purposes of the resettlement effected in 1893. On its expiry no resurvey was made, but the tract was reclassified on the same principles as the rest of the *ilam* area. As it was found that the raiyats had difficulty in paying their revenue at the existing rates, a reduction was made, the rates fixed varying from 2 annas a *bigha* for waste to Re. 1 for first-class homestead, as compared with 4 annas and Re. 1-2 under the preceding settlement.

Pratabgarh
tahsil.

145. The first regular settlement of Cachar was made in 1838-39 for a term of five years, and was based on a somewhat imperfect survey. In 1841-42 the district was surveyed on the same plan as the adjacent Jaintia parganas. The cultivated land in the several mauzas was surveyed field by field, and so much of the uncultivated area as seemed likely to come under cultivation was also surveyed and divided into numbered *dags* or plots, the intention being that, as cultivation extended, these plots should afford the means of determining its site and a basis for a detailed map of its area. In 1843-44 a resettlement, based upon this survey, was made for fifteen years. Then followed the settlement of 1859, made for twenty years, which expired in 1879. This also was based on the survey of 1841-42, and only land broken up since that year was measured up by amins. The land was divided into two classes, called *awwal* and *duam*, respectively; and within these classes it was ranged, according to situation, distance from navigable rivers, and exposure to the ravages of wild beasts, in four grades. The local measure of land in Cachar is the *hál* or plough (also called by the Arabic name *kulbah*), which is equal to 4.82 acres; and the rates imposed varied from Rs. 3-8 to Rs. 3-0 per *hál* for first-grade land to Rs. 2 to Re. 1-8 for fourth grade. Waste land producing thatching-grass and reeds, which are valuable products in the densely-peopled Surma Valley, was settled at the full rates of revenue charged for cultivated land in the neighbourhood. Forest jungle, which required much clearing, was settled for three years revenue free, and then at a progressive *jama*, rising to the full rates charged for adjacent lands at the end of the term, twenty years.

Cachar.

146. On the expiry of this settlement, a fresh survey was made, and a settlement was effected for fifteen years, which extended up to 31st March 1898. For the purpose of this settlement the three fiscal divisions, known as the Katigora tahsil, the Hailakandi tahsil, and the sadr tahsil, were dealt with separately. In each tahsil the soil was divided into four classes, *vis.*, homestead, cultivation, tea, and waste, and the lands of each class were again grouped in four circles, the constitution of the circles being based on a consideration of the productiveness of the soil, the facility or otherwise of communication, the liability to inundation, the exposure to the ravages of wild animals, and the proximity to dense forests.

Settlement
for fifteen
years in
1879-84.

The rates fixed at this assessment varied from Rs. 8-4 to Rs. 4-12 per *hál* for homestead land, from Rs. 7-2 to Rs. 3-12 for cultivation, and from Rs. 7-2 to Rs. 6-0 for tea. Waste was assessed at a uniform rate of Re. 1 per *hál*.

The district was resurveyed in the seasons 1893-97 and in April 1900 was resettled for a further term of 15 years.

The method of classification adopted for the purpose of reassessment was more discriminating than that employed at previous settlements. Instead of a rough classification of villages, an attempt was made to assign land to classes according to quality, and to recognise broad differences in the value of land within the village. Rice lands were distributed into five classes, homestead and ordinary cultivation other than rice into four each, and settled waste into two, while tea land was treated as a separate class, and assessed at a uniform rate. The rates of assessment which were approved by the Government of India resulted in the enhancement of the demand of the area coming under resettlement from Rs. 3,07,624 to Rs. 4,51,568, or by 46.80 per cent. In the greater part of the district, however, the whole of this enhancement was not brought into force at once. In all villages in which the total increase amounted to 33 per cent. or upwards, it will be reached by progressive instalments, spread over 12 years in the case of villages which have been raised from the third or fourth to the first class, or in which the assessment at the maximum rates sanctioned will exceed double of the present assessment, and over 8 years in other cases.

Physical and
Political
Geography.

Political.

SECTION 5.—CIVIL DIVISIONS OF BRITISH TERRITORY.

General
administrative
divisions.

147. The province of Assam is divided, for administrative purposes, into twelve districts, viz., the six districts of the Brahmaputra Valley, the two districts of the Surma Valley, and the four hill districts. These districts, their administrative headquarters, the subdivisions into which they are divided, their area, and their population according to the census of March 1901, are shown below :

Name of district.	Headquarters.	Subdivisions.	Area in square miles.	Population.
1	2	3	4	5
<i>Surma Valley.</i>				
Cachar ...	Silchar ...	Silchar ...	1,649	301,884
		Hailakandi ...	414	112,897
		Total ...	2,063	414,781
Sylhet ...	Sylhet ...	North Sylhet ...	864	463,477
		Karimganj ...	1,066	410,460
		South Sylhet ...	1,064	379,158
		Habiganj ...	999	555,001
		Sunamganj ...	1,450	433,752
Total ...	Total ...	5,443	2,241,848	
Total Surma Valley ...	.....	.....	7,506	2,656,629
<i>Brahmaputra Valley.</i>				
Goalpara ...	Dhubri ...	Dhubri ...	2,959	329,102
		Goalpara ...	1,002	132,950
		Total ...	3,961	462,052
Kamrup ...	Gauhati ...	Gauhati ...	2,584	473,252
		Barpeta ...	1,274	115,935
		Total ...	3,858	589,187
Darrang ...	Tezpur ...	Tezpur ...	2,173	166,733
		Mangaldai ...	1,245	170,580
		Total ...	3,418	337,313
Nowgong ...	Nowgong ...	.....	3,843	261,160
Sibsagar ...	Sibsagar ...	Sibsagar ...	1,162	211,764
		Jorhat ...	819	219,137
		Golaghat ...	3,015	167,068
Total ...	Total ...	4,996	597,969	
Lakhimpur ...	Dibrugarh ...	Dibrugarh ...	3,033	286,572
		North Lakhimpur ...	1,174	84,824
		Total ...	4,207	371,396
Total Brahmaputra Valley	.....	.....	24,283	2,619,077
		Carried over ...	31,789	5,275,706

Physical and
Political
Geography.
Political.

Name of district.	Headquarters.	Subdivisions.	Area in square miles.	Population.
1	2	3	4	5
		Brought forward ...	31,789	5,275,706
<i>Hill Districts.</i>				
Garo Hills...	Tura ...	Shillong	3,140	138,274
Khasi and Jaintia Hills..	Shillong ...	Jowai ...	3,941	134,329
			2,086	67,921
		Total ...	6,027	202,250
Naga Hills ...	Kohima...	Kohima... ..	2,337	46,144
		Wokha ...			22,475
		Mokokchang ...	733	33,783
		Total ...	3,070	102,402
North Cachar*	Haflong ...	Aijal	1,706	40,812
Lushai Hills ...	Aijal ...	Lungleh...	4,701	52,936
			2,526	29,498
		Total ...	7,227	82,434
Total Hill districts ...	.....	.....	21,170	566,172
Grand total ...	.....	.....	52,959	5,841,878

* North Cachar is really a subdivision of Cachar, but is here shown as a separate district.

The six districts of the Brahmaputra Valley constitute the charge of the Commissioner of the Assam Valley Districts, whose headquarters are at Gauhati.

148. There are in the province 60 thanas and 63 outposts. These areas, though they originally define police jurisdiction, are convenient for other purposes: thus, the jurisdiction of the munsifs in Sylhet is arranged by thanas; the registration sub-districts are similarly arranged. Muhammadan Marriage Registrars and Kazis in the Surma Valley are also appointed for thana and outpost areas.

149. As has been already stated, the districts of Assam Proper and the Eastern Duars are portioned out for revenue purposes into mauzas. The average area of these mauzas is 117 square miles. They thus correspond in size rather to the pargana or *tappa* than to the mauza of Upper India. In Assam there is little cohesion in the village society, and almost nothing which represents the complex social organisation of the North-Western Provinces or the Punjab. Hamlets of a few houses are scattered about the whole mauza area; and though the boundaries of the lands recognised as belonging to a particular village are in some districts (*e.g.*, parts of Kamrup) known to the people, they do not imply any definite appropriation of the soil to that village; any one applying for it can settle upon Government waste wherever it is situated. The tahsils which have been formed since 1882 (paragraph 108 *ante*) each comprise from three to eleven of the old mauzas.

Physical and
Political
Geography.
Political.

In Sylhet and the plains of Cachar, as well as in the permanently-settled portion of Goalpara, the ordinary revenue division into parganas, which dates from times prior to British rule, is in force. In the two former districts, however, these parganas are very small, and much interlaced one with another. In Sylhet, there are 186 parganas, so that their average area is less than 29 square miles; 15 are less than one square mile, and 42 are more than one and less than two square miles. In the plains of Cachar there are 24 and in Goalpara 19 parganas, the last representing separately-settled estates of the permanent settlement.

These parganas are grouped, in Sylhet and Cachar, into larger areas for the purposes of revenue collection. In Sylhet these areas are called zilas, of which there are ten, besides the Jaintia parganas, which latter are divided into two tahsils or collection areas. The zilas are made up of parganas, and the revenue is paid at each sub-divisional headquarters for the zilas included in its jurisdiction. In the Jaintia parganas there are two collecting centres, one at Kanairghat, and the other at Guyainghat. In Cachar, the plains portion of the district is divided into three tahsils, the offices of which are located at Silchar, Hailakandi, and Katigora.

In the hill districts different divisions for revenue purposes prevail. In the Garo Hills, the strip of plains land which surrounds the hill area on three sides is managed by two mauzadars, who, however, are not contractors, as in Assam, but officers on a fixed salary. The hill area is also portioned out into five mauzas; but the mauzadar here is merely the superior officer, who receives the house tax from the *lashkars*, or Garo headmen of groups of villages. These again collect from the *lakma* or *nokma*, the head and representative of each village.

In the Khasi Hills, as already mentioned, there is not much British territory, the area being generally included in the States of the Khasi Seims, Sardars, Longdohs, or other petty chiefs. Only 34 villages, or groups of villages, are British, and these pay house tax through a village headman. In the Jaintia Hills there are 19 circles of villages, each of which is managed by a dolloi or headman, who collects the house tax and pays it in, receiving commission. There are, besides, four Sardarships, the management of which is hereditary, the headmen being Kuki or Mikir chiefs.

In North Cachar, the assessment and collection of house tax were formerly carried out by a special tahsil establishment, but this has been replaced since 1884 by mauzadars, who are remunerated by a commission of ten per cent., and occupy much the same position as the mauzadar in the Brahmaputra Valley.

In the Naga Hills, the house tax is collected by village headmen, called *lambardars*, who receive a commission of $12\frac{1}{2}$ per cent.

SECTION 6.—DETAILS OF THE LAST CENSUS (1901).

Manner of
taking the
Census.

150. The third synchronous Census of the province was taken on March 1st, 1901. In the plains and in the Lushai and North Cachar Hills the record was brought up to date on the Census night, but in the rest of the Assam range, and in the hills surrounding Manipur, the sparseness of the population and the dearth of men qualified to act as census officers made it necessary to spread the enumeration over a period ranging from ten days to six weeks. Only a small proportion of the total population was included in the non-synchronous returns, and there is so little movement in the hills, that the accuracy of the enumeration can have been but little affected by this deviation from the ordinary form of procedure.

The report and tables were published exactly 13 months after the census had been taken, and a brief summary of the results disclosed is given in the following paragraphs.

Area and
density of
population.

151. The area of the province, including the Manipur State, is 56,243 square miles, and the population 6,126,343, the mean density per square mile being 109.

Assam is about the same size as England and Wales, though the population of the latter country, where nearly three-fourths of the inhabitants live in towns, is more than four times as dense. In the Surma Valley there are 353 persons to the square mile, and though the population has not yet begun to press heavily upon the soil, there is no urgent need for immigration; but in the valley of the Brahmaputra, where there are only 108 persons to the square mile, there are large tracts of good land awaiting settlement, and the development of the natural resources of the province is hampered by the absence of a labouring class. In the hill districts the population is very sparse, being only 27 to the square mile, but a great proportion of the land is unfit for permanent cultivation, and even this low rate is 50 per cent. in excess of that of Norway.

The largest district is the Lushai Hills (7,227 square miles), and it is the one which supports the smallest population (11 to the square mile), next come the Khasi and Jaintia Hills (6,027 square miles), but here also the population is very sparse. Sylhet, with an area of 5,443 square miles, is thickly peopled (412 to the square mile), but no other district except the Cachar Plains has as many as 200.

Physical and
Political
Geography.
Political.

	Area in square miles.	Density.	
Cachar Plains ...	2,063	201	or western end was the more densely peopled, as rich and poor alike had removed as far as possible from the Burmese invaders and the internecine struggles of the Ahom Rajas.
Sylhet ...	5,443	412	The last twenty years have, however, witnessed a great change in the distribution of the population. Lower and Central Assam have been very unhealthy, and in Kamrup and Nowgong the number of people to the square mile has largely decreased; but in Sibsagar and Lakhimpur there has been a steady growth of the Assamese and an enormous increase in the foreign population. The area and density of population in each district are shown in the statement in the margin.
Goalpara ...	3,961	117	
Kamrup ...	3,858	153	
Darrang ...	3,418	99	
Nowgong ...	3,843	68	
Sibsagar ...	4,996	120	
Lakhimpur ...	4,207	88	
Lushai Hills ...	7,227	11	
North Cachar ...	1,706	24	
Naga Hills ...	3,070	33	
Khasi and Jaintia ...	6,027	34	
Garo Hills ...	3,140	44	
Manipur ...	3,284	87	

152. For census purposes a house was defined as "the homestead consisting of one or more buildings, where the members of one family reside under a common head with their servants." The average number of persons to a house was 4.6, the figures ranging from 5.3 in Goalpara to 3.3 in the Naga Hills, where families as a rule run small, and are inclined to split up and form separate establishments.

Houses and house room.

153. The urban population of the province, excluding Manipur and the hill districts, was only 1.9 per cent. of the whole, a proportion which is much less than that prevailing in the Indian Empire in 1891 (9.5). The explanation is not far to seek. The only manufacture of any importance is tea, and this industry tends to prevent rather than to foster the growth of towns, as each large garden forms a centre of local trade. The natives of the province are almost all agriculturists, and there is nothing to attract them to the small towns which do exist. Excluding Imphal, the capital of Manipur, which is rather an overgrown village than a town, the largest town in the province is Sylhet (13,893), which has been steadily decreasing in importance since 1872.

Towns and villages.

Other towns with a population of over 6,000 souls are Gauhati (11,661), Dibrugarh (11,227), Silchar (9,256), Barpeta (8,747) Shillong (8,384), and Goalpara (6,287).

The figures for villages are of little interest, as, except in the Lushai and Naga Hills and in North Cachar, the boundaries of a village are vague and indeterminate, and it is by no means easy to determine where one ends and another begins. The total number of villages was 22,326, with an average population of 266 souls. Fifty-six per cent. of the people lived in hamlets containing less than 500 persons, 38 per cent. in villages with from 500 to 2,000 inhabitants, and less than 5 per cent. in those containing from 2,000 to 5,000 people.

154. The gross increase in the population of the province between 1891 and 1901 was 649,041, or 11.8 per cent., but this includes the figures for Lushai and Manipur, for which census totals for 1891 are not available, and if the population of these places is deducted, the increase sinks to 5.9 per cent. The greater part even of this moderate increase was due to immigration, and the number of those born and censused in the province only rose by 67,200, or 1.36 per cent. In the Cachar Plains there was an increase of nearly 16 per cent. in the numbers of those born and censused in the district; the increase in Sibsagar was nearly 17 per cent., and in Lakhimpur 24 per cent., but in Sylhet it was less than 2 and in Goalpara less than 3 per cent. The three other plains districts showed a positive decrease, which varied from 5.5 per cent. in Darrang to 29.7 in Nowgong. *Kalá-ásár* was prevalent during the decade in each of these three districts, and was especially virulent in Nowgong; while in Kamrup severe epidemics of cholera and the disorganization of agriculture produced by the earthquake of 1897 and the floods which followed it helped to check any tendency to increase amongst the people. The increase in those born and censused in the district of Lakhimpur was very remarkable, but a considerable portion of it was due to the large importation of female coolies during the decade, who gave birth to children after they had reached the province. In Assam Proper, *i.e.*, the five upper districts of the Valley of the Brahmaputra, the Assamese and the indigenous tribes who inhabit the valley have been dying out, and there was a decrease in their numbers of about 6 per cent. during the last ten years.

Variations in the population.

The statement in the margin shows the gross increase or decrease in each district.

	Number.	Percentage.
Cachar Plains	+ 47,239	+ 12·8
Sylhet ...	+ 87,255	+ 4·0
Goalpara ...	+ 9,279	+ 2·0
Kamrup ...	- 45,062	- 7·1
Darrang ...	+ 29,873	+ 9·7
Nowgong ...	- 86,147	- 24·8
Sibsagar ...	+ 117,310	+ 24·4
Lakhimpur	+ 117,343	+ 46·1
North Cachar	+ 21,871	+ 115·4
Naga Hills	+ 5,765	+ 5·9
Khasi and Jaintia Hills ...	+ 4,346	+ 2·1
Garo Hills	+ 16,704	+ 13·7

The greatest gross increase occurred in Sibsagar and Lakhimpur (117,000), which was equivalent to an increase of 24 per cent. on the population of the former and 46 per cent. on the population of the latter district. In Kamrup there was a gross decrease of 45,062, or 7·1, and in Nowgong of 86,147, or 24·8 per cent., but though the indigenous population of the Mangaldai subdivision decreased largely in numbers, there was so much immigration to the Tezpur tea gardens that the district as a whole showed an increase of nearly 10 per cent. The enormous increase in the North Cachar subdivision was due to the presence of over 20,000 persons who were engaged on

Physical and
Political
Geography.
Political.

the construction of the Assam-Bengal Railway. There was a considerable increase in the population of the Garo Hills (13·7 per cent.); but the inhabitants of the Khasi and Jaintia Hills suffered severely from the earthquake and the epidemics which followed it, and there was very little growth in their numbers. The slow growth of the population during the last ten years was not, however, normal, and there is every reason to anticipate a steady increase in the numbers of the people during the next ten years. In North Lakhimpur and the Garo Hills, which are generally considered to be far from healthy, there was a satisfactory growth of population, and if the people can increase in those areas there is no reason why they should not do so in normal years in other parts of the province.

155. During the ten years ending March 1st, 1901, there was an increase of nearly 52 per cent. in the number of foreigners in the province, and on the census night they were found to amount to 775,844 souls, or nearly 13 per cent. of the total population.

Immigration
and Emigra-
tion.

In Lakhimpur over 41 per cent. of the population had been born outside the province, and in Darrang and Sibsagar over 25 per cent., while in the Cachar plains the proportion was very little lower. It was calculated that about 645,000 of these foreigners had come to the province to work on tea gardens, and from the census returns it appeared that the coolies, instead of returning to their homes on the expiry of their agreements, were settling down to ordinary cultivation. Nearly 65 per cent. of the foreigners had come from the neighbouring province of Bengal, 14 per cent. from the United Provinces, and 10·8 from the Central Provinces. More than half the immigrants from Bengal came from the single division of Chota Nagpur.

The loss to the province by emigration during the last decade was very slight, only 51,323 people born in Assam having been censused in other parts of India. Bengal absorbed 94 per cent. of the whole, and the immense majority of these persons were born in Sylhet and Goalpara and censused in the neighbouring districts of Mymensing, Tippera, Hill Tippera, and Kuch Behar. They thus belonged rather to the category of inter-district than inter-provincial migrants, and have probably moved only a short distance from their homes.

Chota Nagpur, though it sent over a quarter of a million of emigrants to Assam, only received 195 persons in their place,—a fact which shows that very few *ex-garden coolies* return to their homes, as otherwise there would have been in these districts a considerable number of children who had been born in Assam and accompanied their parents back to Bengal.

156. The three main religions of the province are Hinduism, Islam, and Animism, the name applied to the somewhat vague and indeterminate beliefs of the aboriginal tribes inhabiting the province. Three million four hundred and twenty-nine thousand and ninety-nine, or 55·9 per cent., of the population were returned as Hindus, 1,581,317, or 25·8 per cent., as Muhammadans, and 1,068,334, or 17·4 per cent., as Animists. Excluding the figures for Manipur, for which returns for 1891 are not available, the Hindus increased by 8·7 per cent., the Muhammadans by 5·8 per cent., while the Animists decreased by 4·8 per cent. The large increase amongst the Hindus was due more to immigration than to anything else; the decrease amongst the animistic tribes was partly due to their conversion to Hinduism, partly to the ravages of *kalá-ázár* in the south of Nowgong, which is largely peopled by aboriginal tribes. Though the largest number of Hindus, 1,042,248, is to be found in Sylhet, the proportion (46·8 per cent.) is much lower than in Assam Proper, where the ratio varies from 64 per cent. in Nowgong to 88 per cent. in Sibsagar and 89 per cent. in Lakhimpur. The majority of the Hindus are Vaisnavas, about a fifth are Saktists, and a comparatively small proportion are Sivaites. Much reliance cannot, however, be placed on the figures for sect, as in Assam the boundary line between Saktism and Vaisnavism is not very clearly defined. Muhammadans are most numerous in Sylhet, Cachar, and Goalpara. In

Religion.

Sylhet they form a little more than half of the population and in Cachar and Goalpara 30 and 27 per cent., respectively. In the Assam Valley the proportion steadily decreases towards the east, falling from 9 per cent. in Kamrup to 3 per cent. in Lakhimpur. In the hills proper, there are very few followers of the Prophet, though there are a certain number of Musalmans in the terai at the foot of the Garo Hills, and a few thousands were censused on the railway works in North Cachar. More than 98 per cent. of the Muhammadans in the province were returned as Sunnis.

*Physical and
Political
Geography.
Political.*

The majority of the unconverted tribes believe in the existence of good and evil spirits, but devote most of their religious energies to the propitiation of the latter, as from the former they have nothing to fear. The general impression seems to be that after death men live much the same life as they have spent on earth; some tribes actually going so far as to hold that their farms will be stocked with the animals they have eaten, and kept in order by the spirits of the enemies they have slain. The majority of the Animists were found in the hills, where they form nearly 85 per cent. of the population, but they are also numerous in Goalpara, Kamrup, Darrang, and Nowgong, where they form from 20 to 30 per cent. of the total. The process of conversion to Hinduism does not appear to be going on very rapidly, except in Darrang for, though in Kamrup and Nowgong there has been a large decrease in their numbers, this decrease is less than that which has occurred amongst the indigenous population as a whole.

In the ten years ending March 1st, 1901, the Christian population of the province was more than doubled, the figures having risen from 16,844 to 35,969. Two thousand and ninety-nine of these persons were members of European and allied races, 275 were Eurasians, and 33,595 natives of the country. The chief proselytizing agency in the province is the Welsh Presbyterian Mission, whose efforts in the Khasi and Jaintia Hills were extraordinarily successful, the number of Native Christians in the district having risen from 6,041 to 17,125. The Baptists also enjoyed no small measure of success and their numbers rose from 3,767 to 10,045.

157. There were on the census night only 949 females in the province to every 1,000, ^{Sex.} males, but this deficiency of women was to a great extent due to the large proportion of immigrants, and if they are excluded the proportion of women rises to 977 per 1,000, which is higher than the rate for Assam (excluding immigrants) at either of the two preceding enumerations. The explanation of this increase is apparently to be found in the excessive unhealthiness of the last decade, as in those districts or subdivisions where population has been decreasing, there has been a very marked increase in the proportion of women. In the hill districts, where the position of women is not much inferior to that of men, where families run small and marriage is, as a rule, deferred till a girl is fitted to become a mother, the number of women (born in the hills and censused in the province) considerably exceeded that of men, and in the same way there was a preponderance of the female element amongst those born and censused in Kamrup and Nowgong. The following explanation has been offered by the Superintendent of Census Operations of the marked variations of the sex proportions of the different districts: "In temperate climates, where families run small, women preponderate; in the plains women are in a minority, which is especially pronounced in those districts in which they have to labour in the fields; but where public health is particularly bad, and the men are exposed to an abnormal strain, the greater resistant capacity of the woman comes into play, and she approaches or even exceeds the other sex in numbers."

There were 161,041 fewer women than men in the province, but if foreigners are excluded, the deficiency sinks to 63,559, which is considerably less than the corresponding figures for 1891 (78,643). The largest number of women to 1,000 men was found in the Khasi and Jaintia Hills (1,080) and Manipur (1,037), the smallest in Lakhimpur (862), Sibsagar (886), and Goalpara (903).

158. Any discussion of the age statistics is rendered unsatisfactory by their extreme ^{Age.} inaccuracy, only a very small proportion of the people having any but the vaguest idea of the number of years that they have lived. This inaccuracy renders it difficult for any one but a trained actuary to calculate the actual birth-rate or death-rate, but it appears that while in England the births between 1881 and 1891 exceeded the death-rate by 14 per mille, in Assam the surplus of births during the last ten years was only 1 per mille, while in Nowgong the deaths exceeded the births by 37 per mille. Though the age statistics are extremely inaccurate, it is probable that the amount of inaccuracy remains fairly constant, and, if this assumption is correct, it would appear that the unhealthiness of the last decade has not only killed off the people but has diminished their reproductive powers, as the proportion of children in 1901 was much smaller than ten years before. They also show that the early marriage of the Hindus, far from tending to produce large families, has a prejudicial effect upon the fertility of women whose reproductive powers

Physical and
Political
Geography.
Political.

are brought into play at too early an age, the proportion of children under 10 to married women between 15 and 40 being much lower amongst Hindus than amongst Animistic tribes, where adult marriage is the rule. Taking 15 to 55 as the wealth-producing age for men and 15 to 40 as the reproductive age for women, it appears that 54 per cent. of the males fell in the former and 42 per cent. of the females in the latter period. These proportions were considerably higher than those for Bengal or for Assam in 1891, and at first sight it seems strange that an increase in the number of potential mothers should have been combined with a decrease in the proportion of children. This apparent anomaly is explained by the fact that there has been a large increase in the number of young widows, the proportion of wives between 15 and 40 being less than it was ten years before.

Marriage.

159. Taking the province as a whole, 55 per cent. of the men were bachelors, 40 per cent. husbands, and 5 per cent. widowers, while 41 per cent. of the women were spinsters, 41 per cent. wives, and 18 per cent. widows. The proportion of husbands was highest amongst the Animistic tribes, who marry earlier than the followers of other religions; in spite of the fact that the hill girl is generally willing to concede to her lover all the privileges of a lawful husband. The percentage of bachelors was largest among the Muhammadans; and of widowers amongst the Hindus, many of whom cannot afford to pay more than once for a virgin bride, and are debarred by their religion from taking a widow as a second wife. Spinsters were most numerous amongst the unconverted tribes, who do not attempt to marry their daughters till they are really of marriageable age, wives amongst the Muhammadans, and widows amongst the Hindus. Both Hindu and Muhammadan girls marry early in the Surma Valley and Goalpara, but in Assam Proper child marriage is comparatively rare, except amongst Brahmans, Ganaks, and Kayasthas.

Infirmities.

160. The four infirmities selected for record at the census were insanity, deaf-mutism from birth, blindness, and leprosy. The proportion of insane persons was higher than that for the Indian Empire as a whole, but insignificant when compared with the figures for England; where however four-fifths of the mentally deranged were censused in Asylums, and so could not fail to be included in the returns. The number of deaf-mutes per 10,000 of the population was the same as in the whole of India in 1891, *i.e.*, 9 amongst men and 6 amongst women. In the hill districts the ratio was largely in excess of this figure, but it is generally believed that the natives of hill tracts are particularly liable to this form of disease. Assam, for India, is a comparatively cool country, there is an abundant rainfall and little dust or glare, and this no doubt accounts for the small proportion of the blind censused within its boundaries. The rate was 10 for men and 9 for women, as compared with 34 and 37 in the Punjab in 1891 and 16 and 17 in the Indian Empire. The proportion of blind was much higher in the hills than in the plains portion of the province. But though the inhabitants of Assam are comparatively free from eye disease they are singularly liable to leprosy, the ratio for men being 13 per 10,000, as compared with 7 in the Indian Empire in 1891. The diagnosis of the disease is by no means easy, and it is possible that a certain proportion of the cases returned as leprosy were really cases of leucoderma, or syphilitic ulcerations. Leprosy was more prevalent in the plains than in the hills, and was most virulent in Goalpara.

	Number insane in 10,000 of either sex.	
	Males.	Females.
Assam, 1901	5	3
India, 1891	3	2
England, 1891	32	35

Language.

161. There is probably no country which affords a richer field for the philologist than Assam, for, though the population barely exceeded six millions, no less than 167 different languages were returned at the last census. The two main indigenous languages are Bengali, which was spoken by 48 per cent. of the population, and Assamese, which was used by 22 per cent., nearly all of whom were found in Assam Proper, *i.e.*, the five upper districts of the Brahmaputra Valley. Bengali is the common vernacular of the Surma Valley and Goalpara, and is used by a large number of foreigners in the tea districts. The other main groups of indigenous languages are the North-Eastern, of which the best known specimen is Miri, used by 40,000 people; the Bodo including Bodo, or plains Kachari (218,000), Garo (133,000), Rabha (20,000), and Hills Kachari (19,000); the Naga group, which, besides a large number of Naga dialects, includes Mikir, which is spoken by 82,000 people; the Kuki Chin group, including Manipuri (255,000), Lushai (72,000), and Kuki (47,000), and the Mon Anam family, which consists of Khasi and Synteng (123,000 and 54,000). The great majority of Bodo speakers were found in the Brahmaputra Valley and the Garo and North Cachar Hills, and, as is only natural, these special forms of speech are being gradually replaced by Assamese, which is the *lingua franca* of the Valley. The growth of tea gardens, on which a considerable number of indigenous tribes are employed, the improvement in the means of communication, and the general development of the

province have produced a state of affairs in which the tribesman finds it necessary to know some language which will be understood outside his own village, and it is probable that in the course of time these different languages will disappear.

*Physical and
Political
Geography.*
Political.

The principal foreign languages were Eastern Hindi (334,000), Mundari (37,000), Santali (30,000), Oriya (23,000), Naipali (20,000), and Hindustani (17,000). A large number of immigrants, however, especially in Upper Assam, abandon their native language in favour of that of the country of their adoption.

162. The number of different castes, tribes, and races returned at the census was very great, but the subject is too extensive to admit even of the most inadequate treatment in a brief summary of this nature. In the Assam Valley the castes which command most respect are the Brahman (57,144), the Ganak (14,791), and the Kayastha (15,651). The Kalita, an important indigenous caste (202,845), who rank after the Kayastha, are found in large numbers in Kamrup; and so are the Koch (217,025), this being the name applied in Lower Assam to members of the aboriginal tribes who are converted to Hinduism. In Goalpara the same system is in force, but converts are styled Rajbansi (116,982), a caste which for all practical purposes is the same as the Koch.

Caste.

Another important caste, who rank a little below the Kalita, are the Kewat or Kaibarta (103,141). Amongst the castes from whose hands Brahmans will not take water come the Ahoms (177,562), a Shan tribe who entered the province in the 13th century, and ultimately became the ruling race, and the Chutiya (85,487), a tribe of Bodo origin whom the Ahoms found in possession of Upper Assam. The great majority of these two castes still live in the districts of Sibsagar and Lakhimpur. Other large castes are the Jugis and Katanis (71,053), whose traditional occupation is weaving, and the Nadiyals or fisher folk (80,509).

In the Surma Valley the most respected castes are the Brahman (43,351) and Bhat (817), the Kayastha (69,589), Baidya (4,206), and the Nabasakh or castes from whose hands Brahmans can take water. The Das, whether Halwa or Sudra, also take a good position. The total number of the Dases was 120,271. Amongst castes from whose hands Brahmans will not take water, the most numerous were Namasudras (145,766), Dom-Patnis (114,022), and Jugis (89,963).

The principal aboriginal tribes are the Garos, who live at the western extremity of the Assam Range (128,117); the Kachari (239,865), the majority of whom live on the grass plains at the foot of the Himalayas in the north of Darrang and Kamrup; the Khasis and Syntengs (159,536), who occupy the Khasi and Jaintia Hills, the Kukis (55,827), who are found in Cachar, the Naga Hills, and Manipur; the Lalungs (35,513), the majority of whom live in Nowgong; the Lushais (63,452), who occupy the hills that bear their name; the Mech (74,922), this being the name by which the Kacharis of Goalpara are known; the Mikir (87,335), whose great centre is the hills on the border between Nowgong and Sibsagar; the Miri (46,720), most of whom were censused in Sibsagar and Lakhimpur; the Naga (161,950), who are found in the Naga Hills and Manipur; and the Rabha, a tribe closely akin to the Kacharis, the great majority of whom are found in Goalpara.

The principal foreign castes are those employed as coolies on tea gardens, *i.e.*, the Bauri (42,473), the Bhuiya (49,447), the Munda (80,693), and the Santal (77,680).

The number of the British, under which term are included the English, Scotch, Irish, and Welsh, was 1,807, as compared with 1,381 ten years before.

163. Less than 2 per cent. of the population of Assam live in towns, and, excluding Imphal, the capital of Manipur, the largest town contains less than 14,000 inhabitants, so that it is obvious that the great bulk of the people must be engaged in satisfying the primary and elemental needs of mankind. In 1901 84·2 per cent. of the people were supported by agriculture, 4·6 per cent. were engaged on the provision of food, drink, and stimulants, 1·8 per cent. on earthwork and general labour, 1·3 per cent. were occupied with textile fabrics and articles of dress, and 1·2 per cent. with personal and domestic service. In other words, no less than 93 per cent. of the population were engaged upon agriculture, the provision of food, drink and clothing, earthwork and personal service.

Occupation

The proportion of agriculturists in any district varied between 95·6 per cent. in the Garo Hills and 72·8 per cent. in Manipur, where a large number of women were shown as weavers, though agriculture was in all probability their principal means of livelihood. 87 per cent. of the persons censused in the Brahmaputra Valley were agriculturists, and 82·6 per cent. of those in Sylhet and Cachar; but these figures only represent those whose principal occupation was agriculture, and a large number of persons who follow other avocations are dependent, to some extent at any rate, upon the land for their support. 7·8 per cent. of the population were supported by the preparation and supply of material substances, but many of them were fishermen, goalas, and others employed in the

*Physical and
Political
Geography.*
Political.

provision of animal food, who are not really members of the industrial class. If they are excluded, the proportion of industrials sinks to 5 per cent. The ratio was highest in Kamrup, where 62 people out of every 1,000 belonged to this class, lowest in the Naga Hills, where there were only 7. The primitive character of the economic organisation of the province is illustrated by the fact that only 13 persons out of every 1,000 were dependent upon the learned professions. Sylhet contained the largest proportion of professional persons (19 in every 1,000) and the Garo Hills the smallest (1 per mille). More than half of these professional persons were, moreover, priests and their families. Out of every 1,000 people, 499 were returned as workers and 501 as dependents, the small proportion of the latter being due to the fact that in the Assam Valley and the Hills the women, as a rule, assist the men of the family by planting and cutting the rice. There were altogether 1,073,776 female workers in the province, nearly nine-tenths of whom were agriculturists, while the great bulk of the remainder were engaged in the provision of food, drink, and textile fabrics, or earthwork and general labour.

SECTION 7.—CHANGES IN THE ADMINISTRATION.

*Transfer of a
tract of land
from Naga
Hills to
Sibsagar.*

164. For administrative (including revenue) purposes a tract of land in the Naga Hills district was transferred to the Sibsagar district during the year, and, with the sanction of the Government of India, the Inner Line of the Sibsagar district was modified accordingly.

*Additional-
Deputy
Inspector of
Schools for
Cachar.*

In 1888, the Government of India sanctioned the entertainment of four Deputy Inspectors of Schools for Assam, each Deputy Inspector being placed in charge of two plains districts, and in accordance with this scheme, the two districts of the Surma Valley, Cachar and Sylhet, were placed under one Deputy Inspector of Schools. The work of the Deputy Inspector of Schools, Surma Valley, having increased considerably since 1888, owing to the large increase in the number of schools, it was found impossible for one Deputy Inspector of Schools to effectively supervise the schools of the two districts efficiently. A separate Deputy Inspector of Schools was, therefore, appointed, with the sanction of the Government of India, for the Cachar district alone, a new grade of Deputy Inspectors on Rs. 100 a month being created for the purpose. The former Deputy Inspector of the Surma Valley now holds charge of the Sylhet district only.

SECTION 8.—FRONTIER RELATIONS AND FEUDATORY STATES.

*Feudatory
States.*

165. The only Feudatory States with which the Assam Administration has political relations are Manipur and the petty States in the Khasi Hills. Of the latter, sufficient has already been said in section 2 of this chapter. A list of these States, their population, revenue, and the names of their rulers will be found in section 9, paragraph 190.

Manipur.

166. Manipur is a protected State lying between Burma on the east, the Naga Hills on the north, Cachar on the west, and the Lushai Hills and the country of the Sakte Kukis on the south. It is almost entirely a hill country, the exception being the valley of Manipur in its centre. Its area is 3,284 square miles, and its population, according to the census of 1901, 284,465. Of these, 103,307 were members of Animistic tribes, the remainder being by religion Hindu or Muhammadan, and consisting of the population of the valley of Manipur, in which is situated the capital of the State. The claim of the Manipuris to be Hindus, however, rests on no better foundation than the same claim on the part of Ahoms, Kacharis, or Tipperas (with all of whom the Manipur ruling family has intermarried); and, while their features clearly show that they belong to the Indo-Chinese stock, their language is closely allied to those of the Kuki tribes which border them on the south.*

The kingdom of Manipur first emerges from obscurity as a neighbour and ally of the Shan kingdom of Pong, which had its capital at Mogaung. The regalia of the royal family are said to have been bestowed by king Komba of Pong, who at the same time added the valley of Khambat to Manipur. In 1714 a Naga, named Pamheiba, became Raja of Manipur, and adopted Hinduism, taking the name of Gharib Nawaz. His people followed his example, and since that date have been conspicuous for the

* Although the above is true of the present people of Manipur, there is some reason for believing that this territory was the road by which Hindu influence from the west was first brought to bear upon the Burmese races of the Irrawaddy Valley (see Phayre, "History of Burma," pages 3, 4, and 15).

rigidity with which they observe the rules of caste and ceremonial purity. Gharib Nawaz, during his reign of forty years, was engaged in constant warfare with Burma, and this state of things continued during those of his successors. Manipur was frequently invaded by the Burmese, whose last occupation of the country began in 1819. The three Manipuri princes, Marjit, Chaurjit, and Gambhir Singh, were compelled to escape to Cachar, which country, as has already been related, they occupied. With them large numbers of Manipuris emigrated, and many of their descendants, together with emigrants of later date, are still to be found in Cachar and Sylhet.

When war was declared against Burma by the British Government in 1824, and the Burmese had been expelled from Cachar, assistance in arms and money was given by the Company to Gambhir Singh in an attempt to recover possession of Manipur. In this he was successful, occupying not only the valley in which the capital is situated, but also the Kubo Valley down to the Ningthi or Chindwin river, lying to the east of the former boundaries of the State, and peopled by Shans (called Kabau in Manipuri). The treaty of Yandabu with Burma, executed in February 1826, declared (article II) that should Gambhir Singh desire to return to Manipur, he should be recognised by the king of Ava as Raja thereof.

Gambhir Singh being thus established on the throne, the levy with which he had effected the reconquest of his country was placed under the management of two British officers, and supplied with ammunition, and also with pay, by the British Government. In 1833 the British Government agreed to annex to Manipur the ranges of hills on the west, between the eastern and western bends of the Barak, giving that State the line of the Jiri and the western bend of the Barak as its boundary, on condition that the Raja removed all obstructions to trade between his State and Cachar, kept in repair the road between Manipur and British territory, and promised to assist the Government, in the event of war with Burma, both with carriage and with troops. In 1834 Gambhir Singh died, and his death was followed by the regency of Nar Singh, his minister, and a great grandson of Gharib Nawaz, on behalf of the dead king's son, Chandra Kirti Singh, then one year old. In the same year, the British Government decided to restore the Kubo Valley to Burma, the Government of which had never ceased to remonstrate against its separation from that country. The valley was given back, and a new boundary laid down in the presence of British Commissioners by an agreement dated the 9th January 1834, and at the same time the British Government bound itself to pay a monthly stipend of Rs. 500 to the Raja of Manipur in compensation for his loss. In 1835 the assistance formerly given to the Manipur levy was withdrawn, and a Political Agent was appointed to reside at Manipur.

In 1844 the Queen Dowager, widow of Gambhir Singh and mother of Chandra Kirti, attempted to poison Nar Singh, the Regent; her attempt failed, and she fled from the country with her son. Nar Singh then assumed the *raj* in his own name, and ruled till his death in 1850. He was succeeded by his brother Debendra Singh; but this prince ruled for only three months, Chandra Kirti Singh, with the help of Nar Singh's three sons succeeding in ejecting him and recovering possession of the throne. This was followed by some disorder in the State; but in February 1851 the Government of India decided upon recognising the succession of Chandra Kirti Singh, guaranteeing the *raj* to him and his descendants, and preventing, by force of arms if necessary, any attempts by rival chiefs to dislodge him.

In 1851 Debendra Singh's and Nar Singh's sons attempted a rising. In 1852 another attempt occurred, led by Kanhai Singh, son of Marjit, Gambhir Singh's brother. In 1857 some of the rebellious sepoys from Chittagong, who had found their way to Cachar, were used by one Narendrajit, a younger son of Chaurjit, to raise a disturbance. Narendrajit was transported. In 1859 Maipak, a descendant of Gharib Nawaz, invaded the valley, but was defeated, and fled. In 1862 he again, in conjunction with another Rajputra, named Khaifa Singh, headed an attack, and penetrated to the Raja's palace, where he was captured. Kanhai Singh made another attempt in 1865, when his followers were attacked and dispersed by British troops and police. Another raid was perpetrated by Gokul Singh, a younger son of Debendra Singh, in 1866. His enterprise failed, like the rest, but he escaped for the time. He was captured in 1868, tried in Cachar, and sentenced to seven years' imprisonment.

In the Naga war of 1879 the Maharaja of Manipur distinguished himself by rendering loyal assistance to the British Government. He furnished a force, which, under the leadership of the Political Agent, Colonel (afterwards Sir James) Johnstone, raised the siege of Kohima by the Nagas, and prevented a great catastrophe. In recognition of this service, the Government of India bestowed upon the Maharaja Chandra Kirti Singh the dignity of K.C.S.I. Another series of events, which gave

Physical and
Political
Geography.
Political.

occasion for much correspondence, was the raids of certain Kukis known as Chasads on the eastern frontier of Manipur territory. It was believed that these raids were abetted by the Shan Tsawbwa, or chief of Samjok in the Kubo Valley ; and, as there was much indefiniteness in the frontier north of the Kubo Valley proper as set forth in the agreement of 1834, it was determined by the Government of India to send a Commission to define and demarcate the boundary of Manipur in this direction. This task was accomplished in the cold weather of 1881-82, and the Burmese Government (who were invited to co-operate in the demarcation, but did not do so) were informed that the boundary so laid down would be maintained by the Government of India. The raiding Kukis, who were favoured in their enterprise by the uncertainty of the frontier, were found to be settled within Manipur territory, and some of them were induced to move further in, and were thus brought under stricter control.

On the death of Chandra Kirti Singh, in 1886, Bara Chauba, the eldest son of Nar Singh, who had been Maharaja from 1834 to 1850, made an attempt to get possession of the *gadi*, but was eventually defeated by a detachment of the Cachar Military Police, after which he gave himself up, and was deported, with his relatives, to Hazaribagh.

In 1891 this little State suddenly sprang into notoriety in consequence of the outbreak which occurred in March of that year. In September 1890 the Maharaja Sura Chandra Singh was driven from his palace by his two youngest brothers, at the instigation of the Senapati, Takendrajit Singh, and took refuge with the Political Agent. Notwithstanding the advice given by the latter, he declared his intention of abdicating, and left Manipur for Brindaban. On reaching British territory, he repudiated any intention of abdicating, and requested the assistance of the Government of India to regain the *gadi*. The Government of India, after duly considering the matter, decided that the Jubraj should be confirmed as Raja, but that the turbulent Senapati should be removed from Manipur. To carry out this decision, Mr. Quinton, who was then Chief Commissioner, proceeded to Manipur early in 1891 with an escort, and ordered the Senapati to surrender himself. This he refused to do. Troops were sent to arrest him in his house in the palace enclosure. They were fiercely attacked by the Manipuris, and the engagement continued until the evening, when an armistice was agreed to, and firing temporarily ceased. The Chief Commissioner and four other officers were then induced, under a promise of safe conduct, to enter the "Pat" and hold a Darbar in the Darbar hall at the entrance to the Raja's citadel. No agreement being found possible, the officers started to return to the Residency : but on the way the crowd closed in on them, and the Political Agent, Mr. Grimwood, was fatally speared and Lieutenant Simpson severely wounded. The Chief Commissioner and his companions were then kept prisoners for two hours, after which they were marched to the green space in front of the dragons, and there beheaded by the public executioner. The attack on the Residency was then resumed, and the defenders, thinking it untenable, retreated to Cachar. These events took place on the 24th March. On the 27th April the place was entered by three columns of British troops, marching from Silchar, Kohima, and Tammu. The Regent and his brothers had fled the night before, together with the Tangkhul Major, the Senapati, and other persons implicated in the outrage, but all were subsequently captured. The Senapati, Tangkhul Major, and some others were sentenced to death and executed, and the Regent and his brothers were transported for life. The future of the State had then to be considered, and it was eventually decided by the Government of India to regrant the State and to place upon the throne a youth named Chura Chand, a scion of a collateral line. This boy was sent for six years to be educated at Ajmir, and during his minority the administration of the State has been conducted by the Political Agent, and numerous reforms, including the introduction of better judicial tribunals, the improvement of the land revenue administration, and the abolition of the system of *lalup*, or forced labour, etc., have been effected. The boundaries between Manipur and Burma and the Chin and Lushai Hills have been laid down, steps have been taken to disarm the hill tribes, and trade has been much stimulated, first by the construction of a cart-road from Kohima to Imphal, and subsequently by the opening of the Assam-Bengal Railway to Dimapur. Only one serious raid has occurred in Manipur territory during recent years, and that was in 1893, when a combination of Kuki villages surprised a village of Khoirao Nagas, against whom they professed to have a grievance, and killed 99 men and 187 women and children.

The Political Agent in Manipur was till 1879 only partly under the control of the Chief Commissioner, with whom he corresponded only in regard to matters connected with Assam and its frontier, but in that year he was made directly subordinate to the Chief Commissioner. On the regrant of the State in 1891, his designation was changed to "Political Agent and Superintendent of the State."

167. The frontier States and tribes which adjoin the province of Assam, commencing at the north-west corner, are the following :

- | | | |
|--------------------------------|--|----------------|
| (1) Bhutan. | \| | (6) Miris. |
| (2) Bhutias subject to Thibet. | | (7) Abors. |
| (3) Independent Bhutias. | | (8) Mishmis. |
| (4) Akas. | | (9) Khamtis. |
| (5) Daflas. | | (10) Singphos. |
- (11) Nagas.

*Physical and
Political
Geography.*

Political.

**Frontier
States and
Tribes.**

South of the Naga territory, a portion of which is included in the British district of the Naga Hills, comes the Manipur State, just referred to, and south and west of Manipur, adjoining the southern boundary of Cachar and a portion of Sylhet, is found the country of the Lushais, now forming a British district ; west of the Lushai Hills and south of Sylhet lies the State of Hill Tippera.

168. With the Deb Raja of Bhutan the Chief Commissioner has now no direct relations. Whenever it may be necessary to communicate with him, this is done through the Commissioner of Koch Bihar, a copy of the communication being sent at the same time to the Government of Bengal. Although this State adjoins Assam to the north of the districts of Goalpara, Kamrup, and Darrang, as far east as the Doisham river, no official intercourse other than complimentary interviews with local officials is kept up.

On the conquest of Assam, the northern portion of Kamrup, consisting of the Bijni, Chappakamar, Chapaguri, Banska, and Garkalia Duars, was found in possession of Bhutia chiefs, who paid a tribute of Rs. 3,049 yearly to the Assam Rajas. To the east of the Bornadi the two Duars of Khaling and Buriguma were held by the Bhutias for eight months of the year, and by the Assam Raja for the remaining four (the rainy season). The payment of tribute by the Bhutia Jungpens during the first fifteen years of our rule was very irregular, and the frontier was continually harassed by dacoities and outrages perpetrated on our subjects, which necessitated frequent armed reprisals. At last, in 1841, it was determined (since the possession of these tracts by the Bhutias was of recent date) to resume the Duars, and bring them under British management, paying to the Bhutan Government an annual sum of Rs. 10,000 as compensation for their loss. This sum was regularly paid until the outbreak of the Bhutan war in 1864, when it was stopped, and the seven Assam Duars (as well as the five Eastern Duars north of Goalpara, by name Guma, Ripu, Chirang, Sidli, and Bijni, and the seven Western Duars north of Koch Bihar), were finally annexed to British territory. At the same time the Fort of Diwangiri and its neighbourhood, which commands the passage down to the bazars of Kamrup, was occupied and retained as British territory.

The Bhutias come down during the cold weather for pasture and trade into the north of Kamrup and western Darrang, but few of them appear to visit the thinly-peopled submontane tract of Goalpara. Most of their trade is done at Subankhata, Kumori, Kata, and Genbari in the Kamrup district south of Dewangiri, and at Ghagrapara in Darrang. There are a few Bhutia settlements in British territory at the foot of the hills, but their condition is not very prosperous, and they seem to be a survival of the old days of Bhutia supremacy, rather than the beginning of a more extended immigration.

From time to time there have been complaints of high-handed conduct on the part of the Bhutias, who take advantage of the timorous nature of the villagers to force upon them chillies and salt and extort in exchange large quantities of rice and other articles. Military police outposts are maintained during the cold weather at Udalguri in Darrang, and at Darranga, Subankata, and Kokilabari in Kamrup to prevent these exactions and give confidence to the people.

169. The Bhutias of the Kariapara Duar, which lies east of Bhutan Proper and extends from the Doisham to the Rota river, are dependent upon Towang, which is a dependency of the Government of Lhasa. The chiefs of this Duar, called the Sat Rajas, used, like their neighbours of Bhutan Proper, to levy dues from the inhabitants of the adjoining plains. In 1844 their claims were bought out by the British Government on payment of an annual sum of Rs. 5,000. Our relations with these people since the composition of 1844 have only once been disturbed. In 1852 one of the Gelongs, or Thibetan officials appointed from Lhasa to supervise the local chiefs, having some misunderstanding with his superior, fled to British territory. His surrender was peremptorily demanded by the authorities of Lhasa, and a Thibetan army moved towards the frontier. A British force was assembled at Udalguri, with two guns. But no hostilities actually occurred. The Thibetans retired, the fugitive Gelong was removed to Gauhati, and the Duar was re-opened for trade. This pass is specially interesting, as it is the only place in many hundred miles of Himalayan barrier where the British power is in actual contact with Thibet. The

Physical and
Political
Geography.

hillmen, including Thibetans from the higher ranges, resort in considerable numbers during the cold weather through this Duar to the annual fair at Udalguri, which lies due south of the gap through which the Dhansiri river issues from the hills.

Political.
Independent
Bhutias.

170. Next to these Bhutias subject to Towang come the Sat Rajas of Charduar, chiefs who live at villages called by the people of the plains Rupraigaon and Shergaon. They claim to be independent of Towang, and rule the face of the hills from the Rota to the Diputa rivers. The Thebengia Bhutias are a distinct race, and live several days' journey into the hills, but they used, in conjunction with the Sat Rajas, to levy contributions from the people of the adjacent plains. From 1839 to 1844 these people were excluded from the plains by the British Government, in punishment for outrages committed by them. On their submitting and executing a formal agreement to refrain from aggressions, they received annual pensions,—the Shergaon and Rupraigaon Bhutias of Rs. 2,526-7 a year, and the Thebengia Bhutias of Rs. 145-13-6. They come down annually to receive their pensions at Tezpur. They also hold an annual fair at a place beyond British territory, in the gorge of the Belsiri river, called Daimara, where some trade is done with the people of the plains, which is registered by a police post at the boundary pillar on the frontier.

Akas.

171. Next to the Bhutias come the Akas, who occupy the sub-Himalayan region as far east as the issue of the Khari-Dikarai river. This tribe is divided into two sections, called by the Assamese the Hazarikhoas and the Kapahchors.* The former received a *posa*,† or stipend, from the Assam Rajas, and the latter levied contributions without having any such title. Both tribes are believed to be very limited in number; but to the north of them is an allied race called the Mijis, of whose strength nothing certain is known. Though small, however, this tribe has a great reputation for violence and audacity. For many years Tagi Raja, the chief of the Kapahchor Akas, gave us much trouble by his robberies and murders in the plains. In 1829, he was captured and lodged for four years in the Gauhati jail. In 1832, he was released in the hope that he had learnt a lesson and would be quiet in future; but he immediately resumed his attacks, and in 1835 massacred all the inhabitants of the British village and police outpost of Balipara. For seven years after this he evaded capture, his tribe remaining outlawed in the hills. At length, in 1842, he surrendered, and it was decided to use his influence with the other chiefs to secure the peace of the border. An agreement was made, under which the Kapahchor Aka chiefs receive Rs. 520 a year as pension. The Hazarikhoas receive a pension of Rs. 180. Both tribes have certain small areas of land in the plains allotted to them for cultivation. The Kapahchors threatened in 1875 to give trouble, claiming an extensive tract of forest and other land on the Bhareli river, which was cut off by the demarcation of the boundary in 1874-75. Nothing further occurred at the time, and the new boundary was quietly accepted.

This dispute, however, coupled with one or two other grievances of a very minor nature, is believed to have been the cause of the acts of aggression which resulted in the expedition of 1883-84. In October 1883, Lakhidhar mauzadar, who had visited the village of Medhi, the Kapahchor Aka chief, to ask him to supply articles for the Calcutta Exhibition and to send down a man and a woman to be modelled there, was forcibly detained, and shortly afterwards Medhi's brother, Chandi, carried off a clerk and forest ranger from Balipara. A punitive expedition was despatched and Medhi's village was occupied, the Akas taking refuge in the jungle. They gave up their captives (except Lakhidhar, who had died) and sent in some rifles and other articles which they had carried off; but the chiefs themselves did not come in before the departure of the troops, which took place only fourteen days after their arrival, and appears to have been somewhat premature. The expedition was followed by a blockade of the frontier, which was maintained until 1883, when the Aka chiefs appeared before the Deputy Commissioner and tendered their submission. Since that time they are reported to have been well behaved and contented.

Daflas.

172. Next to the Akas come the Daflas, who, with the Hill Miris and the Abors, occupy the whole of the rest of the sub-Himalayan hills until the Mishmi country is reached. These three races speak languages which are said to be mutually

* The first of these names probably indicates that a thousand *gots* of *paiks*, or individual groups of revenue-payers, was set aside to provide a stipend for the tribe: *k'ioa* (eater) is the usual Assamese termination, indicating that a person is supported from the revenues of any place or people. *Kapahchor* means cotton-thief, this class of Akas being famous for their night attacks, in which they lurked in the cotton-fields with a primitive sort of dark lantern, waiting their opportunity.

† The word *posa* or *pacha* (পাচ) literally means a collection or subscription for a common purpose; it is probably connected with the word *panch* (five), and recalls the Mahratta *chauth*, or fourth. The word is still well understood in this sense in Upper Assam. In its special sense of payment to a hill tribe, it strictly denotes the subscription which the village raised in order to meet the customary demands of their visitors from the hills, in other words, blackmail. It is not properly applicable to a fixed stipend, paid, as in these cases, by Government in accordance with treaty; but it has now come to include such stipends.

intelligible, and they are evidently, though differing in arms and style of dress, nearly akin. The Daflas and Miris were, like the Akas, in receipt of *posa*, or pensionary allowance, under the Assam Government, as a condition of their refraining from aggression on the northern tracts of Darrang and Lakhimpur, and these allowances have been continued by the British Government. There are two divisions of the Daflas, one called the Paschim or Western Daflas, and the other the Tagin Daflas, who live to the east of these. For many years the Daflas have been quiet neighbours. Previous to 1837 their raids on the frontier were numerous, but in that year the system of annual pensions was settled. The only occasion since then when they have given trouble was in 1872 and 1873, when the Tagin Daflas broke the peace on two occasions by seizing some plains Daflas who were believed by them to have caused sickness in the hills. These outrages were punished first by a blockade; on this proving ineffectual in obtaining the surrender of the captives, an expedition was sent into the hills north of the Dikhrang river in the cold weather of 1874-75, which was followed by the release of the prisoners and the submission of the tribe. Since then our relations with the Daflas have been peaceful. Considerable numbers of this people, whose superstitions in regard to sickness and witchcraft lead to frequent attacks by one village upon another, have settled in the plains of Darrang and Lakhimpur as Government raiyats.

173. The Hill Miris are a quiet and inoffensive race. They receive an annual allowance in money, salt, and rum from the North Lakhimpur treasury. It is believed that the Miris of the plains stand in some sort of servile relation to the Abors, to avoid which large numbers of them have settled in Upper Assam as British subjects. In the plains they still preserve their customs of building houses on piles, and of cultivation by *jhum*; they are expert and fearless boatmen, and always settle on the banks of a river. Retaining their own language among themselves, they also speak Assamese, to which is due the name by which they are known in Assam (Miri, or Mili, meaning go-between or interpreter), as they act as a channel of communication with Abors of the hills. The total number of Miris settled in Assam is 46,720, of whom all except about 4,000 are found in Sibsagar and Lakhimpur.

Another tribe with whom we have recently come in contact are the Apatanangs, or Ankas, who occupy the valley of the Kali river, at the back of the range of hills which forms the northern boundary of the North Lakhimpur subdivision. Members of this tribe have from time to time come down to work on tea gardens, and in 1896 they raided the house of a Miri living in British territory, against whom they considered that they had a grievance, and killed two men, and carried off three captives. A punitive expedition was despatched, which, after a somewhat trying march, reached the principal village Hong, which is situated in a fertile valley about 5,000 feet above the sea.

No resistance was offered, the captives were surrendered, and the tribe has since given no trouble. It appears that the Apatanangs are merely an off-shoot of the Dafla tribe, who, from their isolation, have developed a few distinguishing characteristics. They were described by Mr. McCabe, the officer in charge of the expedition, as "timid, good-natured, industrious, and loquacious people, far inferior in pluck and physique to the Hill Miris." The tribe has an estimated population of 15,000 souls, and as their villages lie close together, they can very quickly put a large force into the field to resist any marauding parties of hillmen, and it is to this fact that they probably owe the immunity from raids which they have hitherto enjoyed.

174. The term Abor, which means in Assamese an independent, remote, and unknown savage, is applied somewhat loosely to a number of tribes and clans, who occupy the hills east of the Miris as far as the Dibong river. They are divided into two principal groups, Passi Meyong Abors west of the Dihong, and the Bor Abors or Padams between that river and the Dibong, while several Abor settlements have been founded in the plains. These tribes bear a very different character from the Miris, and the want of population on the north bank of the Brahmaputra from opposite Dibrugarh to Sadiya is chiefly due to dread of their raids. Murders and outrages committed by them on Government raiyats, in some cases close to the headquarters station of Dibrugarh, have led to several punitive expeditions. In 1858 one was sent to punish the massacre of a Bihia village by the Bor Meyong Abors, but was not successful in its object. In 1859 a second expedition was sent, and met with better fortune. In 1861 another massacre of Bihias, a few miles from Dibrugarh, on the south side of the Brahmaputra, occurred. This was followed by preparations for establishing a line of outposts along the north bank of the Brahmaputra, connected by a road, to guard against such attacks in future. The Abors appear to have been impressed by these operations. They

Physical and
Political
Geography.

made overtures, which were responded to, and a meeting took place in November 1862 between them and the Deputy Commissioner. A treaty was arranged with eight communities of the tribe, promising them, on condition of good behaviour, an annual allowance of iron hoes, salt, rum, opium, and tobacco. Later, in November 1862 and in January 1863, some other powerful villages made similar agreements. The last concluded was made with the remaining communities in April 1866. All these agreements recite that the British territory extends to the foot of the hills. The allowance to the tribe is paid at the Darbar held annually at Sadiya; but on several occasions the Abors have held sulkily aloof, and have not presented themselves at the Darbar.

Political.

In 1881 it was apprehended that certain villages of Abors, who had expressed an intention to cross the Dibong river and settle upon the hills beneath those occupied by the Chulikata Mishmis, would carry their hostilities with the latter tribe into British territory, and cut them off from access to Sadiya. The execution of this plan was prevented by the despatch of a mixed force of troops and police to occupy the post of Nizamghat, where the Dibong river issues from the hills north of Sadiya, and another lower down, opposite the Abor village of Bomjur.

In 1889 two Meyong villages combined to decoy four British subjects, Miris, beyond the Inner Line, where they murdered them, the object apparently being to establish a claim for *posa*. A fine of 20 *mithans* was imposed upon them, and the whole of the Passi and Meyong Abor frontier was blockaded pending payment. The fine was paid in less than a year. In 1893 the Abors east of the Dihong broke into open revolt. In November of that year three Military Police sepoy, while patrolling on the frontier, were waylaid and killed, it was believed, by Bebejiya Mishmis acting on the instigation of the Bor Abors, and in the following month another police party were attacked and one sepoy killed, and one wounded, this outrage in this case being committed by some of the Bor Abors themselves. An expedition was sent into their country, which occupied their principal villages after encountering a good deal of resistance, and as a further punishment blockade was imposed against the tribe in 1893, which was only withdrawn in 1900. These measures appear to have made a great impression on the Bor Abors, whose conduct in recent years has been fairly satisfactory.

Mishmis.

175. The Mishmis, who occupy the hills from the Dibong to the Brahmakund in the north-eastern corner of the valley, are divided into three principal tribes, called respectively the Chulikata or crop-haired Mishmis, the Tain or Digaru Mishmis, and the Mizhu or Midhi Mishmis. Of recent years a smaller tribe known to the Assamese as the Bebejiya Mishmis, who inhabit the valleys of the Ithun and Ithu rivers, to the north-east of the Chulikattas have come into prominence.

The Chulikatta Mishmis were for a long time regarded as a particularly dangerous and hostile tribe, having, on several occasions, attacked Khamti settlements in the neighbourhood of Sadiya, but it has since been ascertained that many of the outrages attributed to them were really committed by Bebejiyas. A blockade was imposed both upon the Chulikattas and the Bebejiyas in 1893, as they were believed to have taken part in the outrages committed by the Abors. In 1899 the Bebejiya Mishmis murdered three Khamti British subjects, and carried off three children, and an expedition was despatched against them in the following cold weather, which, after a tedious and difficult march, succeeded in recovering the captives and burning the guilty villages. One of the raiders was subsequently given up, and, after due trial, was found guilty of murder, and hanged at Sadiya. The expedition of 1899, besides greatly impressing the tribes, added much to our knowledge of them and their country. It is reported that the Chulikattas own the land on both banks of the Dibong from Nizamghat up to the watershed of the river, and also a considerable extent of territory on the plains side of the Nizamghat gorge. They formerly owned all the country in that quarter as far as the Sesser river, but were driven eastward by the Abors, to whom the Chulikattas on the right bank of the Dibong are now more or less subject. The tribal name of the Bebejiyas is Mithun, and that of the Chulikattas Midus. Although the two tribes are reported to resemble one another strongly in manners and customs and to speak the same language, the Chulikattas disdain all connection with the Bebejiyas, who, they say, are of Digaru origin. The Chulikattas are active traders and resort in considerable numbers to the fair at Sadiya; a good many Bebejiyas also traded with Sadiya before the blockade of 1893. It would appear that neither of these tribes is really so ill-disposed towards us as was formerly believed, and that many of the outrages which have been traced to them were acts of revenge for which a good deal of provocation had been given by our Khamti subjects.

The Digaru Mishmis are a quiet, inoffensive people, and act as guides to pilgrims to the sacred gorge of the Brahmaputra known as the Brahmakund. Of the Mizhu or Midhi Mishmis, further to the east, we know little. In 1851, M. Krick,

a French missionary, made a successful journey through their country to the frontier of Thibet, and back to Assam, but in 1854, when he again visited Thibet with a colleague, M. Bourry, both were murdered on their return journey by a party of these Mishmis under a chief named Kai-i-sha. This outrage was avenged in February 1855 by an expedition under Lieutenant Eden, who, with 20 Assam Light Infantry and 40 Khamti volunteers, reached Kai-i-sha's village, stormed it, and took the murderer prisoner. In December 1885, Mr. F. J. Needham, Assistant Political Officer at Sadiya, accompanied by Captain E. H. Molesworth, Commandant of Military Police, and three police orderlies, succeeded in penetrating through the Mizhu Mishmi country and in entering the Thibetan province of Zayul. This exploration went far to establish the identity of the Sanpo with the Dibong.

*Physical and
Political
Geography.*
Political.

The Digaru Mishmis carry on trade with Sadiya, while the Mizhus have little or no intercourse with Sadiya, but trade with the Thibetans of Zayul. The Digarus, on the other hand, are believed to have little direct intercourse with Thibet. None of the Mishmi tribes receive any *posa*, nor do formal treaties or agreements with them exist.

176. The Khamtis settled about Sadiya have already been mentioned in paragraph 73 of this report. They are immigrants from the Shan State beyond the Patkoi range, formerly tributary to Burma, and known to the Assamese as Bor Khamti. They are of the same race as the Ahoms, but differ from the latter in being Buddhists. They are a literary and cultivated people, and much more civilised than any of their neighbours, not excluding the Assamese. They first settled in Sadiya during the latter part of the eighteenth century. When the Burmese were expelled from Assam, the Khamti Gohain, or chief of Sadiya, executed an agreement of allegiance to the British Government, and Sadiya was selected as the residence of the Political Agent in Upper Assam. In 1839, after the death of the Khamti chief, with whom we made the agreement, the Khamtis of Sadiya suddenly rose, and massacred the Political Agent, Colonel White, and many of his guards and attendants. A war followed, ending in the transportation of the Khamti chief's son and his followers to a distant part of British territory. In 1843 some chiefs of this race were again allowed to settle about Sadiya; and in 1850 a new immigration from Bor Khamti took place. The Khamtis living about Sadiya and Saikwa are British raiyats, and pay revenue. Those living on the Tengapani beyond the Inner Line acknowledge allegiance to the British Government, but pay no revenue. The last census showed 1,975 Khamtis to be resident in Assam.

Khamtis.

177. The Phakias, or Phake, are said to have left Mogaung for Assam about 1760 A. D., immediately after the subjugation of that province by Alomphra. Colonel Hannay tells us that, prior to their immigration into this province, they were resident on the banks of the Turungpani, and were thus apparently near neighbours of the Turungs. On reaching Assam, they at first settled on the banks of the Buri Dihing, whence they were brought by the Ahoms, and settled near Jorhat. When the Burmese invaded Assam, they and other Shan tribes were ordered by the Burmese authorities to return to Mogaung, and they had got as far as their old settlement on the Buri Dihing when the province was taken by the British.

*Phakias and
Turungs.*

Their language closely resembles that of the other northern Shans. Like the Khamtis and Turungs, they are Buddhists. They seldom marry outside their own community; and, as this is very small, their physique is said to be deteriorating. They are adepts in the art of dyeing.

The Turungs immigrated into the province less than seventy years ago. Their own tradition is that they originally came from Mungmang Khaosang on the north-east of Upper Burma, and settled on the Turungpani, whence the name by which they are now known. While there, they received an invitation from the Noras, who had preceded them and settled near Jorhat, and in consequence they started across the Patkoi *en route* for the Brahmaputra Valley. They were, however, taken prisoners by the Singphos and made to work as slaves, in which condition they remained for five years. They were released by Captain Neufville, along with nearly 6,000 Assamese slaves, in 1825, and continued their journey to the Jorhat subdivision, where they are still settled.

178. The Singphos, who live intermixed with the Khamtis on the New and Old Dihings, the Tengapani, and the mountains beyond, are, like the latter, but an outlier of the main population of the same race who occupy in force the hilly country between the Patkoi and Chindwin river, where they are nominally subject to Burma. To the Burmese they are known as *Kakhyens*, and *Singpho* is but the word in their language meaning "man." They are, apparently, from what is known of their language, related to the Naga tribes in their neighbourhood, to whom, however, they stand distinctly in the position of masters and superiors; where brought in contact with the Khamtis, they

Singphos.

Physical and
Political
Geography.
Political.

have borrowed something of the civilisation and outward appearance of the latter, and have also in some cases been converted to Buddhism. They are, however, probably quite distinct by race.

The Singphos are recent arrivals in Assam, having made their appearance at the head of the valley during the troubles of Raja Gaurinath Singh with the Moamarias about 1793. It was through their country that the Burmese invaders passed into Assam in 1818 and 1822; and the ravages of the Singphos, added to those of the Burmese, contributed greatly to the depopulation of the Matak country and Sibsagar. When Assam was conquered from the Burmese, the chiefs of the Singphos, after several engagements with our troops, tendered their allegiance, and entered into agreements not to disturb the peace of the frontier. Great numbers of Assamese slaves, who had been carried off by them in the early years of the century, were released, and the wealth and power of the tribe were in this manner much reduced. In 1839 they joined the Khamtis in their attack on Sadiya; but by 1842 they had again been brought to acknowledge their subjection. Many of the Singpho immigrants, with whom agreements were made in 1826, have since retired across the frontier into Hukong.

The Duanias, or Singpho-Assamese half-breeds (so called from the Assamese *duan* = language, because they act as interpreters), are the offspring of the intercourse between these slaves and their captors. They are chiefly settled along the Buri or Old Dihing, and are quiet subjects.

The now universal habit of opium-eating is believed to have contributed largely to the present pacific attitude of the Singphos and Khamtis. Since 1882 an Assistant Political Officer has been stationed at Sadiya, who is charged with the duty of conducting the relations of the Administration with the Abors in particular, as well as with the other tribes bordering upon Sadiya. This officer has also jurisdiction over the Dibrugarh frontier tract. The chiefs of the Singphos and Khamtis meet annually at the full moon of *Magh* (in the end of January or beginning of February) at Sadiya to present themselves, with the chiefs of the Mishmi and Abor tribes, before the Assistant Political Officer, who receives their offerings, and gives them in return small presents. They pay no revenue except where settled within the Inner Line.

Nagas.

179. The tribes known to the Assamese as Nagas stretch uninterruptedly from the Patkoi along the southern frontier of the Lakhimpur and Sibsagar districts, to the valley of the Dhansiri and North Cachar. Of the Nagas in the British district of the Naga Hills (the Angamis, Kacha Nagas, Rengmas, Semas, Lhotas, and Aos) mention has already been made. Political control is exercised by the Deputy Commissioner of the Naga Hills over the Eastern Angamis and Semas beyond the boundaries of his district, within an area defined by the Dikhu Zela or Nanga river from the limit of the Mokokchang subdivision up to the northern source of the river in the range west of the village of Yehim, thence by the Patkoi range, and the southern spur of that range as far as the junction of the Tiju and Thejir rivers, thence by the Tiju river as far as its junction with the Lanier, and from that point to the Manipur frontier by the Lanier river. Within this area the Deputy Commissioner makes an annual tour in the course of which he enquires into and settles inter-tribal disputes, in accordance with principles which have been laid down for his guidance. This system has had an excellent effect in putting a stop to murderous raids within the area to which it applies. Such relations as we maintain with the Naga tribes bordering the Lakhimpur and Sibsagar districts, east of the Dikhu, are conducted through the Deputy Commissioners of Lakhimpur and Sibsagar. From the Tirap river eastward to the Patkoi, the Nagas are completely in subjection to the Singphos, and are apparently a very quiet race. West of this point begins a succession of groups of villages known to the Assamese by the names of the passes or Duars through which their inhabitants resort to the plains,—as the Namsangias, Borduarias, Paniduarias, Mithonias, Banpheras, Jobokas, Bhitarnamsangias, Jaktungias, Tablungias, Assiringias, etc. The outer tribes of this region are in constant communication with the plains, and in the times of the Assam Rajas used to make annual offerings of elephants' tusks and other such articles. They do a considerable trade in cotton and other hill produce, and carry back large quantities of salt and rice. The inner tribes, known to the Assamese as *Abors* or wild men, are kept from access to the plains by these outer or *Bors* (subject, civilised) Nagas, who thus keep the carrying trade in their own hands. These outer Nagas also come down in considerable numbers to labour in tea plantations and on roads during the cold weather. Unlike the Angamis, Semas, and Lhotas, who are intensely democratic in their social economy, many of the Eastern Nagas appear to acknowledge the authority of Rajas and minor chiefs among themselves.

With the internal affairs of these people we hardly meddle at all; but they are prohibited from carrying their quarrels into the settled British territory, and, if they do so, are tried and punished by our courts. On this frontier, a system prevails by which

the Nagas of each group have allotted to them certain Assamese agents, called *kotokis*, who manage small plots of revenue-free land called *Naga khats*, on behalf of the tribes. When the attendance of the chief in the hills is required for any purpose, they are summoned through these *kotokis*. If satisfaction for robberies and other outrages is not in this way obtained, the Duar or pass through which the tribe visits the plains is blocked, and no one is allowed to come down or go up. This system has rarely failed to secure reparation: and on the whole, the conduct of the Nagas on this frontier has been peaceable and quiet, so far as the settled lands of the plains are concerned. Among themselves, however, their feuds are incessant, and are only composed to break out anew. The easternmost tribes of Bordurias and Namsangias have thus been prosecuting a quarrel for over fifty years, each group taking, when it can, the lives and heads of some of the others. With these feuds it has not been our policy to meddle, though attempts have occasionally been made to mediate between contending tribes.

Physical and Political Geography.
Political.

180. With the State of Hill Tippera this Administration has no direct relations; all communications for the Maharaja are forwarded through the Government of Bengal. The State is conterminous with Sylhet, along the whole of the southern border of that district, and considerable intercourse takes place up and down the valleys of the rivers which flow northwards from the Tippera Hills. The Maharaja's boundary was laid down on this side by a joint Commission in 1865-66. The Maharaja is the zemindar of considerable estates in Sylhet, and is to that extent subject to our revenue jurisdiction.

Hill Tippera.

181. The Inner Line is a boundary which, in accordance with the policy to which effect was given by Regulation V of 1873, has been laid down in certain districts as that up to which the protection of British authority is guaranteed, and beyond which, except by special permission, it is not lawful for British subjects to go. The Inner Line Regulation was the result of much correspondence between the Government of Bengal and that of India on the subject of frontier policy. It was believed that many complications were caused by permitting persons from the plains to penetrate into the hills or submontane forests inhabited or frequented by wild tribes, where no effective protection could be given by Government, and where disputes relating to buying and selling frequently occurred. At the time the Regulation was passed, the great demand and competition for India-rubber brought down by the hillmen gave special prominence to these considerations: and it was decided that the best way to prevent such complications was to stop, as far as possible, the access of strangers to tracts where adequate control could not be exercised. An Inner Line has been laid down in the following districts. In Darrang, towards the Bhutias, Akas, and Daflas; in Lakhimpur, towards the Daflas, Miris, Abors, Mishmis, Khamtis, Singphos, and Nagas; in Sibsagar, towards the Nagas. The Inner Line formerly maintained along the Lushai border has since 1895 been allowed to fall into desuetude, but Lushais visiting Cachar are required to take out passes from the Superintendent of the Lushai Hills. The line is marked at intervals by frontier posts held by Military Police and commanding the roads of access to the tract beyond; and any person from the plains who has received permission to cross the line has to present his pass at these posts.

The Inner Line.

SECTION 9.—RELATIONS WITH TRIBUTARY STATES AND FRONTIER AFFAIRS.

MANIPUR.

182. Tribute—Rs. 50,000 annually; Population (1901)—284,465; Gross revenue—Rs. 4,07,670; Military—400 Military Police; Products—Rice, *dal*, and vegetables of various kinds, India rubber, wax, tea-seed and other forest products, cattle, ponies, and buffaloes; Manufactures—Cotton cloth, fine and coarse, silk cloth, fine and coarse, brass and other metal utensils, a few articles of ivory and ordinary native jewellery, some leather work, a coarse kind of salt; Minerals—Iron ore, limestone, copper and salt.

Raja—Chura Chand Singh, aged 16 years 11 months; caste Kshatriya Hindu; no heir. Principal members of family—(1) Ramananda Singh, aged 74, Moirang Ningthow; (2) Dumbra Singh, aged 30, eldest brother of Raja; (3) Dimbha Singh, aged 28, second brother of Raja; (4) Chandra Hash Singh, aged 26, third brother of Raja; (5) Degendra Singh, aged 17, step-brother of Raja.

The behaviour of the hill tribes during the year was exceptionally good, and only one case of raiding was reported. The village of Jessami, which is on the north-east frontier of the State, was reported to have raided Phozomi, a village on the Laner, outside the Naga Hills political control area, killing 4 men.

Behaviour of hill tribes.

The rainfall of the year amounted to 57·19 inches, about 7 inches more than that of the previous year. In the village of Ukrul, the rainfall was 64·26 inches, as against

Rainfall.

Physical and
Political
Geography.
Political.

50·40 in 1900. In the valley only 79 inch of rain fell during the last quarter of the year. The harvest (paddy) was fair. In some places the low-lying cultivation suffered from the autumn floods, but the higher lands were probably benefited. The average outturn of paddy per *para* was about 40 *pots*, or 60 maunds, equivalent to 1,991 lbs. per acre. The *matikalai* crop was rather poor, and sold for about Re. 1-8 per maund. Vegetables were good and cheap. Manipur-grown potatoes were plentiful, and sold from Re. 1-8 to Rs. 2 per maund. No information is available regarding the crops in the hills; but it was presumably a fair harvest, as no complaints of scarcity were heard. As a rule, a good harvest in the valley is accompanied by a bad harvest in the hills, and *vice versa*.

Trade and
manufactures.

The statistics of trade with British India were as hitherto registered at Jhirighat and Mao Thana. The imports at Jhirighat were valued at Rs. 1,21,608, as against Rs. 1,91,409 during the previous year, and the exports at Rs. 1,21,985, as against Rs. 1,72,348 in the preceding year.

The exports to the Assam Valley *via* Mao Thana were valued at Rs. 1,20,822, as against Rs. 78,161 in the previous year. Rice, which is the only important export, accounts for the very large increase. The value of the rice exported was Rs. 1,10,067. The imports *via* Kohima were valued at Rs. 65,998. The principal imports are kerosine oil, salt, and cotton goods.

Finance.

The revenue of the State in 1901-1902 amounted to Rs. 3,96,061, as against Rs. 3,87,826 in the previous year. There was a small increase under Land Revenue, Hill house-tax, Fisheries, and Salt, and a slight decrease under the heads of Foreigners' tax, Ferry, Forest, Tea-seed, and Law and Justice. The expenditure during the year was Rs. 4,63,409, as against Rs. 3,73,192 in 1900-1901. The large increase was due to the expenditure incurred on account of the visit of His Excellency the Viceroy to Manipur, and also the return of His Highness the Raja from school to Manipur. Much of this was, however, laid out on works of practical utility, such as the improvement and repair of roads, bridge, etc. The closing balance showed a sum of Rs. 2,51,501 at the credit of the State, as compared with Rs. 3,18,849 at the end of 1900-1901. The unusual expenditure of the year had to be met from the reserve balance.

Land revenue.—The total demand for the year was Rs. 2,57,612, as compared with Rs. 2,60,567 for 1900-1901, the decrease being due to the raiyats relinquishing land on account of the low prices obtained for rice in the previous year. Of the total demand, Rs. 2,45,906, or 95·45 per cent., were collected during the year. The total receipts under Land Revenue, including miscellaneous and arrears, etc., amounted to Rs. 2,53,967, as compared with Rs. 2,49,944 in 1900-1901. The expenditure was Rs. 27,496, as against Rs. 27,238 in the previous year.

Foreigners' tax.—The proceeds of this tax decreased from Rs. 4,429 to Rs. 4,228.

Hill house-tax.—The demand for the year, including arrears, was Rs. 65,728 and the collections realised Rs. 63,566, as compared with Rs. 52,609 in 1900-1901. The expenditure was Rs. 3,876, as against Rs. 4,131 in the preceding year.

Fisheries.—The year was again unfavourable to the lessees of fisheries in the State. Rain was short at the beginning of the season, and there were heavy floods in September, which kept the water abnormally high and thus retarded fishing operations. The fisheries were sold for Rs. 31,731, of which Rs. 28,747 were collected during the year. A sum of Rs. 330 was remitted in the case of an exceptionally unfortunate lessee.

Ferry.—The Jhiri ferry realised at auction Rs. 678, of which Rs. 339 was credited to the State, the other moiety being payable to the Cachar district. The State income from this ferry in the preceding year was Rs. 603.

Salt.—The brine wells in the valley were leased for Rs. 4,408, of which Rs. 4,083 were collected during the year; and the balance has since been collected. The demand on account of hill wells was Rs. 3,960, and Rs. 3,064 were collected during the year. The arrears of the previous year, Rs. 1,392, were also collected. A considerable portion of the year's revenue of the hill wells was collected by the hill *Lambus*, who have misappropriated the money. The *Lambus* have been prosecuted, and the money will be realised from them, if possible.

Forests.—From the Jhiri forest, which is under the management of the Forest Department, a sum of Rs. 25,497 was credited to the Manipur treasury. This sum represents 75 per cent. of the total receipts, 25 per cent. being deducted by Government for working expenses according to standing arrangement. The credit to Manipur in the previous year was Rs. 32,427. Rupees 530 were expended in maintaining the small forest guards for the reserves near Imphal.

Tea-seed.—The outturn from the State tea-seed gardens was only 7 maunds 30 seers, which realised Rs. 78. The cost of collection of the seed amounted to Rs. 39.

Excise.—There are now no excise shops in the State.

Kubo Valley compensation.—The sum of Rs. 6,270, being the allowance granted to the State in settlement of the disputes as to the ownership of the Kubo Valley between Manipur and Burma, was paid by Government to the State, as usual.

Miscellaneous.—The receipts under this head were Rs. 3,433, as against Rs. 3,427 in the previous year.

General administrative expenditure.—The following paragraphs deal with the various branches of the administration other than those noticed under the heads of revenue.

Raja's Civil List.—The total expenditure under this head was Rs. 1,14,054, as against an expenditure of Rs. 27,246 in the preceding year. The increase in expenditure was due to the visit of His Excellency the Viceroy to Manipur, and also to the return of the minor Raja and his half-brother and party from Ajmere.

State establishment and contingencies.—The total expenditure was Rs. 8,965, as against Rs. 9,001 in the previous year.

State Public Works.—A sum of Rs. 1,37,250 was spent on State public works, as against Rs. 1,22,737 in 1900-1901. In view of the visit of His Excellency the Viceroy the road between Jhirighat and Manipur and between Manipur and Moreh Thana was put into thorough order, and bridges were erected over most of the important rivers between Manipur and Moreh Thana. In Manipur, a large *pandal* was erected for use as a Darbar Hall. The Bishenpur staging bungalow was very nearly completed during the year. The expenditure on the Cachar-Manipur bridle-path was Rs. 13,512. The usual contribution of Rs. 30,000 towards the up-keep of the Manipur-Kohima cart-road was made over to the Public Works Department. In the valley and the station Rs. 93,738 were expended. This included the cost of construction of buildings for the Viceregal camp, amounting to Rs. 15,281, Rs. 31,692 for the repair and the construction of bridges, Rs. 19,721 for the repair of roads, levelling ground, etc., in the station, and Rs. 13,622 for tools and plant and miscellaneous. Rupees 2,503 were expended on the repair and excavation of tanks, and Rs. 4,206 on the repair of State buildings, while establishment charges amounted to Rs. 5,828.

Manipur Cantonment.—The regiment is now in occupation of the new barracks. The hospital is finished and in use. As noted in the last year's report, the wells have proved a failure, and the majority of the regiment have been using a tank, which holds very fair water, close to the evening bazar. This tank at the end of the year was very nearly dry on account of the short rainfall during the last quarter. Major Aldridge, Sanitary Officer, Bengal, visited Manipur during the cold weather, to enquire into the feasibility of a water scheme for the cantonment.

Public health and sanitation.—The general health was good, and there were no epidemics. During the last quarter of the year, there was great scarcity of water, the rivers and tanks becoming extremely low, and grave fears at one time were entertained that the public health would suffer in consequence. Rain, however, fell in abundance in the early part of 1902, and dispelled any apprehension of a water famine and its attendant sickness.

Dispensary.—The only dispensary is in Imphal. Ten thousand and forty eight out-patients were treated at this dispensary during the year, as against 6,428 in the previous year. The total number of in-patients treated during the year was 168, of whom 51 were foreigners. In the previous year 143 in-patients were treated. There were 20 major operations, of which 10 were for lithotomy. Minor operations numbered 216. The expenditure on the Medical Department was Rs. 5,878. The pay of the hospital assistant is borne by Government, which also gives a grant-in-aid of Rs. 650 to the dispensary.

Vaccination.—The number of primary operations performed during the year was 15,943, and there were 297 revaccinations. The percentage of successful cases reported was 98'07.

Law and Justice.—In the Agency Court, where cases are disposed of, in which one or both of the parties are British subjects, 37 criminal cases were reported. In the 18 cases brought to trial, 6 persons were acquitted and 17 convicted. There were no serious cases. Seventy-eight civil suits were instituted during the year and 16 were pending from the previous year. Of these 94 cases, all but 6 were disposed of before the close of the year. The sale-proceeds of court-fee stamps were Rs. 847. In the Courts of the Superintendent and Assistant to the Superintendent of the State, 161 cases were reported, of which 69 were brought to trial, 31 persons being acquitted and 84 convicted. The majority of these cases were cases of theft and house-breaking and cattle theft, the common crimes in the State. Three hundred and seven miscellaneous cases came on for hearing, of which 57 were pending from the previous year; 262 cases were disposed

Physical and
Political
Geography.
Political.

of during the year. There were 108 civil appeals, including 28 pending from the preceding year, of which 86 were disposed of before the close of the year. Of 9 criminal appeals filed, 8 were disposed of during the year. The *Chirap* Court decided 35 criminal cases, 147 civil suits, and 1 criminal and 58 civil appeals during the year. Twenty-nine criminal cases and 808 civil cases came on for hearing before the Town *Panchayat*, excluding 401 cases which were pending at the beginning of the year. At the close of the year 323 cases were still pending.

Police.—The Military Police Battalion was kept up to its full strength, and there was no difficulty in obtaining recruits on vacancies occurring. There were 30 casualties, of which 5 were deaths. There were no changes in the outposts, and the same number of men were employed on outpost duty as in the previous year. The total expenditure on account of the State Police, including Civil Police, was Rs. 79,330, as against Rs. 81,122 in the previous year. The decrease is due to the fact that for some months the force had no Commandant.

Jail.—During the year 84 convicts, 119 under-trial prisoners, and 35 civil prisoners were admitted into the jail, the daily average population being 53·71. Five prisoners escaped and two were recaptured. There were no deaths, and the daily average sick amounted to 2·74. The expenditure was Rs. 7,137, as against Rs. 4,654 in 1900-1901. The increase in expenditure is due to the cost of materials (Rs. 1,941) for the new jail and also the cost of excavating a tank (Rs. 1,886) near its site. The building of the new jail is progressing satisfactorily.

Education.—At the close of the year there were 16 primary schools and one middle class English school open in Manipur. One new school was opened. The average daily attendance of pupils at all schools in the State was 978·30, as compared with 775·18 in 1900-1901. The Girls' school can hardly be considered a success, the average daily attendance being 18·29, of whom only about one-half are Manipuri subjects. The expenditure on education in the State amounted to Rs. 15,557 during the year.

Post and Telegraph.—There were no changes in the Postal or Telegraph services during the year. The State maintained the postal line to Kohima, and also the line to Tammu in Burma at a cost of Rs. 4,341. The line to Silchar is maintained by the Imperial Government. The sale of postage stamps realised Rs. 2,703.

Miscellaneous.—Miscellaneous expenditure amounted to Rs. 7,926, as against Rs. 12,528 in 1900-1901. The only important items under this head are Rs. 1,788, the cost of the census, Rs. 2,053, cost of disarmament, and Rs. 820 for preparing Manipuri text-books. This latter item should have been classed under "Education."

Fire-arms.—During the year 7 new gun licenses were issued and 5 were cancelled, leaving 37 at the end of the year, of which British subjects held 31 and subjects of the State 6.

Three hundred and ninety-nine guns were confiscated from Nagas and others during the year, which were all destroyed. Disarmament was still being carried out at the close of the year.

Military.—The 3rd Brahmans garrisoned Manipur throughout the year. The Kaopum outpost on the Cachar road was garrisoned by this regiment and the Kalanaga outpost on the same road by the 5th Bengal Infantry from Cachar. The Khongnem-Makhang outpost was abolished.

Political prisoners.—There were no casualties amongst the political prisoners or detenus. By order of the Government of India, Zilla Gumba Singh, son of Sir Chandra Kirti Singh, was transferred from Sylhet to Hazaribagh. Five Manipuri prisoners and two Naga prisoners, who were all convicted after the rebellion in 1891, returned from the Andamans and were permitted to reside in the State.

The minor Raja.—His Highness Raja Chura Chand Singh returned to the State with his half-brother Rajkumar Digendra Singh in September. The Raja has, as a temporary measure, taken up his residence in the Rajbari, where a suitable house was built for him. Rajkumar Digendra Singh has been given a site not far from the Rajbari, and a suitable house is being erected for his occupation. The new palace for His Highness had not been commenced at the end of the year.

Census.—The final census figures show a total population of 284,465—males 139,632, females 144,833. The cost of the census operations amounted to 2·11 pie per head.

The great event of the year was the visit of His Excellency the Viceroy. The escorts as far as Bishenpur were furnished by the Cachar Military Police Battalion, and the 3rd Brahmans and 5th Bengal Infantry furnished the camp guards between Jhirighat and Manipur. His Excellency the Viceroy entered Manipur territory at Jhirighat on

His Excellency the Viceroy's visit.

Sunday, 10th of November, and reached Manipur on Friday, 15th November, having halted at Kalanaga, Nongba, Kaopum, Laimatak, and Foiching *en route*. On the 16th, 17th, and 18th November His Excellency halted in Manipur. On the 16th there was a Durbar in a special hall erected for the purpose close to the Agency Office. His Highness the Raja of Manipur, Rajkumar Digendra Singh, half-brother of the Raja, Rajkumar Pushkar Singh, Myntri, President of the *Chirap* Court, Ramananda Singh, Moirang Ningthou, grandfather of the Raja, the members of the *Chirap* and the members of the Town *Panchayat* were presented by the Political Agent to His Excellency the Viceroy, after which the Hindu and Mahomedan subjects of the State presented addresses. His Excellency's speech in reply was translated and read out in Manipuri in the presence of about 1,500 people. The same afternoon His Excellency witnessed a Manipuri game of polo and in the evening a Manipuri *nautch*. The 17th unfortunately turned out wet. On the 18th His Excellency visited the *pdt*, after which a number of Angami, Lhota and Sema Nagas, dressed in their picturesque full war dress, were brought up for inspection by Captain W. M. Kennedy, Deputy Commissioner of the Naga Hills. In the afternoon there was a Manipuri hockey match and in the evening a State dinner at the Residency, after which His Excellency witnessed a Kabui Naga *nautch*. On the 19th, His Excellency and staff left for Palel, on the 20th marched to Lokchao, and on the 21st crossed the Manipur frontier into Burma at Moreh Thana, thus bringing to a close an event unique in the annals of Manipur, and to be long remembered by the subjects of the State.

Physical and
Political
Geography.
Political.

BHUTIAS.

183. The Bhutias bordering on the Kamrup district were quiet and well-behaved during the year, and the Deputy Commissioner, who made a tour in March through the villages on the frontier, received no complaints against them. Guards were stationed as usual during the cold weather at Darranga and Subankhata.

Bhutias visit-
ing Kamrup.

The Darranga fair lasted from the 10th January, and that at Subankhata from the 15th January to the 20th March 1902; the former was attended by 3,500 Bhutias, against 600 in 1900-1901, and the latter by 400, against 2,000 in 1900-1901.

Trade.

The values of imports and exports to and from the two fairs, as recorded in the trade statistics, are compared below with the figures for the preceding year :

		1900-1901.		1901-1902.	
		Rs.		Rs.	
Darranga	{ Imports	...	9,982	...	22,133
	{ Exports	...	10,734	...	19,769
Subankhata	{ Imports	...	3,877	...	7,670
	{ Exports	...	4,511	...	2,920

The increase in the value of the imports at both fairs was due to more ponies and lac having been brought to the fair by the Bhutias. The increase in the value of the exports at Darranga was due to a greater demand in Bhutan for *eri* thread, *eri* cloth, and some other articles of export in Bhutan.

Only 442 Bhutias visited Ghagrara, against 839 in 1900-1901. It is reported that, when they were coming down, a disease broke out, which proved fatal to a number of their ponies.

Bhutias visit-
ing Darrang.

The value of the trade done at this fair is shown below :

		1900-1901.		1901-1902.	
		Rs.		Rs.	
Ghagrara	{ Imports	...	13,094	...	7,104
	{ Exports	...	19,733	...	7,170

The number of Towang Bhutias who came down to Udalguri was about the same as in the previous year. The following are the figures for this fair :

		1900-1901.		1901-1902.	
		Rs.		Rs.	
Udalguri	{ Imports	...	8,464	...	8,280
	{ Exports	...	7,460	...	8,598

As in the previous year, only a small number of Bhutias visited Tezpur.

The past two years show a marked decrease in the trade between Darrang and Bhutan. It is reported that Bhutias go now in larger numbers to the Subankhata and Darranga fairs in Kamrup, because the facilities for trade are greater there.

The usual *posa*, consisting of Rs. 5,000 in cash and other articles, was paid to the Towang Bhutia chiefs on the 1st March at Udalguri, and in return they presented to Government one Bhutia pony, two yak tails, two China cups, a few pieces of muslin, a gold ring, and some fruit. All these items were sold at public auction for Rs. 41-4-9, and the sale-proceeds were credited to Government. The Charduar Bhutia

Physical and Political Geography. Sat Rajas came into Tezpur on the 8th February 1902, and were paid their *posa* of Rs. 2,526-7 in cash, with other presents. In return they presented to Government three blankets, one yak tail, and one bag containing some spices. They reported that there had been heavy rainfall in the hills, and that the condition of crops was fair. The Thebengiya Bhutias came to Tezpur on the 13th March 1902, and received their *posa* of Rs. 145-13-6 in cash, with the usual accompaniment of scarlet broad-cloth, etc.

Political.

AKAS.

Kapaschor and Hazarikhooas.

184. The Kapaschor Akas did not come to Tezpur in 1901 to receive their *posa*. They came on the 12th February 1902, and received *posa* for two years (1900-1901 and 1901-1902), amounting to Rs. 1,072, and in return presented to Government some bows and arrows and a small sword. Medhi Raja came down in person in February, and requested that in future his *posa* might be paid to his son, as he was getting too old to come personally. He reported that the year was a healthy one in their hills, that the snowfall was normal, and the condition of crops good. Fighting between the Akas and Daflas beyond the frontier was reported. The Hazarikhooa Akas came to Tezpur on the 10th March 1902, and received their usual *posa* of Rs. 164 in cash and other presents. In return they presented to Government five blankets.

DAFLAS.

Daflas.

185. Towards the close of the year 1900-1901, it was reported to the Deputy Commissioner, Darrang, that the servants of an *agar mahaldar*, who were camping within the Inner Line, had been threatened and their camp looted by some Khari Dikrai Daflas. The matter was enquired into, and the result showed that the Daflas had come down and threatened the servants of the *agar mahaldar*, who took fright and left their camp in consequence. The occurrence was exaggerated by the *mahaldar* in the hope of getting compensation. The Daflas were fined Rs. 100, which was paid immediately.

The plains Daflas attended in small numbers to draw their *posa*.

Daflas bordering North Lakhimpur and Apa Tanangs.

In March 1902 some Daflas of the Banskotia Duar came down through Silloni-bari tea garden to trade, and on their way back wounded a Nepalese herdsman and drove off his buffaloes, 14 of which were afterwards found 3 or 4 miles away close to the Inner Line. A somewhat exaggerated account of the matter was at first received, but the result of enquiries made showed that it was not of any political importance. It was ascertained that the offenders belonged to Tehi Gam's village and the Chief Commissioner approved of the Deputy Commissioner's proposal to stop the *posa* of Rs. 60-9-3 payable to Tehi Gam for one year. A sum of Rs. 572-12-3, including Rs. 144-3-9 for previous years, was paid as *posa* to the Daflas on the North Lakhimpur frontier.

The Apa Tanangs were well-behaved throughout the year.

MIRIS.

Miris.

186. There was no complaint regarding the conduct of the Hill Miris. The principal *gam*, with some of the plains people, has been permitted to hunt elephants within certain boundaries beyond the Inner Line, and an objection was raised by some of the Abors who alleged that they had been hunting in Abor country. The matter was under enquiry at the close of the year.

A sum of Rs. 877-1-11, including Rs. 8-10-6 for previous years, was paid to the Panibotia and Tarbotia Miris as *posa*.

Saraks.

The Saraks were well-behaved. They did not come in for their *posa* in 1900-1901, and were paid two years' *posa*, amounting to Rs. 498-15-6, in 1901-1902.

ABORS.

Doba Abors.

187. The conduct of the Doba Abors was satisfactory. A complaint was made by two of their *gams* that two Miri contractors had felled *simul* trees in their country. The Deputy Commissioner, Lakhimpur, found that the complaint was true, and fined each of the Miris Rs. 50. The Miri *gam* concerned was fined Rs. 50 for not reporting the matter, though he had received strict orders to report all such cases.

Passi Meyongs.

The Assistant Political Officer, Sadiya, having reported that the Passi Meyongs who avoided Sadiya, going to Dibrugarh for their purchases, had been giving trouble to our Miri subjects on the Lali, and at Hilonimur, and its vicinity, the Chief Commissioner accepted Mr. Needham's proposal that the tribe should be excluded from Dibrugarh, and ordered to trade at Sadiya only in future.

Large numbers of Bor Abors visited Sadiya during the year, and behaved well. About 50 families settled on the Dihong above Sibiyamukh, declaring that they must remain in British territory, as they would starve if required to return to the hills. Mr. Needham at first proposed to forcibly expel the people, on the ground that they are undesirable neighbours and very troublesome settlers, but subsequently expressed the opinion that the Bor Abors might be allowed to settle on the Dihong on the following conditions : (i) that they do not occupy land on either side of the river below Sibiyamukh, (ii) that they remain quiet and peaceable, and (iii) that they pay poll-tax.

Physical and Political Geography.
Political.
Bor Abors or Padams.

In view of the fact that the blockade against this tribe has now been raised, which has removed the political importance of preventing the Bor Abors from coming into contact with us, and of the fact that the settlement of such a considerable number of Bor Abors as British subjects would in time of need afford a means of control over the tribe as a whole, the Chief Commissioner decided not to raise any objection to the settlement of the Bor Abor families in British territory on the terms specified. He directed, however, that the settlement should be visited at least once every year by the Assistant Political Officer.

MISHMIS.

188. Many Bebejiyas visited Sadiya during the year and were well-behaved, but no *gams* from the distant villages came in. The Hanli *gams* demanded compensation for the loss inflicted on them during the Mishmi expedition, but the claim was found to be unjustifiable.

Chulikattas and Bebejiyas.

Large numbers of Chulikattas came down, and were well-behaved. It was reported that this tribe had been purchasing guns from Tibet.

Fewer Digarus visited the plains than usual, owing, it is said, to the exhaustion of the rubber trees.

Digarus.

KHAMTIS AND SINGPHOS.

The conduct of these tribes gave no cause for complaint.

Khamtis and Singphos.

NAGAS.

189. Complaints were received of raids committed by the Rangpang Nagas, who live for the most part some four or five days' journey south of Margherita, and are under the influence of the Singphos, on the so-called Sarkari Nagas, whose villages are found just beyond the Inner Line near Margherita, and who frequent British territory, resorting largely to the neighbouring tea gardens for employment. The Sarkari village of Panthoi was reported to have been raided in this way at the instigation of an influential Singpho Chief named Sumbiyamong, and some Nagas from a village named Nokoya, who had migrated to British territory for fear of the Rangpangs, were allowed to settle between the Dihing river and Ledo junction. Again, the headman of the village of Bor Lunchang having assisted in recovering a coolie kidnapped by the Nagas of the Rangpang village of Yogli, as mentioned in paragraph 56 of last year's report, these people, in revenge, captured and detained the headman, but subsequently released him on hearing that the matter had been reported to the Deputy Commissioner of Lakhimpur, and that punitive measures were about to be taken. The question of taking steps to prevent the occurrence of raids so close to the Inner Line, and to the important settlements of Margherita and Ledo, is now under consideration.

Nagas on the Lakhimpur frontier.

The dispute between the Borduaria and Namsangiya Nagas still continues, and has led to the occurrence of several raids. In one of these a party of Bor Mithunias, who own allegiance to the Namsangiyas, under the leadership of the *gaonbura*, went out to attack the Paniduarua village, and finding three women on the path leading to the plains, killed them and took their heads. The Namsangiyas having thus broken the agreement entered into before the Deputy Commissioner in 1900 not to block the paths leading down to the plains, the *posa* paid to the Namsangiya and Bor Mithunia Rajas for Hukunjuri and Towrok gardens was stopped for two years. Subsequently, the Namsangiya Chief petitioned the Chief Commissioner against the stoppage of his *posa*, and further prayed that the Borduaria Nagas might be required to vacate a hill claimed by the Namsangiyas, which was forcibly occupied by the Borduarias, and which a former Deputy Commissioner had allowed them to retain, as stated in paragraph 56 of the report for 1900-1901. After enquiry, the Chief Commissioner decided that the Namsangiya Raja had been rightly fined two years' *posa* for breaking the agreement entered into in 1900. It appeared, however, that there was once a Namsangiya village on the disputed hill, and the fact that it had been unoccupied for

Jaipur Nagas, Borduarias, Namsangiyas, Bor Mithunias, etc.

*Physical and
Political
Geography.*
Political.

about 15 years did not justify the conclusion that it had been abandoned by them. In order, therefore, to remove the *casus belli*, and thus ensure peace, the Chief Commissioner accepted the recommendation of the Deputy Commissioner that the Borduaria Chief should be ordered to vacate the hill in dispute at once on pain of being deprived of the 200 *bighas* of rent-free land which he holds in the Jaipur mauza. A second murder of three Nagas, believed to have been committed by members of the Bor Mithunia tribe, was reported in November 1901.

*Nagas on the
Sibsagar frontier.*

Visits of courtesy were paid to the Deputy Commissioner of Sibsagar by the Chiefs of Jaboka, Kanchang, Mulung, Sima, Changnoi, and Nowgong, and the usual presents were exchanged.

*The trans-
Dikhu tribes
adjoining the
Naga Hills
district.*

The usual feuds, resulting in raids and counter-raids, prevailed among the trans-Dikhu tribes adjoining the Naga Hills district, but they refrained from molesting British subjects. A party from Letam, however, made use of the Longmisa path on our side of the Dikhu, to make a raid on the trans-Dikhu village of Char, in the course of which they killed a man of the latter village. The Char people complained of the facilities granted by Longmisa, but on enquiry it was established that the latter village was ignorant of the passage of the party from Letam. No action was taken, as the facts described did not disclose sufficient grounds for any interference with the affairs of tribes beyond the area of political control. A deputation from the village of Alisubo (Yuts-u), which is outside the area of control, again approached the Subdivisional Officer of Mokokchang, asking to be taken under British protection. They were raided in March last by Tatai-umbong, who burnt the village. It was not considered advisable to interfere.

The Semas.

The conduct of the Semas under the political control of the Deputy Commissioner of the Naga Hills was good. There were the usual land disputes, leading to petty squabbles and assaults, but no serious crime. Two of the participators in the Natami raid reported in paragraph 60 of the report for 1899-1900, were arrested and sentenced each to seven years' rigorous imprisonment. During the tour of the Deputy Commissioner, Naga Hills, in the Sema political control area, he found that six of the raiders of that occasion had been living openly at Natami, which had been rebuilt against orders. He accordingly destroyed the village again. He also visited the village of Saghami and caused the villagers to break down the houses of three men of that village, who murdered a Tessephima trader in 1899. The conduct of the Semas beyond the area of political control was not quite so satisfactory. The Yachumi Chiefs, who were mentioned in last year's report as having visited Kohima, were ambuscaded on their return journey by Yehimi people, who lay in wait, intending to kill them, but, hearing from people of Seromi that their intended victims had received handsome presents at Kohima, appear to have been so impressed that they feasted them instead. In March 1902, Yekashe's village and Lovishe's village, both in the Tizu Valley, had a fight over land, two men of the former being killed and four wounded. During his tour through the Sema political control area in May 1902, the Deputy Commissioner was appealed to to settle several land disputes beyond the area of political control. The Deputy Commissioner, Major Woods, proposed that the limit of political control should be extended up to the Tizu, but, after considering all the circumstances, the Chief Commissioner was not prepared to recommend such an extension to the Government of India. A fight subsequently occurred between two of the contending villages, Lhoshiapu's and Inato's, in which five men were killed on one side and three on the other. Eventually, the Deputy Commissioner allowed Khupu, his head Sema *dobhasha*, and Ghukia and Khukia, two of the principal Chiefs subject to the British control, to go across the border and settle the dispute, explaining carefully that this in no way made Government responsible for enforcing the decision of the arbitrators. The *panchayat* was held, and Khupu reported that the disputed land had been divided between the parties, each of whom swore not to molest the other, unless first attacked. A party of Sema Chiefs, among them the sons of Lhoshiapu and Sakhai from across the border, went with the Deputy Commissioner to Manipur during the Viceroy's visit.

*The Eastern
Angamis.*

Except for a riot between two *khels* of the Memi Naga village of Razama, everything was quiet in the Eastern Angami political control area. In the Razama case some salt was stolen from a man of the Thepama *khel*, and in discussing the matter the Thepama and Dima *khels* finally came to blows. They agreed to fight the matter out, and drew up in two lines, facing each other about five yards apart, in an open space in the centre of the village. They carried shields and sharpened bamboos, and wore helmets. Taking shelter behind their shields, they hurled the sharpened bamboos and threw large stones provided by the women over the tops of their shields. They were eventually separated by the other *khels*, but not till 28 persons had been injured, some of them severely. The ringleaders were sent to jail and the *khels* fined Rs. 500. The Naked Nagas of Melomi, Sohemi, and Lapvomi, and the Nagas of Temimi and Primi, came in several times to

ask for assistance against the Aishan Kukis, who are harassing them. The Eastern Angami villages across our border are also continually praying to be taken under our protection, as they fear the Kukis on the one side and the Semas on the other.

Physical and
Political
Geography.
Political.

KHASI AND JAINZIA HILLS.

STATES.

190. 1. Bhowal.—Population (1901)—865; Gross revenue—Rs. 1,270; Products—Rice, millet, bay-leaves, black pepper, pepper-nigram; Mineral—Lime.
Siem—U Ram Singh, aged 37 years, Khasia; Male heir—U Jit Singh (disputed).
2. Cherra.—Population (1901)—8,155; Gross revenue—Rs. 3,750; Products—Cotton, millet, betel-nut, *pan*, oranges, black pepper, pepper-nigram, chillies, bamboos, turmeric, ginger, honey, and potatoes; Manufactures—Bamboo mats and bamboo baskets; Minerals—Lime, iron, and coal.
Siem—Roba Singh, Khasia.
3. Shella.—Population (1901)—4,358; Gross revenue—Rs. 3,370; Products—Oranges, betel-nuts, and pine-apples; Minerals—Lime and coal (not worked).
Wahadadars—(1) U Jaidon, aged 34 years, Khasia; (2) U Wandap, aged 52 years, Khasia; (3) U Shlain, aged 41 years, Khasia; (4) U Klor Kha, aged 56 years, Khasia.
4. Khairim.—Population—31,327; Gross revenue—Rs. 15,778; Products—Rice, cotton, millet, job's-tears, caoutchouc, cinnamon, *sohphlang* (an edible root), betel-nuts, *pan*, oranges, Indian corn, lac, potatoes, black pepper, pepper-nigram, chillies, turmeric, ginger, and honey; Manufactures—Cotton cloth, *eria*, silk cloth, *daos*, *kodalis*, knives, hammers, crowbars, wedges, and bamboo-mats; Minerals—Lime, coal, and iron (not worked).
Siem—U Klur Singh, aged 58 years, Khasia; Male heir, U Mana Singh.
5. Mylliem.—Population (1901)—17,863; Gross revenue—Rs. 8,394; Products—Rice, potatoes, job's-tears, Indian corn, *sohphlang*, sugarcane, ginger, and millet; Manufactures—*Daos* and baskets; Mineral—Iron.
Siem—U Ron Singh, aged 40 years, Khasia; Male heir—Siem's brother, U Kumin.
6. Langrin.—Population (1901)—1,138; Gross revenue—Rs. 2,380; Products—Rice, millet, chillies, turmeric, and ginger; Minerals—Lime and coal (not worked).
Siem—U Langngut, aged 29 years, Khasia; Male heir—U Sor.
7. Maharam.—Population (1901), 8,464; Gross revenue—Rs. 1,570; Products—Job's-tears, black pepper, pepper-nigram, chillies, bay-leaves, honey, rice, sugarcane, potatoes, ginger, millet, Indian corn, *sohphlang*, caoutchouc, and cinnamon; Manufactures—*Daos*, *kodalis*, and hammers; Minerals—Lime and iron (not worked).
Siem—U Kison Singh, aged 42 years, Khasia; Male heir—Raban Singh.
8. Maoiang.—Population (1901)—1,856; Gross revenue Rs. 510; Products—Potatoes, millet, chillies, turmeric, honey, and ginger; Minerals—Lime and iron (not worked).
Siem—U Mai Singh, aged 38 years, Khasia; Male heir—U Saketrai.
9. Maosanram.—Population (1901)—1,414; Gross revenue—Rs. 2,130; Products—Potatoes, millet, chillies, turmeric, honey, and ginger; Minerals—Lime, coal, and iron (not worked).
Siem—U Sombu Kai, aged 24 years, Khasia; Male heir—U Sordo Rai.
10. Malaisohmat.—Population (1901)—491; Gross revenue—Rs. 220; Products—Rice, millet, job's-tears, ginger, chillies, turmeric, bay-leaves, betel-nuts, and sugarcane; Minerals—Lime, coal, and iron (not worked).
Siem—U Juba Singh, aged 22 years, Khasia; Male heir—U Hiba.
11. Myriaw.—Population (1901)—2,289; Gross revenue—Rs. 380; Products—Rice, millet, job's-tears, ginger, chillies, turmeric, *sohphlang*, Indian corn and sugarcane; Minerals—Lime, coal, and iron (not worked).
Siem—U Burom, aged 38 years, Khasia; Male heir—U Tap.
12. Nobosophoh.—Population (1901)—1,555; Gross revenue—Rs. 500; Products—Rice, job's-tears, Indian corn, *sohphlang* and potatoes; Minerals—Lime, coal, and iron (not worked).
Siem—U Dewan, aged 37 years, Khasia; Male heir—U Bor Singh.
13. Nongklaw.—Population (1901)—9,715; Gross revenue—Rs. 2,202; Products—Potatoes, rice, millet, job's-tears, Indian corn, *sohphlang*, caoutchouc and cinnamon; Manufactures—*Kodalis*, *daos*, and crowbars.
Siem—U Kine Singh, aged 58 years, Khasia; Male heir—U Kumbur Singh.
14. Nongspung.—Population (1901)—1,859; Gross revenue—Rs. 649; Products—Rice, potatoes, honey, and bees' wax; Manufactures—*Daos*; Mineral—Iron.
Siem—U Pyrba Singh, aged 41 years, Khasia; Male heir—U Shabat Singh.
15. Nongstoin.—Population (1901)—9,606; Gross revenue—Rs. 6,030; Products—Lac, honey, bees' wax, cotton, caoutchouc, bay-leaves, rice, millet, job's-tears, sugarcane, chillies, and *sohphlang*; Manufactures—Earthenware, pottery, cotton cloth, *daos*, and spades; Minerals—Lime and coal (not worked).
Siem—U Suna, aged 60 years, Khasia.
16. Rambrai.—Population (1901)—2,697; Gross revenue—Rs. 550; Products—Rice, job's-tears, ginger, chillies, millet, cotton, and Indian corn; Manufactures—Cotton cloth.
Sardar—U Duba Singh, aged 40 years, Khasia.

Physical and
Political
Geography.

17. Jirang.—Population (1901)—723; Gross revenue—Rs. 2,020; Products—Rice, millet, ginger, chillies, job's-tears, caoutchouc, and cotton; Manufactures—Cotton cloth.

Sardar—U Bang, aged 41 years, Khasia.

Political.

18. Duara Nongtyrmen.—Population (1901)—362; Gross revenue—Rs. 100; Products—Rice, millet, oranges, chillies, and job's-tears; Manufactures—Net bag; Mineral—Lime.

Sardar—U Shongkhana Singh, aged 55 years, Khasia.

19. Maodon.—Population (1901)—296; Gross revenue—Rs. 1,730; Products—Millet, oranges, betel-nuts, jack fruits, pine-apples, chillies, and bay-leaves; Minerals—Lime and coal (not worked).

Sardar—U Jir Muluk, aged 40 years, Khasia.

20. Maolong.—Population (1901)—1,472; Gross revenue—Rs. 670; Products—Oranges, millet, jack fruits, betel-nut, pine-apples and chillies; Mineral—Lime (not worked).

Sardars—(1) U Babin, aged 35 years, Khasia; (2) U Sabin, aged 33 years, Khasia; (3) U Sombut, aged 36 years, Khasia.

21. Pamsangut.—Population (1901)—288; Gross revenue—Rs. 10; Products—Potatoes, job's-tears and millet.

Sardar—Vacant.

22. Longiong.—Population (1901)—596; Gross revenue—Rs. 200; Products—Potatoes and millet.

Longdoh—U Bna, aged 49 years, Khasia.

23. Mapphang.—Population (1901)—947; Gross revenue—Rs. 190; Products—Millet, job's-tears, rice and potatoes.

Longdoh—U Balo, aged 32 years, Khasia.

24. Nonglwai.—Population (1901)—169; Gross revenue—Rs. 10; Products—Millet, job's-tears, rice and potatoes.

Sardar—U Harib, aged 54 years, Khasia.

25. Sohiong.—Population (1901)—2,014; Gross revenue—Rs. 480; Products—Millet, job's-tears, rice and potatoes.

Longdoh—U Kir Singh, aged 54 years, Khasia.

Two Siems died during the past year. U Mon, Siem of Nongstoin, died in April 1901, and was succeeded by his uterine brother, U Suna, a Christian. This is the first time that a Christian has been elected to the Siemship of Nongstoin, and his appointment appears to be due to the fact that for many years past successive Siems of Nongstoin have been addicted to drink and have not given proper attention to the affairs of the State.

U Hajon Manik, Siem of Cherra, died in May 1901, having been Siem of the State for a period of 26 years. He was a strong Siem, and kept his State in good order, but he was never popular with his people on account of his failure to perform the rites of cremation of his predecessor. The succession to the Siemship was contested by Chandra Singh, nephew of the late Siem, and Roba Singh, who belongs to the line of his predecessor Ram Singh Siem, and except Govind Chandra, his uncle, who, being a Christian, had no chance of election to the Siemship, is the senior male member of that line. An assembly claiming to be the State Durbar was reported to have elected Roba Singh, but, objections having been raised to its constitution, the Chief Commissioner refused to accept this nomination, and called upon the Myntris of the twelve principal clans to state whether they consented to the succession of Chandra Singh. A majority of the Myntris having voted for Chandra Singh, he was appointed Siem by the Chief Commissioner, and a *Sanad* and *Khillat* were presented in due course. An appeal against his appointment was preferred to the Governor General in Council, by whom it was eventually decided that the appointment of Chandra Singh was irregular, and that a new Siem should be elected by the inhabitants of the Cherra State. The election was fixed for 3rd April 1902, when Roba Singh was unanimously elected Siem, Chandra Singh and his adherents abstaining from attendance. In connection with this dispute, some serious disturbances occurred. In December 1901, on account of certain acts of oppression alleged against Chandra Singh or his Myntris, about 2,000 people took possession of the village of Cherra, disarmed the Siem's adherents, looted their food supplies, and forced many of them to swear fealty to Roba Singh by licking salt from the blade of a sword, a form of oath considered by Khasias to be of a most solemn and binding nature. The Deputy Commissioner proceeded to Cherra with a detachment of the 43rd Gurkha Rifles, and the disturbances were soon quelled. The ringleaders in these disturbances were ordered to execute bonds for their good behaviour for three years, and were further ordered to be deported to the Jaintia Hills. These orders were, however, cancelled on the election of Roba Singh. On the 2nd and 3rd of April 1902, the adherents of Chandra Singh created disturbances with a view to render the election ordered by the Government of India impossible. They set fire to houses in Cherra village, and shot at the followers of Roba Singh. On the morning of the 3rd April, when Roba Singh's adherents were

proceeding to the place of election, they were fired at by the adherents of Chandra Singh, who were armed with guns, and some of the adherents of Roba Singh then retaliated, also using guns, with the result that 3 men and 1 woman on the side of Chandra Singh were wounded, while 1 man was killed and 2 wounded on the side of Roba Singh. Three leading men on the side of Chandra Singh were tried under section 148, Indian Penal Code, and sentenced to rigorous imprisonment for three years and to pay fines of Rs. 500 each, in default to undergo nine months' imprisonment in addition. On the side of Roba Singh one leader was tried under section 148—109, Indian Penal Code, and sentenced to three years' rigorous imprisonment.

Physical and
Political
Geography
Political.

Ill-feeling still subsists between the Siem of Khyrim and his nephew and heir-apparent, U Mana Singh, and some complaints against the Siem were received from the people of the tract in the south of the State known as the "25 villages," who have always been averse to his government. These complaints are under enquiry. There was also opposition to the Siem's authority on the part of the people of Nongkrem, who complained that he had unlawfully removed the *hat* from the village of Nongkrem to the new village of Smith. On enquiry, it was found that the removal of the *hat* dated from the year 1892, and had been ratified by successive Deputy Commissioners. The Deputy Commissioner therefore ordered the entire abolition of the Nongkrem *hat*, and it is hoped that no further disturbances will take place. In the remaining States, affairs generally remained satisfactory throughout the year.

The boundaries of the village of Laitkynsew, forming part of the Siemship of Nongkhlaw, were finally determined by the Deputy Commissioner on the 30th of May 1901. The village of Laitkynsew was established 80 or 90 years ago by people of Maomluh, which village at that time formed part of the territory of the Siem of Nongkhlaw. A feud arose in Maomluh, and the defeated party, headed by U Hain Siem, was driven from Maomluh and ordered to go towards the setting sun. These people settled on the hill top, about 4 miles to the west of Maomluh, founding there the village first called Pynther and later Laitkynsew. There can be no doubt that this hill was at the time of the occupation part of the territory of the Shella confederacy, and since then there have been numerous cases arising from claims to different parts of the hill top. During the enquiry the Wahadars of Shella and the Sirdars of Nongwar, Nongkroh, and Tyrna, the two latter being now British villages, though formerly belonging to the Shella confederacy, all preferred claims to the hill top. As no proof was forthcoming of the terms under which the people of the Shella confederacy permitted the settlement of the people from Maomluh, and these people and their descendants had been in undisturbed possession for 80 or 90 years, the Deputy Commissioner held that the former proprietors must be considered to have waived their rights, and that the hill top must now be considered as a part of the territory of the Siem of Nongkhlaw.

One of the Sirdars of Maulong had to be dismissed for misconduct, and a successor was unanimously elected.

SECTION 10.—CONDITION OF THE PEOPLE.

191. *Cachar*.—The general condition of the population of this district was good.

Sylhet.—Owing to the bad harvest of late rice in 1900, there was scarcity throughout the district in the early part of the year. The *aus* crop, which was grown more extensively than usual, was good, and this greatly improved the position. In the Jagannathpur outpost and some other parts of Sunamganj subdivision, and in the Baniyachong and Nabiganj thanas of Habiganj subdivision, where the people are mainly dependent on the *aman* crop and a small supplementary *boro* crop, the scarcity continued to be felt until October. In Sunamganj subdivision, the Local Board spent nearly Rs. 5,000 on gratuitous relief, and over Rs. 3,000 was advanced in small loans under the Agriculturists' Loans Act. Small sums were also spent by other Local Boards on the relief of cases of distress.

Assam Valley.—The condition of the people, favoured as they were with fair harvests, and free from any serious epidemic, was generally satisfactory during the year under report. A partial exception must be made in regard to the condition of the inhabitants of the Nalbari tahsil, and some other parts of the Kamrup district, who suffered considerably from distress caused by the failure of the *ahu* harvest, in the early months of the year. This failure was the result of the short rainfall in April and May, and following, as it did, on the loss of the previous year's *salzi* crop, apprehensions were raised of a possible failure for the second time of the latter crop. Money-lenders refused credit, and, the usual doles to the poor having ceased and the employment of widows and

Physical and
Political
Geography.
Political.

other destitute persons in *dhin*-husking and similar forms of petty domestic service being suspended, severe distress was felt among the poorest classes of the community. The Officiating Deputy Commissioner, who investigated for himself on the spot the actual condition of affairs, was in July authorised by Government to distribute relief. The favourable character of the monsoon, however, and the fall in local prices, which ensued on the inland channels being opened to traffic by the rise of the Brahmaputra, soon put a better aspect on the face of things, and the amount which it was found necessary to distribute in relief was inconsiderable. The Maharaja of Darbhanga generously placed Rs. 3,000 at the disposal of the Administration for distribution among the distressed people of Kamrup, but only a sum of Rs. 325 was actually expended.

Garó Hills.—The Garos are generally a prosperous and contented people. Their wants are few, and are satisfied without much difficulty. The condition of the Bengali cultivators in the plains portion of the district is not very satisfactory, the soil having been greatly impoverished by the earthquake of 1897.

Naga Hills.—The condition of the people was good, though, till the early *jhum* crops had been reaped, there was some scarcity of rice among the Kacha Nagas and Kukis. This was due partly to bad harvests and partly to their own indolence. The other tribes in the district, except the people of Tamlu, who are confirmed opium-eaters, are industrious, and their material prosperity is reported to have greatly increased since the establishment of British rule. The shop-keepers of Kohima Bazar suffered considerable loss through the destruction of the greater part of the bazar by fire. The fire broke out after midnight, and, as a high wind was blowing, and the houses were packed closely together, it spread with great rapidity. Their loss is estimated at over a lakh of rupees.

Khasi and Jaintia Hills.—Except the people of Shella, who have suffered severely in consequence of the entire destruction of their orange groves by the effects of the earthquake in 1897, and of the decline in the lime business, the Khasias generally are remarkably well off. With increasing civilisation the standard of living is being raised and new wants are created, but the absence of caste prejudices and the readiness with which the people accept work of all description enable them to add to their income and thus provide themselves with additional luxuries.

Lushai Hills.—In this district the maize crop was not good, owing to want of rain in the early part of the year, but the rice crop was generally good. The Lushais as a class are reported to be well off, and unwilling to undertake any hard work, even for high wages.

CHAPTER II.

Administration of the Land.

SECTION I.—REALISATION OF THE REVENUE.

[For detailed figures see Statements III-VI appended to the Resolution on the Land Revenue Administration of Assam for 1901-1902.]

192. The year opened with an arrear balance of Rs. 5,46,338, of which 69 per cent. was collected. Of the current demand,—Rs. 56,99,023—92 per cent. was collected within the year. Excluding remissions, the balance outstanding at the close of the year was larger by Rs. 29,236 than at its commencement.

Demand, collections, remissions, and balances of land revenue.

Cachar.—The total demand (both current and arrear) was Rs. 5,25,709. Of this, Rs. 4,77,885, or 90·9 per cent., were realised, leaving a balance of Rs. 47,824, or 9·1 per cent., outstanding on 31st March 1902. The percentage of collections was considerably higher than that of the previous year, but the arrears are still considerable. Nearly 96 per cent. of the arrear demand was paid into the treasury, which clearly shows that the settlement-holders of Cachar have no difficulty in meeting their obligations.

Sylhet.—The total collections amounted to Rs. 7,82,009, or 85·37 per cent., of the demand, as compared with 87·47 in the preceding year. The percentage of collections in the case of permanently-settled estates was 99·7, but for temporarily-settled estates it was only 75·8. This somewhat unsatisfactory state of affairs appears to be largely due to defects in the machinery for collection. In the Jaintia parganas, where 64 per cent. of the arrears accrued, it seems doubtful whether the dates fixed for the *kist* days suit the convenience either of Government or of the people, and much additional difficulty is caused by the system of *ijmali pattas*. The bulk of the land is held on joint leases, no record is kept of the amount paid by, or due from, each individual shareholder, and when an estate falls into arrear, process is issued upon the man whose name stands first in the register, though he may have paid his lawful debts, or even, as in one case that came to the notice of the Chief Commissioner, be no longer alive. The question of altering the *kist* dates and of breaking up, where possible, the *ijmali pattas* is now under consideration. Arrears were also heavy in the Pratabgarh pargana, and were largely due, according to the Deputy Commissioner, to the want of a local tahsil office, as the pargana is situated at a considerable distance from Karimganj, where payment now is made.

Only 80 per cent. of the arrear demand was collected, and Rs. 23,067 remained outstanding under this head.

Assam Valley.—The total demand was Rs. 47,91,917, of which Rs. 43,51,630, or 90·8 per cent., were collected, as compared with 91·28

Goalpara ...	...	0·00
Kamrup ...	...	13·11
Darrang ...	...	5·27
Nowgong ...	...	5·80
Sibsagar ...	...	6·65
Lakhimpur ...	...	8·09

per cent. in the preceding year. The balance on 31st March 1902 was Rs. 3,91,633, or 8·17 per cent. of the total demand. The proportion borne by the balance of each district to the total demand for the district is given in the margin. The results of collection were worst in Kamrup,

where over 13 per cent. of the revenue was in arrears at the close of the year. The Deputy Commissioner explains that this was due to the fact that collections in some tahsils were begun late, pending the results of the enquiry incident to the abatement ordered by the Government of India, to be allowed in tracts affected by the earthquake of 1897 and the epidemic of *kala-azar*.

In Sibsaagar, the arrears were attributed to a change in tahsildars at the Namtidol tahsil, to temporary scarcity in Golaghat, the effects of a bad season in 1900-1901, and also to the fact that in this district some mauzas are too large to enable one man to realise the revenue in time. The Deputy Commissioner, Lakhimpur, attributed the comparatively high percentage of arrears in his district to the large area of the Dibrugath tahsil and of some of the mauzas, which renders it difficult for one man to collect the revenue in time, and also to the inefficiency of some of the mauzadars of the district.

**Adminis-
tration of
the Land.**

The collection of the arrears of previous years in the five upper districts of the valley was not satisfactory, only 61 per cent. of the demand being realised during the year, notwithstanding that no less than Rs. 48,654, equivalent to 1 per cent. of the total annual demand, was written off under the Commissioner's authority as irrecoverable. Of this amount, however, Rs. 27,938 was in balance in the Nowgong district, which has suffered so severely from *kalá-ásár*. The sums written off in other districts were comparatively small, the most conspicuous being Rs. 6,061 in Kamrup and Rs. 5,655 in Sibsagar.

**Procedure for
realisation
of revenue.**

193. There was no change in the procedure followed for the realisation of revenue except in Cachar, where the revenue of all estates paying less than Rs. 10 was made payable in one instalment in March. The revenue of all estates in this district was formerly payable in three instalments—in August, November, and March.

In *Cachar* there was less unpunctuality in payment than in the preceding year, but it was necessary to issue notices of demand on 9,432 estates, or 14 per cent. of the total number, and in 3,922 cases the defaulters' moveable property had to be attached. This step produced the desired result, and sales were only held in 31 cases for the small arrear of Rs. 166. In no case was it found necessary to put the estate up to auction.

In *Sylhet* notices of sale were issued on no less than 9,758 of the permanently-settled estates, or nearly a fifth of the total number; but in only 257 cases was sale proceeded to. There were altogether for disposal 193 applications for the annulment of sales, including 58 pending from the preceding year. In 54 cases the sales were cancelled, in 48 the applications were rejected or withdrawn, and 91 remained pending at the close of the year. There were altogether 1,312 applications for separate accounts for disposal, 448 of which were pending from the preceding year. Eight hundred and seventy-eight applications were granted, 25 rejected or withdrawn, and 409 remained for orders at the close of the year.

In the case of temporarily-settled estates the use of minor processes was still larger, 13,450 notices of demand issuing, and 7,419 notices of sale, so that over 40 per cent. of the settlement-holders required a reminder for which a process fee was levied. This state of affairs is largely attributable to imperfections in the records of the Jaintia parganas to which reference has already been made above. Sales of temporarily-settled estates, or of property belonging to their holders, were not numerous, being enforced in only 317 and 214 cases, respectively. The total number of temporarily-settled estates is 48,918.

Assam Valley.—The revenue was paid with much less need of pressure than in either Cachar or Sylhet. Notices of demand were issued for 6·4 per cent. of the total number of estates on account of 13·2 per cent. of the revenue demand, being used in rather less numbers than in the preceding year. There was most occasion for their use in Darrang,—the result, it is stated, of exceptional leniency which was shown in the preceding year, owing to the short crop: they issued in this district for 8·7 per cent. of the total number of estates.

In Sibsagar the number of demand notices slightly increased, and the increase would have been greater and arrears less but for the apathy of some of the tahsildars in the matter of issuing notices.

**Attachment
of property.**

The total amount of arrears for which property was attached was Rs. 2,07,735, or 35 per cent. of the arrears for which notices were issued, as against Rs. 2,01,933, or 35 per cent., in 1900-1901. Moveable property was attached in 10,303 cases, and the defaulting estates themselves in 1,698 cases. The attachments of moveable property decreased by 1,875, as compared with the figures of 1900-1901. The decrease was shared by all the districts, except Darrang, which shows an increase under this head, the number of cases being 2,381, against 1,425 in 1900-1901. There was an increase of 504 in the number of estates attached.

Sales.

Notice of sale was issued in respect of arrears amounting to Rs. 64,171 in 3,628 cases, but only in 436 cases was moveable property actually sold, and in 599 cases the estates themselves. There was a slight decrease in the sales of moveable property, and an increase in the sales of estates, which were most numerous in Darrang (91) and Sibsagar (435). The actual arrears for which sales were held amounted to Rs. 34,911.

Process fees.

The total amount realised on account of process fees was Rs. 1,00,657, or Rs. 9,586 more than in the previous year; and the surplus credited to Government, after deducting the cost of the process-serving establishment, was Rs. 68,859.

**Miscella-
neous land
revenue.**

194. The most important heads of miscellaneous land revenue are house-tax, fisheries, coal-mines, and mineral oil, elephants, and lime-quarries.

House-tax.—This takes the place of land revenue in the hill districts. It is also levied in certain hill tracts in Kamrup, Nowgong, and Sibsagar, the principal of which is the Mikir Hills. Collections fell off by Rs. 2,573, mainly owing to reduction in the rate of revenue from Rs. 3 to Rs. 2 per house in the Mikir Hills in Nowgong, which formed an item in the abatements granted in that district.

Fisheries.—The total collections amounted to Rs. 1,65,400, the bulk of the revenue coming from Sylhet, Sibsagar, and Kamrup. There was a satisfactory increase in the collections in all districts, except Nowgong and Goalpara, but it was especially pronounced in Cachar and Kamrup.

Elephants.—The total revenue derived from elephants was Rs. 27,627, or 17·09 per cent. more than in the previous year, when there was no hunting in the Cachar district. In 1901-1902, the North Cachar *mahals* were sold, and 68 captures made, so that royalty and license fees together yielded Government a revenue of Rs. 8,400. In the Assam Valley, on the other hand, there was a decrease of Rs. 2,330, as no *mahal* was worked in Goalpara, where the lessees had only moderate success in the previous season. The receipts in Lakhimpur were nearly stationary, but in Darrang there was a considerable increase both in license fees and royalty. In the Khasi Hills the elephant *mahals* were withdrawn from settlement, as the lessees objected to working side by side with the Khedda Department.

The current demand for the year on account of miscellaneous land revenue was Rs. 4,63,047 and the revised arrear demand Rs. 32,603, so that the total demand for 1901-1902 was Rs. 4,95,650. Of this, Rs. 4,52,270, or 91·25 per cent., were collected, Rs. 5,434, or 1·10 per cent., remitted, and Rs. 37,946, or 7·66 per cent., remained outstanding at the close of the year. The current demand was Rs. 4,63,047, or 4·02 per cent. more than in 1900-1901; of this, Rs. 4,27,995, or 92·43 per cent., were realised, against 94·16 per cent. in the preceding year. Of the arrear demand, Rs. 24,275, or 74·46 per cent., were realised during the year, against 67·55 per cent. in 1900-1901. The outstanding balance was reduced by the 1st September 1902 to Rs. 15,139. Four-fifths of the amount remitted represented fishery revenue in Sylhet, which was written off owing to excessive loss sustained by the *mahaldars*, or to the absence of any property from which the sums due could be realised.

Demand, col-
lections, re-
missions, and
balances.

SECTION 2.—SURVEYS.

[See Annual Report of the Department of Land Records and Agriculture, Assam, for year ending the 30th September 1902.]

195. The operations undertaken by the professional survey detachment attached to the province during the year and the area completed under each head are given below:

Survey by
professional
agency.

SURMA VALLEY—CACHAR DISTRICT.

(1) Traverse survey of a portion of the disforested area of the Inner Line reserve with a view to its cadastral survey	Sq. miles.
... ..	4·50

BRAHMAPUTRA VALLEY.

(2) Traverse and topographical survey of areas omitted from cadastral survey— Kamrup	15·00
(3) Traverse survey of areas with a view to their cadastral survey by local agency— Darrang	18·50
(4) Traverse survey of areas already cadastrally surveyed by local agency— Kamrup	120·00
(5) Traverse and boundary survey of tea grants— Kamrup	12·00
Darrang	26·50
Nowgong	28·00
Sibsagar	22·00
	88·50
Total Brahmaputra Valley	242·00
Grand Total	246·50

Adminis-
tration of
the Land.

Traverse sur-
vey by local
agency.

Cadastral sur-
vey.

Besides this, the survey detachment surveyed and relaid 4.50 linear miles of boundary line near Cherrapunji in the Khasi and Jaintia Hills.

A plane-table traverse of an area of 1.26 square miles in the Sylhet district comprising certain blocks of *khas* land and detached portions of a few *ilam* estates not traversed by the professional survey party, was carried out by local agency.

A cadastral survey was carried out by local agency in the Darrang district on the basis of a traverse made by the provincial survey detachment. The total area surveyed was 22.71 square miles, and the result was an increase of 384.87 acres, or 5.67 per cent., in the cultivated area, and of Rs. 1,118, or 7.06 per cent., in the revenue demand obtained at a total cost of Rs. 251.

In Sylhet an area of 3.38 square miles of temporarily-settled estates and unsettled lands was cadastrally surveyed. This, with the 306.31* square miles surveyed up to the close of the season 1900-1901, brings the total area surveyed by local agency in the district to 309.69 square miles.

In addition to this, a rough cadastral survey was made by local agency of 13.05 square miles in the Langai-Singla disforested area with a view to its allotment to settlers.

SECTION 3.—SETTLEMENTS.

[For detailed figures see Statements I and II appended to the Resolution on the Land Revenue Administration of Assam for 1901-1902.]

196. There was no regular revision of settlement during the year, but the revised rates sanctioned for the Silchar town and the *ilam* estates in Sylhet were brought into force with effect from the 1st April 1902. The effect of the Silchar resettlement was to raise the revenue demand by Rs. 4,710, or 147.32 per cent. The final report of the *Ilam* Settlement Officer has not yet been received.

The changes in settled area and revenue demand due to causes other than revision of assessment, and the current settlements of waste land taken up for ordinary cultivation are discussed in the following paragraphs.

Total settled
area and rev-
enue.

197. The total area of the plains of Assam, as calculated by the Survey Department, is 31,789 square miles, and the settled area at the end of the year was 12,007 square miles, or 97 square miles more than on the 31st March 1901; but the revenue demand was only 56.7 lakhs of rupees, or one lakh less than the revenue of the previous year.

Permanently
settled
estates.

There are 19 permanently-settled estates in Goalpara, covering an area of 2,373 square miles and paying the nominal revenue of Rs. 11,411. In Sylhet there were on 31st March 49,847 estates of this class, covering an area of 3,767 square miles and paying a revenue of Rs. 3,65,274, thirteen estates with an area of 228 acres having been bought in by Government during the year when sold for arrears of revenue. No less than 51 per cent. of the settled area of the Province is permanently settled, and the average revenue assessed on this class of tenure is only 1.4 pie per acre in Goalpara and 2 annas 5 pies per acre in Sylhet.

Temporarily-
settled
estates.

198. *Cachar*.—The total area settled under the ordinary rules amounted to 418,157 acres, which was only 175 acres more than in the preceding year, but there was an increase of Rs. 4,448 in the revenue demand (amounting to Rs. 4,44,561), chiefly due to the resettlement of expired *jangalburi* leases at ordinary rates. There seems to have been much delay in the disposal of applications for land. There were altogether 2,398 cases to be dealt with, nearly half of which were pending from the previous year, but in only 510 cases were final orders passed. No progress was made in extending the colonization of the disforested areas in the Inner Line, Barak, and Dhaleswari reserves, which were thrown open for cultivation some years ago. Altogether 13,679 acres of land have been settled in these forests up to date, but although a considerable area still remains unsettled, the proportion of culturable land it contains is but small.

199. *Sylhet*.—Less than a fifth of the occupied area in this district is temporarily settled. It exhibits an increase of 20,709 acres; but one-third of this increase is due to the fact that in previous years land annually settled by the tahsil staff was for reasons, which are not quite clear, omitted from the district returns.

Applications for waste land were promptly disposed of, 492 being either struck off or sanctioned, and only 123 remaining pending at the close of the year. Forty-one thousand and seventy-five acres were settled on annual leases for ordinary cultivation.

* Revised figures.

Considerable progress was made in the settlement of the Langai-Singla disforested area, which was recently thrown open to cultivation. It was hoped that it might be possible to break up this land into allotments with clearly-defined boundaries, which could be offered to intending settlers, and a survey was undertaken to ascertain the area of *tila* and flat land in the valleys and to mark off the different holdings. The jungle was, however, found to be so dense that demarcation proved to be impossible, and the settlers must clear and demarcate the boundaries of their land before a survey will be of any use. The total area allotted up to date amounts to 6,848 acres, and as cultivation extends and communications improve, it is expected that the land towards the southern end of the valleys near the Lushai Hills will be taken up.

200. *The Assam Valley.*—There was an increase of 42,337 acres (or of 1 per cent.) in the settled area, concomitantly with a decrease of Rs. 1,19,594 (or of 2.6 per cent.) in the land revenue. The fall in assessment was entirely due to the special concessions that were granted under the orders of the Government of India in the Kamrup, Darrang, and Nowgong districts, which constituted the most prominent fact in the revenue history of the year. A reduction in rates involved abatements of Rs. 60,000 in Kamrup, Rs. 20,000 in Darrang, and Rs. 1,00,000 in Nowgong. This measure of relief was called for by the extraordinary losses these districts had suffered in population and in cropped areas owing to the damage caused by the earthquake of 1897 and the decimating mortality due to *kalá-ázár*. The land which was newly taken up for cultivation was settled almost wholly on annual lease.

Details of the changes in settled *khiraj* (fully assessed) area and revenue demand are given by districts below :

	Settled area, 1901-1902.	Revenue, 1901-1902.	+ or — area.	+ or — revenue.
1	2	3	4	5
	Acres.	Rs.	Acres.	Rs.
Goalpara—Eastern Duars ...	68,912	93,037	+ 691	— 4,200
Kamrup ...	420,992	10,40,904	+ 11,055	— 31,027
Darrang ...	253,684	6,40,332	+ 2,361	— 18,292
Nowgong ...	195,216	4,10,984	— 2,010	— 1,01,925
Sibsagar ...	499,471	13,17,161	+ 8,933	+ 20,747
Lakhimpur ...	204,639	4,99,188	+ 8,281	+ 16,463
Total ...	1,642,914	40,01,606	+ 29,311	— 1,18,314

Nowgong is the only district which shows a decrease in settled area; and a most satisfactory increase is reported from Kamrup, which appears to indicate that the people are beginning to recover from the effects of the earthquake, are abandoning the fields which have been permanently ruined, and are moving to the north of the district. For a long time the raiyats clung to their holdings, and it was only natural that, with the attachment of all natives of India for their homes, they should decline to abandon them till the impossibility of cultivating their fields had been placed beyond all doubt. At the same time there was obviously no justification for a permanent reduction of the cultivated area when there was plenty of good land awaiting settlement, and it is satisfactory to find that the objections towards emigration are being overcome. The inhabitants of several villages, acting on the suggestion of the Assistant Commissioner, Mr. Barnes, and under the guidance of the Local Board Overseer, Srijut Chidananda Chaudhari, united in deepening by their own labour the bed of a portion of the Borolia, which was silted up in the earthquake, in order to render culturable a large tract of land in the Hajo tahsil, which has been submerged since 1897. The increase in Darrang

Adminis-
tration of
the Land.

was less than might have been expected, but Mangaldai is still suffering to some extent from the effects of *kalá-ázár*, and acts as a drag upon the progressive subdivision of Tezpur. In Lakhimpur and Sibsagar there was, as usual, a large increase in the settled area.

Since the Assam Valley was resettled in 1893-94, the settled area in Sibsagar and Lakhimpur has steadily increased year by year, while in Nowgong it has, with equal steadiness, declined. In Darrang, the general tendency has been towards expansion, except in 1900-1901, when the drought produced a reduction in the settled area, but the figures for 1901-1902 are higher than those of any previous year. In Kamrup there have been marked oscillations as will be seen from the figures on the margin,

Year.	Thousands of acres.
1893-94 ...	... - 7
1894-95 ...	... + 6
1895-96 ...	... - 7
1896-97 ...	... + 4
1897-98 ...	... 0
1898-99 ...	... -48
1899-1900 ...	... 0
1900-1901 ...	... -20
1901-1902 ...	... +11

showing the variations, in thousands of acres, since 1892-93, the net result being that the settled area is now only 87 per cent. of that ten years ago. The sudden decrease in 1898-99 was caused by the abandonment of land which had been rendered unculturable by the earthquake, and the further drop in 1900-1901 was no doubt largely due to the bad harvest, which impoverished the raiyats and compelled them to resign all land which did not repay the cost of cultivation. The settlement of 1901-1902 showed the

largest increase which has occurred during the past ten years, and the Deputy Commissioner is of opinion that the worst effects of the earthquake have now passed away, and that cultivation will continue to extend year by year unless arrested by some unforeseen calamity. The decrease in the settled area of Nowgong is comparatively small, but as the year was a healthy one and the recorded birth-rate exceeded the recorded death-rate, an extension of cultivation might not unreasonably have been looked for. The explanation is probably to be found in the reluctance of the raiyats to resign their fields, even when no longer able to cultivate them. It is estimated that between 1891—901 the indigenous population of Nowgong decreased by fully 30 per cent., whereas the *khiraj* settled area (excluding land settled with planters) only decreased by 22 per cent. in the last decade. Resignations have thus not kept pace with deaths, and even now that the general health of the district is improving, a little time must elapse before there will be any substantial increase in the settled area. The Commissioner is, however, inclined to take a favourable view of the situation, and predicts a speedy expansion of cultivation, as *kalá-ázár* is dying out and the revenue rates have been substantially reduced.

The area which is held direct from Government by time-expired tea-garden coolies increased by 7,022 acres and reached the total of 82,272 acres. This is inconsiderable when compared with the extent of the coolie immigration that has been adding to the population of the province for many years past. Foreigners other than coolies have taken up only 20,307 acres in the Assam Valley, a striking proof of the isolation of the valley from the rest of India.

Now that railway communication has practically been completed between Dibrugarh and Gauhati, the Chief Commissioner trusts that it may be found possible to open up the extensive tracts of jungle lying on either side of the line. Efforts have been made to induce contractors to settle their coolies on this land by the offer of favourable terms, and when the hill section has been opened, it is hoped that cultivators will flow in from the Surma Valley, where the population is beginning to press upon the soil.

No less than 186,291 acres settled in the year preceding are shown as having been excluded from settlement during the year under review. But a considerable portion of this area was in reality only transferred from one class of tenure to another, and the actual decrease amounted to 164,054 acres, or to 10 per cent. of the settled area of the preceding year. An area of 154,918 acres was relinquished, and 7,228 acres were struck off the rolls, because the raiyats formerly in possession were dead or had absconded. On the other hand, 153,188 acres of new land were taken up and 38,636 of resigned land retaken.

The percentage of the settled area which was formally resigned was highest in Dhubri (26) and Barpeta and Nowgong (20), and lowest in the Sibsagar district, where it was less than 4 per cent., and in the Dibrugarh subdivision, where it was only a little over 3.

Nisf-khiraj
estates, i.e.,
estates set-
tled at half
rates, in the
Brahmaputra
Valley.

The cultivated portion of *nisf-khiraj* estates, almost three-fourths of which lie in the district of Kamrup, is settled at half the *khiraj* rates, and the waste portions at 1 anna 3 pies per *bigha*. The total area at the close of the year was 192,450 acres, assessed at Rs. 1,70,225. Compared with the previous year, there was a decrease of 289 acres in area and Rs. 7,497 in revenue, for which the Kamrup district was responsible. The decrease in revenue was due to the abatement made under the orders of the Government of India.

SECTION 4.—LAND RECORDS.

201. Under the system in force in Assam the land revenue assessment is in great measure annually revised by the agency of the Land Records staff of Sub-Deputy Collectors, kanungos, and mandals. The number of mandals and patwaris entertained in the province on the 30th September 1902 was 1,135 of all grades, the sanctioned scale being 1,145. The average size of a mandal's circle in the Assam Valley districts is 14,958 *bighas*, and of a patwari's circle in Jaintia and Cachar 20,381 *bighas* and 20,644 *bighas*, respectively. The smaller average size of the circles in the Assam Valley, as compared with Jaintia and Cachar, is due to the fact that a mandal's circle in Assam often contains a large area of fluctuating cultivation, necessitating extensive annual remeasurements, while the cultivation in Sylhet and Cachar is generally fixed and permanent. The number of supervisor kanungos entertained on the 30th September 1902 was 60. The average size of a supervisor kanungo's circle in the Assam Valley is 295,507 *bighas*, in Sylhet 234,381 *bighas*, and in Cachar 250,310 *bighas*.

A system of continuous enquiry into agricultural conditions and record of agricultural statistics was initiated in the Assam Valley in 1897-98. This was designed to provide a permanent source of information for general administrative and fiscal purposes, and especially to afford a basis for the re-assessment of the land revenue demand at the resettlement of the Assam Valley districts, which has just commenced. This record, which is known as the "mauza-book," has now been introduced into all the districts which will come under resettlement.

SECTION 5.—WASTE LANDS.

202. The current settlements of waste land for ordinary cultivation have been discussed in section 3. There is at present very little demand for special grants of waste land for tea cultivation, and no applications for thirty-year leases under Section I of the Settlement Rules were received in the Surma Valley. Details of such applications for the Assam Valley are shown in the statement in the margin. In Sylhet 3,589 acres were settled under the rules, and in Assam Proper 3,402 acres, and though 36 cases were pending at the close of the year, the total area covered by

Districts.	Pending from previous year.	Received during the year.	Disposed of.	Pending at the close of the year.
Goalpara ...	1	...	1	...
Kamrup ...	...	...	...	...
Darrang ...	4	10	4	10
Nowgong ...	1	...	...	1
Sibsagar ...	18	9	18	9
Lakhimpur ...	18	8	10	16
Total ...	42	27	33	36

them was only 6,805 acres.

Two applications for relinquishment of grants in Sylhet, which were pending at the close of the preceding year, were rejected under the rules, and three fresh applications were presented during the year—two for partial and one for entire relinquishment.

In the Brahmaputra Valley, the number of grants resigned in 1901-1902 was 5, *vis.*, two in Kamrup, one in Darrang, and two in Sibsaagar. The total area resigned was 1,377 acres. In Kamrup the settlement of a grant under the old rules of 1854, comprising an area of 465 acres, was also annulled.

The total area held by planters under special rules was 920,580 acres, or 12 per cent. of the total settled area, paying an average revenue of 5 annas 1 pie per acre. In addition to this, a considerable quantity of land, for which details are given in the margin, has been taken up under the ordinary form of lease, and if this be included, the acreage assessment on tea land is 8 annas 8 pies. This, however, hardly affords a fair basis of comparison with the rates paid by *rai-yats*, as an unusual proportion of this land is waste, and on the area actually under tea, the assessment is Re. 1-13-8 per acre. In the Assam Valley, tea gardens occupy 27.4 per cent. of the temporarily-settled area, and pay 9.2 per cent. of the revenue.

	Acres.
Cachar ...	112,906
Sylhet ...	20,401
Goalpara ...	192
Kamrup ...	1,340
Darrang ...	11,640
Nowgong ...	3,342
Sibsagar ...	60,223
Lakhimpur ...	27,055
Total ...	237,699

Administration of the Land.

SECTION 6.—GOVERNMENT ESTATES.

Government estates.

203. Under this section are included petty estates in the districts of Sylhet and Goalpara, which have not been regularly settled for a term of years, and the revenue of which is collected direct from the tenants. The demand, collections, remissions, and balances on their account for the year 1901-1902 were as follows:

District.	Number of estates.	Demand.			Collections.			Remissions.			Balances.		
		Current.	Arrear.	Total.	Current.	Arrear.	Total.	Current.	Arrear.	Total.	Current.	Arrear.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.				Rs.	Rs.	Rs.
Sylhet ...	198	878	86	964	834	47	881	...	...	...	41	39	83
Goalpara ...	1	18	...	18	18	...	18	...	...	...	...	...	...
Total ...	199	896	86	982	852	47	899	...	...	...	44	39	83

The net increase in the number of estates and in the current demand in Sylhet was due to the addition of certain estates purchased by Government at sales for arrears of revenue, and increase of assets of certain estates.

SECTION 7.—WARDS' AND ATTACHED ESTATES.

Management of Court of 'wards' and attached estates.

204. As in the preceding year, the only estate under the management of the revenue authorities was that of Maulvi Muhammad Ahiya of Sylhet. Survey operations, which were begun in 1899-1900, were continued, and an area of 5,181 acres was measured up at a cost of Rs. 847, or 2 annas 7 pies per acre. The current demand amounted to Rs. 25,815, or Rs. 319 more than in the previous year. The arrear demand on the 1st April 1901 was Rs. 35,836, but on further enquiry it was reduced by Rs. 3,223. Of the total demand of Rs. 58,423 (current Rs. 25,815 and arrear Rs. 32,613), only Rs. 26,024 were collected and 55 per cent. remained outstanding at the close of the year. The results are slightly better than in 1900-1901, when only 37 per cent. of the total demand was realised, but they are still far from satisfactory. In portions of the estate the tenants suffered from a bad harvest, but this does not adequately account for the short collection. In addition to the collection of rent, a sum of Rs. 2,881 was realised on account of debts due to the estate and other miscellaneous receipts. The amount due from the estate on the 31st March 1901 amounted to Rs. 46,759, to which Rs. 8,731 were added during the year on account of interest and *patni* rents, making a total of Rs. 55,490. This total was reduced by Rs. 24,139, of which Rs. 13,105 were paid by the estate and Rs. 11,034 remitted by the creditors, leaving a balance of Rs. 31,351 to be liquidated. After defraying all expenses on account of management, maintenance of the proprietor, Government revenue, etc., a current balance of Rs. 2,630 was left at credit of the estate at the close of the year.

SECTION 8.—REVENUE-AND RENT-PAYING CLASSES.

205. The general character of all settlements in Assam of temporarily-settled estates is "raiyatwari," being based on the principle of dealing direct with the individual cultivator and his separate holding without any middleman, landlord or joint responsibility of the village or other group of holdings. The settlement-holder is, as a rule, a "peasant proprietor" cultivating his own lands and paying his revenue direct to Government. Subletting is, however, not unknown. In the Assam Valley Proper, the owners of most of the *nisf-khiraj* (settled at half rates) estates sublet their lands, and *khiraj* (full revenue-paying) lands are also sometimes sublet when their area is large. Sub-tenants are numerous in Kamrup and Mangaldai. In the Gauhati subdivision of Kamrup, it has been ascertained that 22.4 per cent. of the total cadastrally-settled areas of the villages in which enquiries have been made is held by sub-tenants. In Mangaldai the percentage is 9.5, but it is comparatively small in the other districts.

In the Surma Valley, subletting in the case of temporarily-settled estates is more common, the larger estates being held by middlemen, who have sublet to inferior middlemen or to the actual cultivators. The majority of the permanently-settled estates in Sylhet are small, and the settlement-holder cultivates his own land. The owners of the larger permanently-settled estates in Sylhet are "zamindars," who have either sublets their lands in *patni* or under leases fixing the rent in perpetuity or to actual cultivators whose rights in the land are governed by the Rent Law in force in Sylhet [Act VIII (B.C.) of 1869]. In Goalpara the permanently-settled estates are held by zamindars who have sublet the land in most cases to the actual cultivators. These zamindars pay only Rs. 11,411 as land revenue on these lands, which bring in a rental of 8 or 9 lakhs of rupees.

A rent dispute, which had been going on for some time between the zamindar of Prithimpasa in South Sylhet and his Manipuri tenants, resulted in some serious rioting attended by loss of life. There were also complaints on the part of the raiyats of the permanently-settled estate of Mechpara in Goalpara of the exaction of illegal cesses and of harassment caused to the tenantry by disagreements among the shareholders of the estate.

Protection.

CHAPTER III.

Protection.

SECTION 1.—LEGISLATIVE AUTHORITY.

Acts of the
Governor
General's
Council.

206. There are three ways in which measures of legislation are brought into force in this province. The first is the ordinary method, common to the whole of India, of passing Acts in the Council of the Governor General for making Laws and Regulations.

Regulations
under 33 Vic-
toria, Chap-
ter 3, Section
1.

207. The second is the method of passing Regulations in accordance with the provisions of 33 Victoria, Chapter 3, Section 1 (an Act to make better provisions for making Laws and Regulations for certain parts of India, and for certain other purposes relating thereto). This Act was, by Resolutions passed by the Secretary of State for India in Council, made applicable to the districts of Kamrup, Darrang, Nowgong, Sibsagar, and Lakhimpur, and the Garo, Khasi and Jaintia, and Naga Hills, and Cachar from the 1st January 1873; to the district of Goalpara from the 15th December 1873; and to the district of Sylhet from the 1st August 1874. Under its provisions, the Chief Commissioner has power to "propose to the Governor General in Council drafts of any Regulations, together with the reasons for proposing the same, for the peace and government of the territories under his administration." Such drafts, when approved by the Governor General in Council, and after they have received the Governor General's assent, are published in the *Gazette of India*, and thereupon have the force of law. This method, which was first used in Assam in 1873, on the passing of Regulation V of that year (The Inner Line Regulation), before the constitution of the Chief Commissionership, has since been frequently resorted to.

Extension
under sec-
tion 5 of the
Scheduled
Districts Act.

208. The third method is to make use of section 5 of Act XIV of 1874 (The Scheduled Districts Act), which declares that "the Local Government, with the previous sanction of the Governor General in Council, may, from time to time, by notification in the *Gazette of India*, and also in the local *Gazette* (if any), extend to any of the scheduled districts, or to any part of any such district, any enactment which is in force in any part of British India at the date of such extension." By section 6, clause (c), of the same Act, the Chief Commissioner is empowered to direct by what authority any jurisdiction, powers, or duties incident to the operation of any enactment for the time being in force in a scheduled district shall be exercised or performed.

Assam is one of the scheduled districts under this Act (Schedule I, Part X), and the Act was declared to be in force in the province by notification on the 7th November 1877. Since that date, numerous Acts in force in other parts of India have, under the powers given by section 5, been brought into force in Assam.

SECTION 2.—COURSE OF LEGISLATURE.

Acts extend-
ed as notified
to be in force.

209. A tract of plains land formerly included in the Mokokchang subdivision of the Naga Hills district having been transferred for administrative (including revenue) purposes to the Sibsagar district (*vide* section 7, Chapter I of this report), a series of notifications were issued, with the sanction of the Government of India, declaring the rules for the administration of justice and police in the Naga Hills to be no longer in force in the tract, and bringing into force therein the ordinary laws applicable to the remainder of the Sibsagar district.

The provisions of the Bengal Municipal Act, 1884 (Bengal Act III of 1884), were extended to the Municipality of Dhubri. (Notification No. 2047J., dated the 17th May 1901, published in the *Assam Gazette* of the 25th May 1901, Part II, page 416.)

Notification No. 6281G., dated the 22nd September 1896, by which the Lepers Act, 1895 (Bengal Act V of 1895), was extended to the territories under this Administration, was rescinded. (Notification No. 4213J., dated the 26th September 1901, published in the *Assam Gazette* of the 28th September 1901, Part II, page 711.)

The provisions of the Lepers Act, 1898 (III of 1898), were applied to the whole of the territories under this Administration. (Notification No. 4214J., dated the 26th September 1901, published in the *Assam Gazette* of the 28th September 1901, Part II, page 711.)

The following Acts of the Governor General in Council came into force during the year 1901-1902 : Protection.

- Act IX of 1901 (Indian Articles of War Amendment Act, 1901).
- ” X ” ” (Court-Fees Amendment Act, 1901).
- ” XI ” ” (Repealing and Amending Act, 1901).
- ” II ” 1902 (Cantonments House-Accommodation Act, 1902).*
- ” III ” ” (Indian Steamships Amending and Validating Act, 1902).
- ” IV ” ” (Indian Tramways Act, 1902).
- ” V ” ” (Administrators General Official Trustees Act, 1902).

SECTION 3.—POLICE.

[For detail figures see Police Administration Report of Assam for 1901 and also Tables I-II, Part VII, of the Judicial and Administrative Statistics of British India.]

102. The total strength of the police force of the province, as it stood on the last day of the years 1900 and 1901, is shown in the table below: Total police force.

	Actual force of all ranks.		Cost.	
	1900.	1901.	1900.	1901.
1	2	3	4	5
			Rs.	Rs.
Military Police	3,038	3,021	9,45,742	9,06,117
Civil ” (including Armed Civil Police) ...	2,675	2,696	6,28,188	6,51,843
Union Police	15	15	1,486	1,689
Rural ”	6,787	6,854	3,24,062	3,32,283

211. There were 66 vacancies at the close of the year: 12 havildars, 1 bugler, and 47 sepoy in the Lushai Hills Battalion, and 6 sepoy in the Garo Hills Battalion. The vacancies in the Lushai Hills Battalion will not be filled up, as it has been decided to reduce the battalion from 10 to 8 companies. Military Police.

Drill and discipline were good. The Naga Hills Battalion took part in several brigade parades and field days with the 44th Gurkha Rifles. It was inspected on the 22nd November 1901 by the General Officer Commanding Assam District, who spoke very highly of the general turn-out and efficiency of the battalion.

The sanction of the Government of India was obtained to the re-armament of the Assam Military Police Battalions with Martini-Henry rifles, which was almost completed during the year. The Enfield pistols in possession of the battalions were replaced by Webley pistols.

The total number of men enlisted in the several Military Police Battalions during the year was 183, against 288 in the preceding year. The percentage of Gurkhas enlisted was 74.3, against 79.5.

There were 44 deaths, the same number as in the preceding year. The main causes of deaths in the several battalions were fever (12), pneumonia (7), phthisis (5), and cholera (3). Four of the five deaths from phthisis occurred in the Lakhimpur Battalion.

There was a considerable increase in the number of departmental punishments in the Lushai Hills Battalion and a slight increase in the Silchar and Garo Hills Battalions. No judicial punishment was inflicted in the Garo Hills Battalion during the year.

On the occasion of the visit of His Excellency the Viceroy, the Naga Hills Battalion furnished a detachment of two Native officers, 4 non-commissioned officers, 1 bugler and 50 sepoy for duty at Manipur. The Lushai Hills Battalion furnished a guard of honour at Silchar, consisting of two Subadars, 1 jemadar, 10 havildars, 5 buglers, and 113 sepoy, including pipers and drummers. The Silchar Battalion furnished an escort of 2 Subadars, 3 jemadars, 10 havildars, 8 naiks, and 109 sepoy from Jhirighat to Bishenpur. The men were posted every 3 and 4 miles along the road, and had to keep up with the party from post to post. They acquitted themselves well, and their turn-out was all that could be desired. His Excellency was satisfied with the arrangements made, and as a mark of his appreciation, presented a sum of Rs. 200 to be distributed among the escort.

* This Act is not operative in Assam, unless and until it is extended to the province by notification.

Protection.

Civil (including armed reserve) and Union Police.

212. The following statement gives details of the strength of the Civil and Union Police for the past two years :

	Sanctioned strength.		Actual strength.	
	1900.	1901.	1900.	1901.
District and Assistant Superintendents of Police	17	17	16	16
Civil Police, including Armed reserve	2,748	2,748	2,659	2,680
Union Police	15	15	15	15
Total	2,780	2,780	2,690	2,711

During the year under report, nine Sub-Inspectors were newly appointed and the number of head constables was reduced by 12. Of the former, 3 were men of respectable family, who had passed the Entrance Examination and were appointed direct. As regards the future recruitment of Sub-Inspectors, it has been decided not to introduce at present any system of examination, but in order to secure, as far as possible, a superior class of officers, young men of the middle classes, who have passed the University Entrance Examination, will be appointed Sub-Inspectors direct as vacancies occur.

The whole Civil Police force entertained in the province was in the proportion of 1 to 18 square miles and 1 to 2,114 inhabitants. If only the police employed on purely police duty (excluding guards) are taken into consideration, the proportions were 1 to 25 square miles and 1 to 2,830 inhabitants.

Drill and discipline.

213. The officers and men in the reserve were regularly drilled in all districts. In some districts, thana constables were brought temporarily into the reserve and put through a course of drill and musketry. This was rendered possible by the amalgamation of the Civil and the old Armed Civil Police. In most of the districts discipline and musketry showed improvement on the whole.

The total number of casualties decreased from 284 to 257 and the percentage to actual strength from 10.7 in 1900 to 10.5 in 1901. The number of resignations fell from 139 to 111. The decrease was shared by all districts except Darrang, Nowgong, and the Garo Hills. The increased number of resignations in Darrang and Nowgong was ascribed to high prices and insufficiency of pay. It was reported that several men resigned in order to work as coolies. In Darrang and Nowgong the number of punishments rose considerably, but this cannot fairly be said to be the cause of so many resignations. In other districts punishments increased and resignations were fewer. Adverse family circumstances or the transfer of a man from the immediate vicinity of his home would in many cases lead to an immediate resignation. The percentage of resignations to actual strength is, however, steadily decreasing. To this result the reorganisation and the amalgamation of the Civil and Armed Civil Police contributes—the former lessens the individual share of work, while the latter is introducing a healthier spirit of discipline. The total number of deaths decreased from 50 in 1900 to 46 in 1901. The improvement in health was most marked in Sylhet. The total number of officers and men punished departmentally during the year was 580, against 400 in the preceding year. The percentage of persons punished to the actual strength of the force was 21.6, against 15.0 in 1900, the increase being chiefly in the districts of Nowgong, Lakhimpur, Darrang, and Sylhet. In Nowgong the punishments were chiefly repeated warnings to constables for loitering at their homes. There were 66 judicial punishments. A sum of Rs. 7,537 was paid as rewards to the police. Of this amount, a sum of Rs. 5,707 was awarded for successful detection of cases under the Excise, Opium, Arms, and Gambling Acts, and also in connection with enquiries into the registration of births and deaths. The balance of Rs. 1,830 was paid for the apprehension of absconded offenders, and for good work in connection with the investigation of cases.

Punitive Police.

214. No punitive police were entertained during the year.

Rural Police.

215. In Goalpara and Cachar, the number of chaukidars was increased by 53 and 17, respectively. This was due to the increase in the number of houses in the beats. In Sylhet, owing to the re-adjustment of beats, there was a slight decrease in the number of chaukidars. The total cost of the rural police for the year was Rs. 3,32,283, against 3,24,064 in 1900.

Processes served by the Police.

216. As compared with the previous year, there was a net decrease of 872 in the total number of processes served by the police. The orders of the Chief Commissioner that only warrants under the Criminal Procedure Code should be executed by the police, and that all other processes should be served by a staff of peons maintained for the purpose, were more closely observed.

217. The total cost of the department was Rs. 15,57,960, against Rs. 16,41,185 in the preceding year. There was an apparent decrease of Rs. 38,797 under "Arms and accoutrements." Unserviceable Snider rifles in the various battalions were not replaced by new ones, and only a very small quantity of Snider ammunition was indented for. But inasmuch as Martini-Henry rifles were received by the Military Police during the year, though not paid for, there was actually a great increase in expenditure incurred under this head. There was a decrease of Rs. 12,584 under Clothing, principally in the Lushai Hills Battalion. Expenditure under "Petty construction and repairs" decreased by Rs. 19,932.

Protection.
Cost of the
department.

218. The total expenditure on police buildings was Rs. 1,52,179, of which Rs. 83,849 were spent by the Public Works Department, and Rs. 68,330 by the Police Department. There was a total decrease of Rs. 79,330, as compared with the year 1900. In addition to this, the cost of the Union Police, which was met from Union funds, and of the Rural Police, which was paid by the villagers, amounted to Rs. 1,689 and Rs. 3,32,283, respectively.

Buildings.

219. The total number of persons who escaped from the custody of the police was 45, of whom 37 were recaptured.

Escapes.

220. In all there were 17,010 cognisable cases for disposal in the several districts of the province during the year 1901, against 17,328 in the preceding year, or a decrease of 318. Of these 17,010 cases, 960 were pending from 1900, and 16,050 were new during 1901, *i.e.*, either (a) instituted before a Magistrate or (b) reported to the police or (c) instituted by police officers otherwise than on report. There was a decrease under the heads Class I (Offences against the State), Class II (Serious offences against the person), Class IV (Minor offences against the person), Class VI (Other offences not specified above), and cases under Special Laws. There was an increase of 221 cases under Class III (Serious offences against person and property), and of 202 cases under Class V (Minor offences against property). The districts of Sibsagar, Goalpara, Darrang, Cachar, and Lakhimpur were responsible for the increase under Class III. The increase in Class V occurred in the districts of Sylhet, Sibsagar, Nowgong, and Kamrup. The increase was due partly to the failure of crops during the year, and partly to the influx of foreigners into the province owing to the opening of the Assam-Bengal Railway and the construction of the Dhubri-Mogalhat Railway.

Classification
of reported
cognisable
crime.

221. The total number of cases reported to the police during 1901, including cases pending from the preceding year, was 10,977, 10,387 of which were investigated: 5,370 cases were sent up, and 2,534 were not sent up or were refused investigation. The percentage of police investigations to cases reported was 94.6, against 94.3 in the preceding year.

Cases not en-
quired into by
the Police.

222. Of the total number of 17,010 cases for disposal during the year, 14,186 were accepted as true and 1,538 were held or proved to be false. The percentage of true cases and the percentage of false cases to the total number of cases were 83.4 and 9.0 in 1901, *i.e.*, almost exactly the same proportions as in 1900.

Classification
of true crime.

223. For every nine cases declared false by a Magistrate prosecution was undertaken roughly speaking in only one, and for every twenty-three cases declared false, a conviction was obtained in only one. There was a falling off in this respect in almost every district, Cachar again showing the worst results. The District Superintendent of Police of this district complained again of the difficulty of getting Magistrates to sanction prosecutions in false cases.

Prosecutions
for false
cases.

224. The percentage of property recovered to property stolen was 32.3, against 31.5 in 1900. Recoveries were worst in Kamrup. The figures of recovery are by no means a final test of the efficiency or otherwise of the police.

Percentage of
stolen prop-
erty recovered.

225. The system of identification by finger-prints has now been fully introduced, but it has not yet been found possible to give up entirely the old system of anthropometry. There are still a large number of cards in the central bureau. Until these are disposed of or are replaced by slips, the double system must be worked. Anthropometrical cards are prepared only with a view to identifying old offenders by reference to the records of the central bureau.

Anthropome-
try and fin-
ger-impressions.

Of 2,718 cards remaining at the close of the preceding year, 314 were disposed of during the year under notice, 198 being replaced by slips and 116 removed by reason of death. Progress was very slow, and District Superintendents were not always as active as could be wished. The total number of slips in the finger print bureau at the end of 1901 was 5,302. One thousand five hundred and forty-five slips were received during the year from the several districts of this province, and 243 from other provinces, against 962 and 201, respectively, in 1900.

Protection.

One hundred and seventy-seven duplicate finger-print slips (49 of coiners and 128 of persons who were residents of other provinces, but were convicted in Assam) were prepared and sent to the provinces concerned for permanent record. In the same way 243 finger-print slips (174 of coiners, 54 of wandering criminals, and 15 of persons who were residents of Assam, but were convicted in Bengal) were received from other provinces for record in the bureau.

During the year the previous convictions of four men were traced by the finger-print system. In three cases the accused received enhanced punishment. In three of the cases the accused had changed their names. In five other cases identity was established by references made to other provinces.

Non-cognisable cases.

226. The total number of cases instituted during 1901 was 15,403, 13,496 being instituted by complaint and 1,907 taken up by Magistrates of their own motion or upon information from the police.

Offences committed in the Mikir Hills tract in Nowgong.

227. The number of offences committed in the Mikir Hills tract, where special Rules for the Administration of Criminal Justice are in force, was 7, against 20 in the previous year. Four of these cases were classed as true and 2 complaints were dismissed, one remaining pending at the close of the year. Four cases affecting 4 persons were brought to trial, against 13 cases affecting 26 persons in 1900-1901. Two persons were convicted and sentenced to pay a fine of Rs. 200 and Rs. 50, respectively. The total amount of the fines imposed was Rs. 250, which was realised in full, against Rs. 130 imposed and realised in the preceding year.

SECTION 4—CRIMINAL JUSTICE.

[For detailed figures, see statements appended to the Report on the Administration of Criminal Justice in Assam and Tables Nos. 1, 3, 4, 5 and 6, Part IV, of the "Judicial and Administrative Statistics of British India."]

Criminal Courts.

228. The judicial staff employed on criminal work in the province during the year consisted of two Sessions Judges, 8 District Magistrates, 46 Subordinate Stipendiary Magistrates, and 22 Honorary Magistrates. The figures include an addition of 5 Honorary Magistrates appointed during the year. The staff was increased in Darrang, Lakhimpur, and Nowgong, and decreased in Goalpara, Cachar, and Sylhet.

Offences reported.

229. During the year 30,476 offences were reported to the Criminal Courts, of which 23,090 were under the Penal Code and 7,386 under Special and Local Laws. Of this total, 7,797 cases were dismissed under section 203, Criminal Procedure Code, and 1,259 otherwise struck off as being false. There were 19,851 cases considered as genuine ones to be dealt with by the Courts. Of these, 13,659 were under the Penal Code and 6,192 under Special Laws. The total was less by 1,629 than that of 1900, the decrease being 1,107 under offences under the Penal Code and 522 under offences against Special Laws.

Rejected complaints and false cases.

230. The total number of cases in which complaints were rejected, or the case struck off as false, was 9,056, or 29.7 per cent. of the number reported. This percentage is slightly less than that of the two preceding years.

Cases found to be true.

231. Including cases which had been under enquiry at the close of 1900, 21,294 cases coming before the Courts were accepted as true during 1901. Of these, 14,162 were brought to trial. The figures represent decreases of 431 and 427, respectively, on those of 1900.

ORIGINAL JURISDICTION.

MAGISTRATES' COURTS.

Disposals.

232. In the Courts of Magistrates, 14,133 cases were disposed of, of which 148 were committed to the Sessions, 13,985 were disposed of finally during the year, and 608 were pending at its close. Of the cases disposed of, 400 were decided by District Magistrates, 13,077 by Subordinate Stipendiary Magistrates, and 656 by Honorary Magistrates and Benches. There were 9,293 trials under ordinary and 4,840 under summary procedure. The proportion of cases tried summarily was 34.2 per cent., as against 40.4 per cent. in 1900.

Of the 400 cases decided by Deputy Commissioners, 19 were disposed of in the exercise of special powers under section 34 of the Criminal Procedure Code, all of them being dealt with by the Deputy Commissioners of the districts in the Assam Valley.

233. The number of persons whose cases were decided by Magistrates was 21,174, a decrease of 520 persons on the previous year's figures. Of these, 11,290, or 53·3 per cent., were convicted, the percentage being 2 lower than in the preceding year. Protection.
Results of
trials.

Of 11,290 persons convicted by Magistrates, 4,582 were convicted on summary trial and 6,708 on regular trial. Of the former, appealable sentences were passed on 95 persons, or 2·07 per cent., and of the latter on 4,439, or 66·1 per cent. In the former case the proportion of persons having the right of appeal was slightly less, and in the latter larger than in 1900.

234. Exclusive of persons mentally incapable of taking their trial, 1,047 persons were awaiting trial at the close of the year. Persons
awaiting
trial.

235. The number of witnesses examined was 45,339, or 1,145 more than in the previous year. Of the total number of witnesses who attended, 76·1 per cent. were discharged on the first day of the trial. The total number detained for more than three days was 551, a considerable and unsatisfactory increase on the numbers of the previous year. Witnesses.

236. Before Magistrates 3,345 persons were sentenced to imprisonment, 7,807 to fine, and 299 to whipping. Sentences of imprisonment and whipping were more, and of fine considerably less numerous than in 1900. Orders were passed on labourers to fulfil their contracts in 117 cases, and 20 persons were released on probation under the provisions of section 562, Code of Criminal Procedure. Fourteen persons previously so released were brought again before the Courts under section 563, and 11 of them were convicted and punished. Punishment.

237. Of the persons sentenced to imprisonment, 25 were sentenced to rigorous imprisonment with solitary confinement; 3,260 to rigorous imprisonment alone; and 60 to simple imprisonment. Imprison-
ment.

238. The aggregate of the fines imposed was Rs. 70,209, and the realisations, including arrears of previous years, amounted to Rs. 67,741, or 96·4 per cent. of the amount imposed during the year. Out of this amount, Rs. 11,461 was paid as compensation to complainants. The total amount of fines imposed was less by over Rs. 16,000 than in the previous year. Fines.

239. The percentage of cases in which a sentence of whipping was passed to the number in which it might have been, was 14·6 per cent., a slightly larger proportion than that of the three preceding years. The proportion was highest in Sibsagar (27·5) and lowest in Sylhet (7·3). Whipping.

240. One hundred and sixty-nine persons were ordered to execute bonds with or without sureties for keeping the peace; and 104 persons were required to furnish security for good behaviour, 77 of whom were sentenced to undergo imprisonment in default. Security for
keeping the
peace and
for good be-
haviour.

241. In 49 cases complainants were ordered to pay compensation to accused persons against whom they were found to have brought frivolous or vexatious accusations, the total amount of compensation thus awarded being Rs. 877. Frivolous or
vexatious
accusations.

242. There were during the year 22 cases in which European British subjects were involved, 23 persons being implicated in them. Fifteen of these persons were charged with assault, hurt and wrongful restraint or confinement; and five with theft, mischief and criminal breach of trust. One person was concerned in a case of rioting and two were charged with minor offences under special and local laws. The case of one person was referred to the High Court under section 307, Code of Criminal Procedure, and the remainder were tried by Magistrates. Of the latter, 8 were convicted and 14 acquitted. Three of the accused persons claimed a jury; and two of them were tried by a jury. The third case did not come to a trial. Trials of Eu-
ropean Bri-
tish sub-
jects.

COURTS OF SESSION.

243. There were 36 cases pending trial before the Courts of Session at the opening of the year; 148 cases were committed to trial during the year; and 146 were disposed of, leaving 37 pending at its close. The commitments exceeded those of 1900 by 33. Commit-
ments, etc.

244. In the above cases, 400 persons were involved, of whom 331 were tried and 62 remained under trial at the close of the year. Of the persons tried, 180 were convicted and sentenced in the Sessions Courts; 6 were referred for orders of the High Court; and 145 were acquitted. Results of
trials.

245. There were 64 persons tried by jury, of whom the Judge agreed with the verdict as to 61, referring the remaining 3 to the High Court. Including the two persons pending at the end of the previous year, there were 5 persons for orders of the Jury trials.

- Protection.** High Court under section 307, Code of Criminal Procedure, during the year under report. Of these, 1 was acquitted, 2 convicted, and 2 remained pending at the close of it.
- Trials by Assessors.** 246. Two hundred and fifty-two persons were tried with the aid of Assessors, as to whom the Judge concurred with both Assessors in 217 instances, concurred with 1 Assessor in 18, and disagreed with both in 17.
- Punishment.** 247. Death sentences were passed in 3 cases, and were referred to the High Court for confirmation. Fifteen persons were sentenced in the Sessions Court to transportation for life and 165 to rigorous imprisonment.
- No case from Assam was committed during the year to the Original Jurisdiction of the High Court.

APPELLATE JURISDICTION.

- Appeals to High Court.** 248. There were 4 appeals pending from the previous year before the High Court; 62 were instituted during the year, and 58 disposed of, leaving 8 pending at its close. Of the institutions, 2 were from sentences passed by Deputy Commissioners under section 34, Code of Criminal Procedure, and the remainder from convictions by Sessions Judges. The number of persons concerned in these appeals was 117.
- The result of the 58 appeals disposed of during the year was that convictions were upheld in 40 cases, reversed in 1, and varied in 16. One case was struck off. Of 17 appeals decided in cases tried by Jury, convictions were affirmed in 15 cases, modified in 1, and reversed in 1. Of 39 appeals decided in cases tried with the aid of Assessors, convictions were affirmed in 24 cases and modified in 14. One was struck off. Of 2 appeals from order passed by Deputy Commissioners under section 34, Code of Criminal Procedure, conviction was affirmed in one case and modified in another.
- Appeals to Courts of Session.** 249. There were 23 appeals pending before Courts of Session at the opening of the year; and during the year 452 were preferred and 425 disposed of, leaving 48 pending at its close. The institutions were less by 4 than those of 1900.
- There were 836 persons concerned in the appeals of the year, and the cases of 739 of them were disposed of on trial. The appeals resulted in confirmation of the original sentence in 512 instances or 69.2 per cent., in modification in 78 instances or 10.5 per cent., and in reversal in 132 instances or 17.8 per cent. A new trial was ordered in the cases of 16 persons, and in the case of one person the proceedings were quashed.
- Appeals to Magistrates' Courts.** 250. In the Courts of District Magistrates the appeals of 528 persons were disposed of during the year. Of these 324 or 61.3 per cent. were altogether unsuccessful; 127 or 24 per cent. obtained a reversal, and 63 or 11.9 per cent. a modification of their original sentences; a new trial was ordered in the cases of 10 persons; and in the cases of 4 persons the proceedings were quashed.
- The proportion of appellants completely or partially successful to the number whose appeals were heard by Sessions Judges and the District Magistrates was 30.7 per cent. and 38.6 per cent., respectively.

REFERENCE AND REVISION.

- Reference under section 307, C. Cr. P.** 251. Three cases in which the Sessions Judge dissented from the verdict of a Jury were referred to the High Court under section 307, Code of Criminal Procedure, during the year; and 2 were left pending from the previous year. Three of these were disposed of. In two the view of the Judge was accepted, and in one that of the Jury. Two references remained undecided at the close of the year.
- Besides the above, the case of a European British subject and nine other persons tried by a Jury was referred to the High Court by the Deputy Commissioner of Nowgong under section 307, Code of Criminal Procedure. The High Court accepted the view of the Deputy Commissioner in the case, and convicted the accused.
- Reference under section 374, C. Cr. P.** 252. Three cases involving three persons were referred for confirmation of death sentences, and one was left pending from the previous year. The sentences were confirmed in two cases, modified in one, and reversed in one.
- Applications for revision made to High Court.** 253. There were 70 applications made to the High Court for revision of orders passed by lower courts, and 73 were disposed of, the result being that the orders of the lower courts were affirmed in 28 cases, reversed in 30, and modified in 8; a new trial or further inquiry being ordered in 4 cases. In 2 cases the proceedings were quashed, and in the remaining case an order of transfer was made.

254. There were 102 applications for revision preferred to Sessions Judges during the year; and 99 were disposed of. Of the latter, the orders of the lower court were confirmed in cases of 208 persons and reversed in those of 2. A new trial was ordered in cases of 17 persons, and cases of 33 persons were referred to the High Court.

Protection.
Applications for revision made to Courts of Session.

255. Before District Magistrates, 289 such applications were preferred and 276 were decided. The decisions resulted in the orders of the lower court being affirmed in cases of 512 persons and reversed in those of 23. A new trial or further enquiry was ordered in cases of 365 persons, and cases of 10 persons were referred to the High Court.

Applications for revision made to District Magistrates.

256. The charges of the Criminal Courts in Assam amounted to Rs. 2,40,006, and the receipts to Rs. 1,33,153. There was an increase of the former by Rs. 25,855 and a decrease of the latter by Rs. 13,225, as compared with the previous year. The increase of the charges is due chiefly to the increase in the share of the salaries of officers debitable to Criminal Justice. The smaller amount of fines received during the year accounts for the decrease of receipts. There was also a slight decrease in the receipts from stamps.

Receipts and charges.

SECTION 5.—PRISONS.

[For detailed figures, see statements appended to the Jail Administration Report of Assam for 1901 and tables 1—12, Part V of the Judicial and Administrative Statistics of British India.]

257. There were nine district and fifteen subsidiary jails open at the close of the year. No temporary jail was opened during the year 1901.

Number of prisons open at the close of the year. Jail population.

258. There were 1,607 prisoners at the beginning and 1,503 at the end of the year, the daily average of all classes being 1,633. In 1900 it was 1,619.

The total number of convicts admitted direct from the courts during the year was 3,658, against 3,609 in 1900. The average of admissions per mille of the entire population of the province was 1.45, against 1.36 in 1900.

259. Of the 3,658 convicts admitted direct during the year, 2,036 were Hindus, 1,325 Muhammadans, 4 Christians, and 7 Buddhists and Jains. Convicts of all other religions numbered 286. In 1901, 4 juveniles were imprisoned. The number of women admitted was 163, against 167. The cultivating classes supplied 2,266 of the total admissions, as against 2,096 in the preceding year. The number of illiterate convicts was 3,363, as compared with 3,318 in 1900. Sentences of transportation for life decreased from 25 in 1900 to 18 in 1901. There were 4 admissions with sentence of death, against 12 in the preceding year. Sentence of simple imprisonment increased from 74 to 81.

Classification of convicts.

260. Three hundred and ten reconvicted prisoners were admitted into the jails and subsidiary jails. Of these, excluding tea-garden coolies imprisoned under the Labour and Emigration Act, 221 were identified before conviction and 26 after admission into jail, while 34 confessed themselves to be habitual criminals.

Reconvictions.

261. The number of under-trial prisoners and their daily average number increased from 3,663 to 3,825 and from 152.20 to 164.57, respectively. There were 5 escapes, and 3 under-trial prisoners died in jail.

Under-trial prisoners.

262. Sixty-eight civil prisoners were admitted during the year, against 54 in 1900.

Civil prisoners. Jail buildings.

263. Petty construction and repairs by the Jail Department and by the Public Works Department cost Rs. 5,498 and Rs. 71,245, against Rs. 6,086 and Rs. 52,367, respectively, in the preceding year. Of the sum spent by the Public Works Department, Rs. 64,368 was spent for various major and minor works and Rs. 6,877 on annual repairs.

264. There were 16 escapes of convicts during the year, viz., 3 from inside and 13 from outside the jails, as compared with 7 from inside and 13 from outside the prisons during the year 1900. Four of the convicts who escaped during the year remained uncaptured on the 31st December 1901. Three convicts who had escaped during the previous ten years from the jails at Sylhet and Tura were recaptured.

Escapes.

265. The number of offences committed by convicts decreased from 1,575 to 1,524, and the number of punishments inflicted on them from 1,581 to 1,529.

Prison discipline.

The number of corporal punishments inflicted during the year was 25, against 18 in the preceding year.

- Protection.** Three hundred and thirty-five convicts obtained remissions of their sentences under the mark rules and were released during the year, against 362 in 1900.
- Expenditure.** 266. The total expenditure on jails and subsidiary jails for the year 1901 under all heads amounted to Rs. 2,32,829, against Rs. 1,99,617 in the preceding year. The net cost of the Jail Department amounted to Rs. 1,17,258, against Rs. 95,264, or Rs. 74-5 per head of average strength, against Rs. 59-1 in 1900.
- Employment of prisoners.** 267. The average number of convicts under sentence of labour on working days was 1,451, against 1,445 in 1900. There was a considerable decrease in the number of convicts employed on unremunerative labour. The average number of convicts employed on working days on extramural work in each of the past three years was 258·94 in 1899, 206·63 in 1900, and 172·54 in 1901.
- Profits of manufactures.** 268. The sum actually paid into the treasury on account of sale-proceeds of jail-manufactured articles amounted to Rs. 16,270-8-7, against Rs. 14,870-1-1 in 1900. In the Sylhet jail, the manufacture of aerated water has been started, while in Gauhati convicts in the solitary cells are given raw cotton to clean. These were the only new forms of labour introduced.
- Accommodation in prisons.** 269. The jails and subsidiary jails of the province had accommodation for 2,115 prisoners of all classes, against 1,874 in the preceding year. The daily average strength of the prison population in each year was 1,633 and 1,619, respectively.
- Sickness and mortality.** 270. The deaths of prisoners from all causes numbered 40, and the death-rate calculated on the daily average of all classes (1,633) was 24·5 per mille, against 37 and 22·8, respectively, in the preceding year. There were 3 accidental deaths during the year, and one insane under-trial prisoner committed suicide in the prison at Sunamganj. If these four deaths, which do not affect the health of the jails, be deducted, the mortality ratio per mille comes to 22·0. The jails in which deaths occurred were Silchar (3), Sylhet (18), Gauhati (6), Tezpur (8), Jorhat (2), and Sunamganj, Barpeta, and Golaghat (1 each). In the Jorhat prison, two prisoners were killed by a criminal lunatic.

SECTION 6.—CIVIL JUSTICE.

[For detailed figures, see statements 1-7 and A to I appended to the Civil Justice Administration Report of Assam for 1901, and tables 1-4, Part III, of the "Judicial and Administrative Statistics of British India."]

ORIGINAL JURISDICTION.

- Civil Courts subordinate to the High Court.** 271. The number of original civil-suits instituted in the province in 1901 was 28,870. This figure shows a decrease of 1,025 on that of the previous year. There was a decrease of 1,123 in the Assam Valley districts, and of 238 in Cachar; while in Sylhet there was an increase of 336 suits. Of the 28,870 suits instituted in 1901, 20,614 were suits for money or moveables, 4,966 were rent suits, and 3,220 title and other suits. Of the total, 24,293 were valued at sums not exceeding Rs. 100. One suit only was valued at over Rs. 10,000. The average valuation of suits for money or moveables was Rs. 81·2, of rent suits Rs. 36·2, and of title and other suits Rs. 107·8.
- Disposal of suits.** 272. Adding to the number of suits instituted during the year, those which were pending at its commencement, and those which during the year were revived under sections 99, 103, 108, or 371, Code of Civil Procedure, or received on remand or review, the total number of suits for disposal was 35,309. Of these, 29,584 were disposed of, or 535 less than the total disposed of in the previous year. In the Assam Valley districts and Cachar, the number of suits disposed of fell by 606 and 264, respectively, below the figures of the previous year. In Sylhet, there was an increase of 335. The pending file was reduced from 5,099 to 4,911.
- Sixteen original suits were disposed of by District Judges, 538 by Subordinate Judges, and 29,030 by Munsifs. The average number of cases disposed of by each Munsif was 907·1, a figure considerably higher than that of 1900. This result is satisfactory. In Sylhet, where alone the Munsifs are solely occupied with civil work, the average of disposals per Munsif was 1,801.
- Of the disposals, 11,576 were withdrawn or compromised, 12,351 decided *ex parte*, and 5,657 decided after contest. The percentage of contested cases was, as usual, higher in the Assam Valley districts than in Sylhet or Cachar. Of the total number of disposals, 14,038, or 47·4 per cent., were under the summary procedure of the small cause court, and 15,546, or 52·6 per cent., under ordinary procedure.

The average duration of suits, contested and uncontested, before the different grades of courts during the year was as follows : Protection.

					District Judges.	Subordinate Judges.	Munsifs.
					2	3	4
					Days.	Days.	Days.
Contested	...	...	...	...	556	219	110
Uncontested	...	...	...	...	209	68	52

273. Of the total number of suits disposed of, 18,675, or 63·1 per cent., resulted in favour of the plaintiff; 8,651, or 29·2 per cent., in favour of the defendant; and 2,258, or 7·7 per cent., were compromised. Compared with the figures of the previous year, the variation in the relative proportions is slight.

There were 16,404 applications for proceedings in execution of decrees, and 16,409 such applications were disposed of, the number pending at the close of the year being 3,006. Full satisfaction was obtained in 2,284 and partial satisfaction in 3,772 cases, the total amount realised being Rs. 4,06,523. In 9,667 cases, the proceedings were returned as unsuccessful. Execution of decrees.

The principal coercive measures employed were imprisonment of judgment-debtors in 43 cases, arrest followed by release in 102 cases, 2,182 sales of property, moveable or immovable, and 559 attachments of property followed by its release. Possession of immovable property was given in 1,080 cases.

274. Of cases of a judicial nature other than suits and execution proceedings, 2,506 were instituted during the year, 2,491 disposed of, of which 955 were contested and 4,58 left pending. Miscellaneous cases.

The number of non-judicial miscellaneous cases instituted and disposed of during the year was 650 and 638, respectively. The institutions consisted almost entirely of applications for deposit of rent.

275. The number of appeals from the superior civil courts in Assam preferred to, and decided by, the High Court in 1901, and the number pending at the close of the year were as follows : Appeals to the High Court.

					Pending at the end of 1900.	Preferred.	Decided.	Pending at the end of 1901.
					2	3	4	5
<i>First appeals.</i>								
From decrees	...	...	...	65	4	43	26	
„ orders	...	...	...	7	2	7	2	
<i>Second appeals.</i>								
From decrees	...	...	...	168	36	55	149	
„ orders	...	...	...	14	4	13	5	

276. Of the 40 appeals from decrees instituted during the year, 12, or 30 per cent., were valued at less than Rs. 50. Of the 43 appeals from original decrees decided during the year, 5 were dismissed on default; and of the remainder, the decrees of the lower court were confirmed in 7 cases and modified in 31. Of the 9 appeals from appellate decrees of District Judges, 5 were confirmed, 2 reversed, 1 remanded to the lower court, and 1 withdrawn. Of the 46 appeals from appellate decrees of Subordinate Judges, 15 were summarily rejected; while of the remainder, the decree of the lower court was confirmed in 27 instances and reversed in 3, 1 being withdrawn. Of the 20 appeals from orders decided, 11 were confirmed, 1 reversed, 1 remanded, 6 dismissed for default, and 1 summarily rejected.

Protection.
Appeals in-stituted and decided in the lower appel-late courts.

277. Five hundred and twenty-one appeals were pending in the civil appellate courts of Assam at the end of 1900. Eight hundred and forty-one were instituted and 743 disposed of during the year, the number pending at its close being 634. Out of 841 appeals preferred, 268 were in suits for money or moveables, 206 in suits under the Rent Law, and 367 in title and other suits. Both institutions and disposals were very considerably less than in 1900.

The number of appeals preferred from the decisions of Subordinate Judges and Munsifs, respectively, and the ratio of that number to the number of cases in which an appeal lay were as follows :

	Subordinate Judges.	Munsifs.
Number of decrees in contested cases against which an appeal lay to the subordinate appellate courts ...	46	2,988
Number of appeals preferred	26	815
Ratio of appeals to appealable decrees	56.5	27.2

Of the 841 appeals instituted, 540, or 64.2 per cent., were valued at sums not exceeding Rs. 100.

Sixty-seven of the appeals preferred were summarily rejected. Of 676 appeals decided after hearing, the decisions of the lower courts were affirmed in 446 cases, or 65.9 per cent., modified in 78, or 11.5 per cent., and reversed in 119, or 17.6 per cent., the remainder being remanded to the lower courts. The relative proportions differ only fractionally from the results of previous years. Sixty-eight miscellaneous appeals (the same number as in 1900) were decided during the year, and 35 were pending at its close.

The number of appeals disposed of by the District Judge of Sylhet, the Deputy Commissioner of Cachar, and the Judge of the Assam Valley Districts was 30, 22, and 8, against 105, 58, and 45, respectively, in 1900.

Financial results.

278. The receipts from civil courts in Assam fell from Rs. 4,32,321 in 1900 to Rs. 4,01,830 in 1901, and the expenditure of the civil courts from Rs. 2,32,515 to Rs. 2,24,075, the result being that the surplus of receipts over expenditure also fell from Rs. 1,99,806 to Rs. 1,77,755. The expenditure during the year is the lowest since 1891.

The decrease in receipts is due to the decrease in the volume of litigation. In the salaries paid to judicial officers there was a decrease of Rs. 7,339, due partly to the employment of officers of lower grades than in the previous year. In the cost of ministerial establishments there was a decrease of Rs. 1,891, and in the cost of process-serving establishment an increase of Rs. 1,579.

Civil Justice in the hill districts.

279. The following abstracts relate to the administration of civil justice in the hill districts and the Eastern Duars :

Naga Hills.—Including six cases pending from the previous year, there were 105 suits for disposal during the year 1901, of which 97 were disposed of. The value of the suits instituted fell from Rs. 13,272 in 1900 to Rs. 11,663. There were 69 applications for execution of decrees, including 39 pending at the end of 1900, of which 52 were disposed of. In execution cases Rs. 4,750 were realised, as against Rs. 4,097 in the previous year. The receipts of the civil courts amounted to Rs. 1,062, as compared with Rs. 983 in 1900, while charges were Rs. 2,106, against Rs. 2,889 in the previous year. Six civil appeals were filed before the Deputy Commissioner, all of which were disposed of.

Khasi and Jaintia Hills.—One hundred and sixty-two suits were instituted during the year, against 187 in 1900. Of these, 145 cases were filed before the British Court, and the rest before the Dalais of the Jaintia Hills. Three cases were remanded for trial, one case was revived, and 12 cases were pending from the preceding year. In all, 178 cases came up before the tribunals, of which 167 were disposed of, leaving 11 pending at the close of the year. There were 21 appeals before the Deputy Commissioner, including 3 pending from the previous year, of which 20 were disposed of. There were 155 applications for the execution of decrees, of which 102 cases were disposed of. In 53 cases the judgment-debtors are paying the decretal amounts by monthly instalments. The total receipts from Civil Justice amounted to Rs. 3,296 and charges to Rs. 4,212, against Rs. 4,908 and Rs. 4,808, respectively, in the previous year.

Garo Hills.—The total number of cases for disposal was 90, including 5 pending from the previous year and 31 received by transfer from other courts. Of these, 86 were disposed of, leaving 4 pending at the close of the year. The total value of these suits was Rs. 3,977. The number of applications for execution of decrees was 26, including 3 pending from the previous year, of which 23 were disposed of. The

Protection.

amount realised was Rs. 660, as against Rs. 1,479 in 1900. The receipts of the civil court amounted to Rs. 528 and charges to Rs. 5,092.

Eastern Duars.—In the Eastern Duars, 39 suits were instituted during 1901-1902, against 46 in the previous year. The number of suits for disposal was 46, of which 34 were disposed of, and the remaining 12 cases were pending at the end of the year. With the exception of 4 cases, all the suits were decided according to the award of the *panchayats*. The total value of suits instituted was Rs. 4,344, against Rs. 6,238 in the previous year. There were 31 applications for execution of decrees, including 7 pending from the previous year, of which 6 were wholly or partly satisfied, 22 struck off for default, and 3 remained pending at the end of the year.

North Cachar.—The total number of suits for disposal was 296, including 24 pending at the close of 1900, of which 270 were disposed of. The total value of suits amounted to Rs. 32,849, as against Rs. 68,971 in 1900. There were 11 appeals to the Deputy Commissioner for disposal, of which only one was disposed of, leaving 10 pending at the end of the year. The number of applications for execution of decrees was 147, including 22 pending at the end of 1900, of which 110 were disposed of. The amount realised was Rs. 6,196, against Rs. 17,110 in 1900. The receipts of the civil courts amounted to Rs. 3,576, and charges to Rs. 5,952.

SECTION 7.—REGISTRATION.

[For detailed figures, see Statements appended to the Assam Registration Report for 1899-1900 to 1901-1902, also Table 4, Part IX of the Judicial and Administrative Statistics of British India.]

280. The total number of deeds registered in the province during the year was 45,716, against 44,946 during the previous year. In Sylhet, where about three-fourths of the total registration work of the province is done, there was an increase of 493 deeds. *Registration in 1901-1902.*

281. Of the 45,716 deeds registered, 39,914 related to transactions affecting immovable property, 5,718 were concerned with moveable property, and 84 were wills. The number of instruments registered relating to immovable property showed an increase of 1,337, of which 897 alone fell under "Instruments of mortgage." On the other hand, there was a diminution in the number of deeds registered relating to moveable property. Of the deeds relating to moveable and immovable property, 34,274 were compulsory registrations, against 33,884 in the previous year, and 11,358 were optional, against 11,007 in 1900-1901. *Aggregate value of property registered.*

282. With the increase in the number of registrations, the aggregate value of documents of all classes registered during the year rose to Rs. 81,78,968, from Rs. 78,04,231 in the previous year, giving an average of Rs. 183 for each transaction. *Receipts and expenditure.*

The total receipts of the year were Rs. 5,190,* as against Rs. 56,130* in 1900-1901. Expenditure, on the other hand, increased from Rs. 31,507* to Rs. 32,913.*

SECTION 8.—MUNICIPAL ADMINISTRATION.

[For detailed figures, see Statements appended to the Resolution on the working of Municipalities in Assam during 1901-1902, and Tables 1, 2D, and 3D, Part XVII, of the "Judicial and Administrative Statistics of British India."]

283. Act III (B.C.) of 1884 was extended to Dhubri, thereby repealing Act V (B.C.) of 1876, which was previously in force. Minor administrative changes comprised the imposition of a tax on elephants, under section 122 of Act V (B.C.) of 1876, by the Goalpara Municipality, with the sanction of the Chief Commissioner; a new bye-law in Sylhet for the regulation of cart and carriage traffic in the streets, and a new bye-law in Gauhati, closing a portion of the strand road to cart traffic. These bye-laws were submitted to, and duly confirmed by, the Chief Commissioner. *Number of municipalities and population.*

The population of the municipal areas, as ascertained by the census of 1901, is less than 95,000 all told, giving an average to each town of 6,784. But the term "town" is a misnomer for several of the smaller Stations and Unions, the smallest being Golaghat (2,359) and Jorhat (2,809), both Unions. The largest town in the province is Sylhet (13,893), followed by Gauhati (11,661) and Dibrugarh (10,295).

284. A general election of Municipal Commissioners was held for the first time in the Dhubri Municipality under the rules framed under Act III (B.C.) of 1884, and six Commissioners were elected by the ratepayers. In one ward the ratepayers failed to elect a Commissioner, and the vacancy was filled up by Government nomination. In *Elections.*

* Revised figures.

Protection.

the Municipality of Goalpara there was a bye-election, and also a general election. The elections were contested. Two of the three Commissioners elected at the general election were of the retiring body.

Meetings.

285. The total number of meetings of Municipal Commissioners held during the year was 94, against 106 in the previous year. Two Municipalities, Silchar and Sylhet, held twelve or more meetings, but in other places the number of meetings held was very small. No meeting was held in the Jorhat Union, and only one in Habiganj. Municipal affairs in these Unions are practically managed by the Magistrate-Chairman alone.

Incidence of taxation.

286. Direct taxation consists of either a tax on holdings or a tax on persons. In six towns there is a tax on persons, coupled generally with a tax on Government buildings. Omitting the tax on Government buildings, the incidence per head of the tax on persons in these six towns varies from 7 annas 4 pies in Sylhet to 4 annas 2 pies in Nowgong. In the remaining eight towns which assess by holdings (again excluding Government buildings), the tax varies from the high rate of Re. 1-1-8 per head in Shillong to 6 annas 4 pies in Tezpur. The circumstances of Shillong are exceptional, but Silchar, Dhubri, and Gauhati, which assess by holdings, have an incidence of over 8 annas and Dibrugarh of over 9 annas. The tax on holdings thus falls more heavily than the tax on persons. Taking both together, the average for the province is 8 annas 4 pies. Taking the tax on holdings and that on persons together with rates levied for water, lighting, conservancy, etc., it appears that the inhabitants of municipal areas throughout the province pay on the average Re. 1-4-7 per head per annum for their Municipal administration. This exceeds the corresponding average for Bengal, which was Re. 1-1-5 for 1900-1901. Neither province imposes any octroi dues.

Taking individual towns in Assam, and again omitting Shillong, where the population is mostly official, the rate-payer of Gauhati renders as much as Rs. 2-5-0. He enjoys, however, the exceptional advantage of a municipal system of waterworks. Only the Unions of Habiganj, Golaghat, and Jorhat escape with an incidence of 8 annas or less.

Revision of assessment.

287. During the year the assessment of several Municipalities was revised, the result being an increase in the towns of Shillong, Tezpur, Silchar, Jorhat, Dibrugarh, Goalpara, and Gauhati. In Shillong the total demand amounted to Rs. 10,909, an increase of Rs. 1,558 as compared with the previous year, the increase being due to the assessment at full rates of certain Government buildings completed in 1901-1902.

Demand, collections, balances, etc.

288. The largest tax demand is that of the Gauhati Committee, which amounted, arrears included, to Rs. 28,000. The Committee collected 92 per cent. and remitted $1\frac{1}{2}$ per cent. Next comes that of Shillong, Rs. 21,000. Here only 89 per cent. was collected, $6\frac{1}{2}$ per cent. being remitted. Dibrugarh only collected 80 per cent. of its demand of Rs. 20,000 and remitted over $15\frac{1}{2}$ per cent.

Sylhet, the largest town of the province, has a demand of only Rs. 14,666. Its collections were less than 81 per cent., 8 per cent. was remitted, and over Rs. 1,600 remained outstanding. The whole income of Sylhet is relatively small, and it receives no grant from Government. The collection of taxes was most efficient in Silchar, Nowgong, and Barpeta.

Income and expenditure.

289. The income from all sources of the several Municipalities ranged from Rs. 48,000 at Gauhati, Rs. 37,000 at Dibrugarh, and Rs. 29,000 at Shillong to Rs. 4,900 at Habiganj. The sources of income are very diverse, and comprise, besides taxes and rates, the rent of pounds and ferries, Government grants, rents from municipal property, fines, and grants from Provincial or Local Funds.

Gauhati receives a grant of Rs. 10,000 annually from the Local Board and Dibrugarh Rs. 8,000 from Provincial Revenues. The latter municipality also realises over Rs. 6,000 from ground rents (which is practically a Government grant) and Rs. 4,400 from markets. Silchar, Dhubri, Gauhati, and Tezpur also derive handsome incomes from markets. Gauhati secures Rs. 10,000 by the levy of water-rate; Shillong, the only other town with water laid on, derives Rs. 4,700 from that source. Gauhati and Tezpur realise considerable sums from their pounds, and Sylhet over Rs. 9,000 from its roads and ferries.

The principal items of disbursement were (in round numbers) as follows :

	Rs.
Conservancy	73,000
Public Works	53,000
Water-supply	32,000
General Administration and Collection	18,000
Medical, including Vaccination	9,000
Drainage	8,600

290. The receipts of municipal bodies from all sources rose from Rs. 2,45,888 to Rs. 2,55,892,* the increase being chiefly under (i) taxes on houses and lands, (ii) tolls on roads and ferries, and (iii) revenue derived from markets and slaughter-houses. In Sylhet the first instalment of rent of the ferries settled for 1902-1903 was deposited before the end of the year, and in Dhubri the first instalment of the revenue of Chauk Bazar for 1902-1903 was paid during the year. In Shillong Station the apparent decrease of Rs. 10,636 is due to the fact that a special grant from Provincial Funds was given in 1900-1901 for the reconstruction of waterworks. The sum derived from taxation amounted to Rs. 1,21,984, against Rs. 1,11,228 in the previous year, the increase being due to increases of Rs. 4,715 from receipts on account of tax on houses and lands, Rs. 770 from tax on animals and vehicles, Rs. 2,216 from tolls on roads and ferries, Rs. 1,553 from water-rate and Rs. 1,734 from conservancy.

Protection.
Income.

291. The total expenditure amounted to Rs. 2,35,979, against Rs. 2,49,549 in the previous year. There was a slight decrease in the expenditure upon office establishment and the collection of taxes. The total expenditure on roads and conservancy, etc., amounted to Rs. 40,857 and Rs. 73,422, a decrease of Rs. 5,682 under the former and Rs. 3,518 under the latter head. A decrease in the expenditure upon conservancy is due to exceptional outlay in Shillong during the preceding year, and there is a like explanation for a decrease in the total outlay upon water-supply. The Sylhet Municipality spent Rs. 1,544-11-6 on waterworks. The gradual construction of good wells is an improvement, which is urgently needed at Sylhet. The Gauhati Municipality, which supplies filtered water throughout the town, spent Rs. 14,427 under this head, and the purchase of a new boiler at a cost of Rs. 4,544 was also an item of heavy expenditure. A useful drinking-water tank was excavated at Golaghat. The total charges on account of drainage amounted to Rs. 8,672, an increase of Rs. 842 compared with the previous year. New *pucca* drains were constructed in Gauhati and Tezpur, and a road was newly metalled in the Dhubri bazar.

Expenditure.

Gauhati is the only municipality now in debt to Government. Its liabilities amounted on the last day of the year under report to Rs. 12,178-8-1, and represent the balance of the loan obtained from Government for the improvement of its water-supply.

SECTION 9.—LOCAL BOARDS' ADMINISTRATION.

[For detailed figures, see Statements appended to the Resolution on the working of Local Boards in Assam for 1901-1902, and also Tables 1-3, Part XVIII of the "Judicial and Administrative Statistics of British India."]

292. The nineteen Local Boards of the province were represented by 365 members, of whom 60 were *ex-officio*, 172 nominated, and 133 elected. A special feature of the constitution of Local Boards in Assam is the large proportion of Europeans, chiefly members of the planting community, who represent 37 per cent. of the total strength.

Constitution and meetings.

An average of six meetings per Board was held during the twelve months. Goalpara and Barpeta held the largest number, *viz.*, 11 and 8, respectively. Five Boards failed to reach the prescribed minimum of 6, and among these were the important ones of Gauhati, Sibsagar, and Jorhat. The attendance of members at the various meetings was fair, an average of at least half the number of members per meeting having been maintained by all except Habiganj, Dhubri, Goalpara, Barpeta, Tezpur, Nowgong, and Dibrugarh.

Of the 295 non-official members, nearly 9 per cent. failed to attend any meeting, of whom a large proportion were members of the Sunamganj, Dhubri, Habiganj, and North Sylhet Boards.

293. No general election was held during the year, but vacancies were filled, as they occurred, either by election or by nomination.

Elections.

294. The income of the Boards from all sources amounted to Rs. 11,50,690, an increase of Rs. 23,136, as compared with the previous year. Excluding receipts under "Debts," the income fell short of the estimates by Rs. 3,217, but exceeded the actuals of 1900-1901 by Rs. 28,083. The Boards started with an opening balance of Rs. 1,36,827 and closed the year with a balance of Rs. 1,90,602.

Income.

295. (a) *Local Rates*.—The whole of the receipts from local rates are credited to Local Boards, and the income from this source amounted to Rs. 6,62,595, or Rs. 8,241 less than estimates and Rs. 17,674 in excess of the actuals of 1900-1901. The actuals exceeded the estimated receipts in Silchar, Hailakandi, South Sylhet, Sunamganj, Dhubri, Barpeta, Tezpur, Golaghat, Dibrugarh, and North Lakhimpur. In the remaining subdivisions the receipts fell short of the estimates, the largest deficiencies occurring in Nowgong (Rs. 10,626), Gauhati (Rs. 9,179), and Goalpara (Rs. 2,356). The decrease in Nowgong and Gauhati was due to the large remissions of land revenue which were

Difference between actual and estimated receipts.

* Revised figures.

Protection.

granted at the end of the year, and in Goalpara to indifferent harvests and short collections.

(b) *Pounds.*—Pound receipts amounted to Rs. 72,979, or Rs. 8,355 less than the estimates, and Rs. 3,778 in excess of the actuals of the previous year. The increase over the actuals of the previous year was probably due to the extension of the system of farming out pounds in the Cachar and Sylhet districts.

(c) *Provincial grants.*—Contributions from Provincial revenues to Local Funds amounted to Rs. 2,42,913, which includes a sum of Rs. 11,010 overdrawn by certain Boards, and adjusted by a grant from Provincial revenues. These overdrawals arise from various causes: the receipts from local rates, pounds, or ferries may be less than was estimated, or their collection may be delayed so that funds run short.

(d) *Civil works.*—The principal item of receipts under this head is the revenue from ferries, which amounted to Rs. 1,04,377, or Rs. 1,287 in excess of the estimates and Rs. 4,275 more than the actuals of 1900-1901. The increase is due to keener competition among the bidders at the time of auction.

Expenditure.

296. The total expenditure of the Boards amounted to Rs. 10,96,915, a decrease of Rs. 1,26,414, as compared with the previous year.

(a) *Refunds and collection charges of Local Rates.*—Refunds to the amount of Rs. 602 were made, against an estimate of Rs. 463 and an actual expenditure of Rs. 784 in the previous year. Collection charges payable to Government amounted to Rs. 2,490, or Rs. 510 below the estimates, and Rs. 67 more than the actuals of 1900-1901.

(b) *Post Office.*—The expenditure under this head amounted to Rs. 41,386, against an estimate of Rs. 43,713 and an actual expenditure of Rs. 43,065 in the previous year.

(c) *Education.*—The expenditure on education was Rs. 2,24,298, or Rs. 8,776 above the actuals of the previous year. The average proportion of local income spent on education was for the 19 Boards 24·70 per cent., a slight increase on last year's percentage (24·37). The average was exceeded by nine Boards, the highest proportional expenditure having been incurred by South Sylhet, Nowgong, Dibrugarh, North Lakhimpur, and Hailakandi, which spent 35·12, 30·16, 29·84, 29·53, and 28·17 per cent., respectively, of their local incomes. The Boards at Dhubri and Sibsagar again failed to bring their expenditure on education up to the required minimum of 20 per cent. On middle English schools the Boards spent Rs. 23,395, and on middle vernacular Rs. 7,767: the balance of the expenditure was devoted to lower primary education. The total number of schools wholly maintained by Local Boards was 1,213, or 65 less than in 1900-1901, of which 4 were middle vernacular and the remainder lower primary schools. Of the latter, 147 were for the education of girls. In addition to these, 1,161 schools were, on the 31st March 1902, in receipt of aid from Local Funds, of which the schools for boys included 81 middle, 92 upper primary, and 972 lower primary, and the schools for girls 5 middle and 9 lower primary. Four training schools for teachers were also aided by Local Boards.

(d) *Medical.*—The expenditure under this head amounted to Rs. 98,250, or

Names of Local Boards.	Percentage of medical expenditure on local income.	Names of Local Boards.	Percentage of medical expenditure on local income.
Silchar	... 8·70	Gauhati	... 9·59
Hailakandi	... 4·21	Barpeta	... 11·64
North Sylhet	... 10·90	Tezpur	... 17·34
Karimganj	... 11·74	Mangaldai	... 12·03
South Sylhet	... 14·26	Nowgong	... 26·82
Habiganj	... 8·53	Sibsagar	... 4·88
Sunamganj	... 12·40	Jorhat	... 3·98
Dhubri	... 11·48	Golaghat	... 7·09
Goalpara	... 8·33	Dibrugarh	... 15·00
		North Lakhimpur	... 8·74

Rs. 2,584 in excess of the estimates and Rs. 1,031 more than the actuals of the previous year. The expenditure exceeded the estimates chiefly in Dhubri (Rs. 2,464), Dibrugarh (Rs. 529), and North Sylhet (Rs. 414). The percentages of the medical expenditure on local income of each Local Board are given in the margin.

(e) *Sanitation.*—The expenditure incurred by the Boards on village sanitary works was directed chiefly to improving the water-supply by the construction of new tanks and wells and the clearance and repair of old tanks. Special expenditure was incurred by the Silchar Board, which contributes Rs. 360 annually to the up-keep of the Nemotha sanitarium, and by the Habiganj and the Gauhati Boards, which give annual grants of Rs. 1,000 and Rs. 10,000 to the Habiganj Union and the Gauhati Municipality, respectively.

(f) *Scientific and other minor objects.*—Of the total sum of Rs. 2,793 spent under this head, Rs. 2,106 represents the cost of entertaining two Veterinary Assistants, one under the Sibsagar, Jorhat, and Golaghat Local Boards, and the other under the

Dibrugarh and North Lakhimpur Local Boards; Rs. 237, the cost of stationery purchased by the North Sylhet, Karimganj, Nowgong, and North Lakhimpur Boards for census work, and the remaining expenditure consisted of grants made for local *melas* and fairs by the Boards of Habiganj, Gauhati, and Mangaldai.

Protection.

(g) *Famine relief*.—This is an item of expenditure which is fortunately very rare in Assam. There was some scarcity in the Sylhet district, accompanied by high prices, and relief to the extent of Rs. 7,478 was given by the five Local Boards of the district, the largest contribution, Rs. 4,926, being made by Sunamganj.

Contributions from Local to Provincial.—A sum of Rs. 4,404 was recovered during the year from certain Boards. This amount represents advances made from Provincial revenues in 1900-1901 to cover overdrawals.

297. On Local Fund works a sum of Rs. 5,78,205 was expended. Of this, Rs. 2,17,447 were spent on original works and Rs. 3,60,758 on repairs. On Original Works—Communications Rs. 1,65,183 were expended. Civil works.

Buildings.—The Public Works Department spent Rs. 4,814 on the construction of an office building for the Silchar Local Board.

Communications.—An iron bridge over the Chandipur *khal*, estimated to cost Rs. 5,525, was nearly completed by the Public Works Department for the North Sylhet Local Board at a cost of Rs. 5,363, of which Rs. 2,122 were expended during the year. Earthwork and turfing to the extent of Rs. 446 were carried out on the extension of the Sylhet-Lala Bazar road to Sherpur, second section, bringing the total cost to Rs. 49,304; some compensation for land has still to be paid. The total length of the road is 23 miles, and it is 8 feet wide at formation. The North Sylhet Board also spent Rs. 4,011 in compensation for land for the Sylhet-Mukhtapurghat road, which was completed by the Public Works Department in the previous year. The total outlay on the road amounted to Rs. 1,13,051. It is 26½ miles in length, with a width of 8 feet at formation. The Silchar Board spent Rs. 3,000 during the year in the construction of the Palai road.

Rupees 2,108 were expended by the Hailakandi Local Board in remetalling the town roads. The Board also completed the Goglacherra bridge at a total cost of Rs. 4,968. The Dhulikata bamboo bridge on the Kalacherra-Monacherra road was replaced by a timber structure at a cost of Rs. 1,199. The raising of the Koya and Koya-Abdullapur roads was also in progress. The Public Works Department expended Rs. 2,563 for the Habiganj Board in the construction of three permanent bridges on the Mirpur-Madhabpur road; two of these are estimated to cost Rs. 19,975 and the third Rs. 1,181. The two former were nearly completed by the close of the year, the total expenditure having amounted to Rs. 19,053.

The South Sylhet Local Board spent Rs. 6,401, Rs. 6,430, and Rs. 6,258, respectively, in the construction of three iron bridges over the Akhalia, Lakhata, and Langoocherra rivers, which were nearly completed at the close of the year. The Board also spent Rs. 1,615 in improving 6½ miles of the Munshi Bazar-Adampur road, and Rs. 642 in the construction of the Juri Valley road from Jangirai to Sagarnal, a distance of 9.2 miles. This road will connect the Assam-Bengal Railway station at Juri with the Latu-Hingajia thana road on one side and with the Ghazipur-Sagarnal road on the other.

The Karimganj Board spent Rs. 16,156 on account of outstandings on, and compensation for, land taken up for roads.

The Dhubri Local Board spent Rs. 5,000 in extending the Futkibari-Fakiragaon road from Datma to the North Trunk road. The Public Works Department completed a lattice girder bridge of a single span of 30 feet on the Gauripur-Roha road, III section, for the Goalpara Local Board at a cost of Rs. 607, bringing the total expenditure on this section of the road to Rs. 30,807. A sum of Rs. 9,709 was also spent by the Public Works Department for this Board in completing the IV section of the Gauripur-Roha road, bringing the total expenditure to Rs. 43,708, against an estimate of Rs. 45,018. The Public Works Department spent Rs. 1,001 in purchasing materials for an inspection bungalow at Kalaigaon for the Mangaldai Local Board. The Tezpur Board spent Rs. 3,025 in metalling the last 3 miles of the Belsiri-Balipara road from Addabari to the Amarabari terminus of the Tezpur-Balipara Railway. The Dibrugarh Local Board spent Rs. 3,150 and Rs. 4,546, respectively, in metalling bad portions of the Rangagora and Chowkidingi roads. A further payment of Rs. 3,568 was made by the Board in metalling the worst portion of the Rehabari road, and a timber bridge over the Deloi river on the Moria Ali was constructed at a cost of Rs. 2,069. The Public Works Department constructed an office building for the North Lakhimpur Local Board at a cost of Rs. 2,739. The Public Works Department also constructed the Hattigarjan bridge for the Jorhat Local Board for Rs. 3,238. The Sibsagar Board spent Rs. 10,958 in the construction of

Protection.

bridges and culverts, of which Rs. 7,795 were spent by the Public Works Department in completing the Darika bridge on the Sologuri Ali, an iron girder bridge of 5 spans of 30 feet, the total cost of which amounted to Rs. 14,218.

On the maintenance of Local Fund communications, Rs. 3,37,867 were expended. The length of roads maintained during the year was 3,886.50 miles. The roads are all unmetalled, with the exception of short lengths aggregating 19.15 miles, which are metalled. The average cost of maintenance was Rs. 87 per mile nearly.

Miscellaneous Public Improvements.—The total amount spent by the Boards on Miscellaneous Public Improvements was Rs. 65,477, *viz.*, Rs. 45,830 on original works and Rs. 19,647 on repairs. The expenditure was principally devoted to the construction and repair of tanks and wells and the improvement of markets or *hâts* and of town and village drains, etc.

SECTION 10.—MILITARY AND VOLUNTEERING.

Commands.

298. Brigadier-General C. R. Macgregor, C.B. D.S.O., Officiating in Command of the District, was relieved by Brigadier-General Sir A. J. F. Reid, K.C.B., the permanent Commandant.

Volunteers.

299. The Gauhati section of the Shillong Volunteer Rifles was amalgamated with the Assam-Bengal Railway Corps in October 1901, and was struck off the strength of the former corps.

Camps of instruction.

300. The regular forces held six camps of instruction in the district during the year 1901-1902, *viz.*, the 43rd Gurkha Rifles, two at Dumpep, 17 miles from Shillong; the 44th Gurkha Rifles and 3rd Brahmans (combined), two at Maiangklong, 33 miles north of Manipur and about half-way between Kohima and Manipur; the 5th Bengal Light Infantry, one at Badarpur, 17 miles from Silchar, and one on the Brahmaputra, 12 miles north of Dibrugarh.

Disturbances.

301. A detachment of the 43rd Gurkha Rifles under the command of Lieutenant C. P. Barlow, consisting of 2 Native Officers, 123 non-commissioned officers and men, 1 hospital assistant, 13 public followers, 10 private followers, proceeded on the 14th December 1901 from the first camp of instruction at Dumpep to aid the civil authorities to quell a disturbance at Cherrapunji in connection with the election of a new Siem of the Cherra State. The detachment returned to Shillong on 4th January 1902.

Guards and escorts.

302. The outposts at Udalguri, Subankhata, and Darranga were garrisoned, as usual, by a guard of the 43rd Gurkha Rifles.

Withdrawal of guards.

303. The military post at Kalingklang, on the Kohima-Manipur road, was abolished in December 1901 as being no longer considered necessary.

Movement of troops.

304. Owing to the return of two companies, 43rd Gurkha Rifles, to headquarters, Shillong, from Gilgit, the detachment, 44th Gurkha Rifles, under the command of Lieutenant J. D. Grant, 44th Gurkha Rifles, left Shillong on 1st December 1901 to join the headquarters of that regiment at Kohima.

305. The following was the distribution of troops and volunteers in the province of Assam on the 31st March 1902 :

Troops.	Stations.	Strength.			Guns.
		British officers.	Volunteers.	Natives of all ranks.	
1	2	3	4	5	6
District Staff	Shillong	3	...	...	...
Shillong Volunteer Rifles	Ditto	3	25	...	...
43rd Gurkha Rifles	Ditto	7	...	696	2
Assam Valley Light Horse	Assam Valley	34	347	...	...
Wing, 5th Bengal Light Infantry... ..	Dibrugarh	3	...	223	...
Detachment, 5th Bengal Light Infantry	Sadiya ... ..	...	...	74	...
Headquarters, 5th Bengal Light Infantry	Silchar	4	...	332	...
Surma Valley Light Horse	Ditto	28	292	...	...
Detachment, 5th Bengal Light Infantry	Kalanaga ... ..	...	...	53	...
3rd Brahman Infantry	Manipur	6	...	816	2
Ditto detachment	Kaopum ... ..	...	...	26	...
44th Gurkha Rifles	Kohima	5	...	638	2
43rd Gurkha Rifles detachment	Subankhata and Darranga ... ..	...	...	42	...
Ditto ditto	Udalguri ... ..	...	...	50	...
	Total	93	664	2,950	6

CHAPTER IV. Production and Distribution.

SECTION 1.—WEATHER, CROPS, AND PRICES.

306. The weather was, on the whole, favourable to agriculture throughout the province. In the Surma Valley the rainfall was well distributed, but in Assam, though the total amount of rain was up to the average, the early rice crop suffered to some extent from drought in April and May, and an unusually heavy fall in the last week of November damaged the winter rice (*sali* and *baa*) and interfered with the cultivation of mustard and pulse. In the Assam range the rainfall was sufficient and well distributed, except in the Naga Hills. Little damage was done by floods except in Nowgong, where the Kopili overflowed its banks in October and destroyed a portion of the winter rice crop. Weather.

307. In 1900-1901 there was a serious failure of the rice crop, prices rose to a height which is unusual in Assam, and the stocks in hand were reduced below their normal level. The villagers accordingly took advantage of the favourable conditions of the past year and extended the area under cultivation by about 5 per cent., and as the harvest was, on the whole, a good one, the results from the agricultural point of view must be considered satisfactory. The increase in cropping is reported to have been as large as 14 per cent. in Cachar. The following table shows the percentages on the normal of the outturn of rice—the staple crop of the province—taking area as well as outturn into consideration, and of the outturn of all crops taken together : Cropped area and outturn.

—	Cachar.	Sylhet.	Goalpara.	Kamrup.	Darrang.	Nowgong.	Sibsagar.	Lakhimpur.
1	2	3	4	5	6	7	8	9
Rice ...	115	118	78	84	106	94	78	118
All crops...	115	118	77	85	107	92	78	118

In the Surma Valley, and in Darrang and Lakhimpur, the harvest was an excellent one, and it was fair in Nowgong and Kamrup, but in Goalpara and Sibsagar the late rice crop was injured, in the former district by the early cessation of the monsoon, in the latter by heavy rain in November. The area under mustard increased, but the crop was not a particularly good one. Of minor staples, sugarcane did well and pulse (*matikalai*) indifferently. Jute was an average crop.

308. In consequence of the failure of the winter rice crop of 1900-1901, the price of common rice ranged high in every district. The highest point was reached between July and September, when rice could not be purchased anywhere in the plains for less than four rupees a maund, while in Nowgong and North Lakhimpur, only seven seers were sold for a rupee. In these small markets, however, it is probable that the slackness of the demand affects the supply, and that, if there was a larger business to be done, more grain would be brought in for sale and the price would be lower. Prices fell rapidly everywhere after the reaping of the late rice crop. Mustard was cheap and only fetched from Rs. 4-8 to Rs. 3-8 a maund. Raw sugar was also selling for as little as Rs. 3-8 a maund in Golaghat, and in parts of the Assam Valley hardly repaid the cost of cultivation. Prices.

SECTION 2.—AGRICULTURE AND HORTICULTURE.

[For detailed figures¹ see Appendix A to the Annual Note on Crop Experiments in Assam for 1901-1902 and tables 2 and 4, Part XX, of the Judicial and Administrative Statistics of British India.]

309. During the year 515 experiments were made to ascertain the outturn of rice and other crops, and 1,909 experiments were made by supervisor kanungos and mandals under the mauza-book rules. A detailed account of these experiments will be found in the provincial note on the subject. Crop cuttings.

Production
and Dis-
tribution.

310. The present report reviews the operations at the Experimental Farm at Upper Shillong for the year 1901-1902 and the six months ending the 30th September of the current year.

Miscellaneous
Experiments.
Experimental
Farm.

The farm is at an elevation of about 5,900 feet above the sea. The year 1901-1902 was characterized by an unusually dry spring, which interfered with the germination of the potato crop; but was otherwise favourable and the total rainfall amounted to 104.5 inches. The agricultural season of the current year has, on the other hand, been distinguished by continuous heavy rainfall, which set in in March and continued to the end of September. This excessive rain induced a severe attack of potato disease at the farm and proved prejudicial to most of the crops sown. The crops tried at the Farm during the two agricultural seasons under report were as follows:

Potatoes.

The crop of 1901 was a poor one, but in spite of an outbreak of disease a fair yield was obtained in 1902, the total outturn having amounted to about eleven times the quantity of seed sown. A number of varieties were tried, of which the *magnum bonum* imported from Nainital has so far proved the best, and has been distributed, free of charge, to cultivators in the hills. Mustard cake has been used for several years as a manure for potatoes at the Farm with excellent results.

Fodder grasses (rye-grass, clover, maize, and native grasses).—Rye-grass and clover were tried both in 1901 and 1902. Clover has proved to be unable to withstand the heavy rainfall of the Khasi Hills, but rye-grass did tolerably well in both seasons. In 1901 it was made into hay of fairly good quality, and gave a yield of 22½ maunds from an area of a little over an acre. Three kinds of wild indigenous grasses have been grown in this year with excellent results. These grasses required little attention and yield an abundant quantity of sweet herbage.

Fodder roots (turnip, knol-kohl, beet, mangal and carrot).—These crops were tried during both the seasons under report. The outturn in 1901 was unsatisfactory; the present crop is still ungathered, but does not promise well, and there is little prospect of these roots being grown with profit in the Khasi Hills. Swiss-chard, a form of beet, valued for its abundant foliage, which is used as fodder as well as vegetable, is also being tried this year, but does not seem to thrive well. Flax, groundnut, and pumpkins were tried in both seasons. A small area was sown with flax and gave a fairly good yield of plants, but the fibre has not yet been extracted. Groundnut failed as in the preceding year. A giant form of pumpkin, known as Sutton's Mammoth, was grown in 1901 with fairly good results; in 1902 it germinated well, but the heavy and continuous rain of the season caused most of the fruit to rot on the ground.

A few plants of sisal hemp were also put out, but they succumbed to frost.

Silage still does well, but as the pits were partially damaged with water, a new over-ground silo has been constructed.

Farm herd.—The farm herd consisted on the 30th September 1902 of 49 head of cattle. These included 11 Khasi cows, 2 Bhutia heifers, 10 half-bred English cows, and 1 half-bred English bull. The last 11 animals have been recently imported at a cost of about Rs. 2,300 from Patna, and belong to a good milking breed. During the eighteen months ending the 30th September 1902, the farm cows yielded milk to the value of Rs. 552-3-9 and the cost of their up-keep amounted to Rs. 741-3-7. The results will probably be more satisfactory when the new cows have become acclimatized.

Arrangements are being made to establish a fruit garden at Shillong for which a site has been selected about 2 miles from the civil station. The hillside has been terraced and a glass house built, and it is intended to try different kinds of fruit trees which have been ordered from Europe.

An account was given in the last year's report of the Experimental Dairy established at Shillong with the object of improving the local supply of dairy produce and introducing a new industry in the province. The dairy has proved a great success. It is now managed by a European lady under the supervision of the Director of Land Records and Agriculture and his Assistant. The net profit of the dairy during the eighteen months ending the 30th September 1902 amounted to Rs. 2,812-8-1, after meeting all working expenses and charges for management.

Protection
against rin-
derpest

311. There was a severe outbreak of rinderpest at Shillong during July, August, and September 1902. The Sibsagar Local Board kindly allowed their Veterinary Surgeon to visit the station, and he inoculated 285 cattle with favourable results.

Seeds and
plants sup-
plied or dis-
tributed.

312. During the period under report, sugar-beet, the smaller cardamom, and coffee were distributed for cultivation in the Khasi Hills, and Rangpur tobacco and American and Egyptian cotton in the Assam Valley. The results are not yet known. Coffee, both Liberian and Arabian, is reported to thrive well on the southern slopes of the Khasi Hills.

Arrangements have been made to try, through the agency of selected cultivators in different parts of Assam, the cultivation of improved varieties of rice, cotton, sugarcane, and sweet potato which have proved successful at Experimental Farms in other parts of India. *Production and Distribution.*

A large quantity of seeds and plants was sent by the Agricultural Department to officials and private individuals outside this province. Details will be found in the report of the Director of Land Records and Agriculture, Assam.

SECTION 3.—FORESTS.

[For detailed figures, see forms and appendices appended to the Forest Administration Report of Assam for 1901-1902.]

313. The total area of State forests, as it stood on 30th June 1902, was 21,572 square miles, of which 3,707 square miles were reserved and 17,685 square miles were unclassified State forests, as compared with 3,609 and 17,239 square miles, respectively, at the commencement of the year. An area of 34.6 square miles in the Cachar district was formed into a reserve known as the Barail reserve. For the alienation of their rights in this reserve the villagers received Rs. 1,385 compensation. An area of 63.25 square miles of forest in the valley of the Desoi river in the Naga Hills district was constituted a reserve known as the Desoi Valley reserve. Small additions were made to the Jharikhuri and Langai reserves, and a small area of 147 acres was formed into the Dudkhuri reserve. For the purposes of the Assam-Bengal Railway a small area of 7 acres was excluded from the Sola reserve in the Sibsagar district. An area of 476 acres in the Diju Valley reserve in Nowgong, which had been applied for tea cultivation, was also disforested. One hundred and thirty-one square miles of proposed reservation were under settlement at the close of the year. *Area of State Forests.*

314. The total length of boundaries at the close of the year was 2,663 miles, including 1,156 miles of artificially-demarcated boundaries, as compared with 2,595 miles and 1,145 miles, respectively, at the commencement of the year. The expenditure on demarcation work was Rs. 2,838, or Rs. 2-7-9 per mile, as compared with Rs. 2,619, or Rs. 2-5 per mile, expended in the previous year. *Demarcation.*

315. Survey operations were carried on by local officers in two divisions only, *vis.*, Darrang and Lakhimpur, at a total cost of Rs. 48. *Surveys.*

316. The provisions of the working plan for the Dambu reserves in the Garo Hills district terminated at the close of 1901-1902. During the period of 15 years for which the plan was sanctioned, out of 8,000 mature trees, only 2,820 trees were felled. There was little demand for the timber, and until there is an increased demand, a revision of the working plan is considered unnecessary. The prescriptions of the working plan for the Darugiri reserve were not carried out owing to there being no demand for the timber. *Working plan.*

317. Twenty-seven miles of road and path were opened during the year. Rupees 14,567 were expended on the construction of new roads and buildings, and annual repairs were executed at a cost of Rs. 9,334. *Communications and buildings.*

318. Ninety-nine cases of offences against the forest laws were taken into court, as compared with 118 cases in the previous year. Twelve cases were pending at the commencement of the year, and of the 111 cases thus for disposal, 99 cases were disposed of during the year. Eighty-two cases, involving 370 persons, resulted in convictions and 17 cases, involving 96 persons, in acquittals. The number of cases compounded was 227, against 233 in the previous year. *Forest offences.*

319. The area over which special fire protective measures extended was 994.5 square miles, as compared with 994 square miles in the preceding year. In addition to this, 196 square miles were partially protected. Out of the former area 991.2 square miles and of the latter 167 square miles were successfully protected. The expenditure on special fire protection operations amounted to Rs. 8,588. There were altogether 17 fires, 20,652 acres being burnt. *Fire protection.*

320. Out of 3,707 square miles of reserved forests, 21 square miles were open to all animals, and 2,708 square miles, or 73 per cent., were entirely closed; and in addition 915 square miles were closed to browsers only for the whole year, and 63 square miles for part of the year. The whole of the unclassified State forests were open to grazing throughout the province. No cattle were impounded during the year. Rupees 364 and Rs. 16,648 were realised in fees on account of grazing from reserved and unclassified State forests, respectively. *Grazing.*

321. The total area under regular plantation at the close of the year was 3,239 acres. These plantations are situated in the Kamrup, Darrang, and Garo Hills divisions. *Artificial re-production.*

Production and Distribution.

The amount expended on the regular plantations was Rs. 6,554, as compared with Rs. 15,914 in the previous year, and the receipt amounts to Rs. 142. The rubber collected from the Kulsi and Charduar plantations was, owing to the fall of the market price of rubber, not sold during the year. The Charduar caoutchouc plantation in Darrang was extended by 271 acres.

Exploitation of major produce.

322. The number of trees felled and licenses granted for standing trees marked before felling are shown in the following table :

	Reserved forests.	Unclassed State forests.
1. Felled by Government agency	876	59
2. Removed under trade licenses	12,205	10,458
3. Removed under free licenses	129	1,033
Total	13,210	11,550

Exploitation of minor forest produce.

323. The revenue from rubber, which is the most important item falling under this head, amounted to Rs. 35,148 only, as compared with Rs. 93,414 in the preceding year. The falling off is due to the low market rate prevailing for the article, owing to which the rubber *mahal* of the Manipur State was not sold, the trade in foreign rubber on the Darrang and Lakhimpur frontiers contracted, and the outturn of the Government rubber plantations was not disposed of during the year. Grazing fees are realised only from professional breeders and dairymen. The receipts under this head amounted to Rs. 17,012, as compared with Rs. 13,925 in the preceding year.

Yield of the year.

324. The outturn of timber, fuel, and bamboos from State forests was :—Timber 3,806,651 cubic feet ; fuel 6,590,887 cubic feet ; and bamboos 18,451,505 numbers.

In the Garo Hills division the demand for timber on *gurkati* permits was considerably below that of the previous year, and to this cause the falling off in the outturn of timber by one million cubic feet is mainly due.

Free grant of timber and fuel.

325. The quantities of timber and fuel granted free of payment during the year are shown in the following table :

	Cubic feet.	Value. Rs.
Timber	732,287	57,370
Firewood	4,743,255	74,051
Total	5,475,542	1,31,421

Financial results.

326. The total revenue for the forest year ending 30th June 1902 was Rs. 4,83,908, or Rs. 79,492 less than the revenue of the previous year, while the expenditure also decreased from Rs. 3,42,963 to Rs. 3,25,507. The surplus amounted to Rs. 1,58,401, or Rs. 62,036 less than that of the previous year. The percentage of surplus to gross revenue fell from 39.1 to 32.7.

The falling off in receipts is accounted for by the fact that there was no demand for sleepers for the Eastern Bengal Railway, while the income from the Manipur forest, which is shared between Government and the State, diminished, the more accessible portions of them having been worked out, and the revenue from rubber decreased owing to the causes explained above. There was less outlay on departmental timber operations, as well as on buildings, plantation, and fire protection.

SECTION 4.—MINES AND QUARRIES.

[See Tables 1-3, Part XXVI, and Tables 3 and 5, Part XXVII, of the Financial and Commercial Statistics of British India.]

Lime-quarries.

327. There are 34 recognised lime-quarries in the Khasi and Jaintia Hills, the only district in the province in which revenue is derived from lime-stone. Some of the quarries are owned by the Seims, or by the people of semi-independent States, who under treaty rights receive one-half of the revenue. The demand from lime-quarries amounted to Rs. 13,676, a falling off of Rs. 2,308, as compared with the previous year, due entirely to reduced export of lime-stone from quarries worked under the permit system. Of this amount, Rs. 12,705 were realised during the year.

Coal mines and mineral oils.

328. In Lakhimpur, the Assam Railways and Trading Company extracted 249,667 tons of coal, compared with 225,052 tons in 1900-1901. The quantities extracted from Namdang and Tirap mines, for which no royalty is payable, were 34,842 and 45,439 tons, respectively, as compared with 22,871 and 38,739 tons in 1900-1901. From the Ledo and Tikak mines, on which royalty is levied at 3 annas per ton, the output was 169,386 tons, against 163,442 tons. The total royalty paid by this Company was Rs. 33,355, as against Rs. 31,017 in 1900-1901. Surface rent amounting to Rs. 366 was also paid.

In the Khasi and Jaintia Hills, a sum of Rs. 543 was realized on account of dead rent in respect of the two coal mines Lakadong and Maolong, now under lease. Work in these mines has not yet commenced. *Production and Distribution.*

There was no change in the revenue demand (Rs. 5,500) on account of mineral oil concessions in Lakhimpur, which at present consists only of surface rents. The total quantity of petroleum oil extracted was 624,627 gallons, as compared with 882,578 gallons in the previous year.

329. An exploring license for minerals of every description in the north-west of the Cachar Hills was granted to Mr. R. Spicer of Pathimara tea estate. An additional prospecting license for mineral oil was issued to this gentleman in the Cachar district in respect of a different area. A mining lease in respect of an area of about 345 acres at Lakadong coal-fields in the Jaintia Hills was granted to Babu Jeebon Roy of Shillong. Two mining leases were granted to Mr. G. L. Garth of Dacca, for two adjacent blocks of the Maolong coal-field in the Khasi Hills. The transfer of these leases to a Company has since been sanctioned at the request of the lessee. The license granted to the same gentleman to prospect for coal and other minerals in the Garo Hills was extended for two years, with effect from the 1st July 1901. *Mineral concessions.*

SECTION 5.—MANUFACTURES.

[For detailed figures, see statement appended to the Report on Tea Culture in Assam for 1901, and table 9 of the Agricultural Statistics of British India.]

330. The only manufacture of importance in the province is that of tea. The total number of gardens at the close of 1901 was 805, against 804 in the previous year. Eight gardens were newly opened, four in Lakhimpur, two in Sylhet, and one each in Kamrup and Sibsagar, and two gardens were added by the subdivision of estates. Two gardens were closed, one each in Sylhet and Kamrup, and three gardens were abandoned, two in Darrang and one in the Khasi and Jaintia Hills. Four gardens in Sibsagar were amalgamated with other gardens. *Gardens opened and closed. Extensions and relinquishments.*

331. The total area of tea gardens at the close of 1900 was estimated at 1,060,037* acres. This estimate, however, included areas planted with mature or immature plants which had been abandoned. Such areas were excluded from the returns for 1901, which give a total of 1,049,018 acres, being a decrease of 11,069 acres. *Area of tea gardens and area of all lands held by tea planters.*

332. The total area under mature and immature plants was 338,186 acres, against 337,327 acres at the end of the previous year, an increase of 859 acres. There was an increase of 462 acres in the Surma Valley (from 132,372 acres to 132,834 acres) and of 397 acres in the Brahmaputra Valley (from 204,955 acres to 205,352 acres). Sylhet showed an increase of 798 acres and Cachar a decrease of 306 acres. An area of 30 acres in the Khasi and Jaintia Hills was relinquished. The area under tea in Sibsagar increased by 895 acres (from 78,422 acres to 79,317 acres) and in Lakhimpur by 1,181 acres (from 67,509 acres to 68,690 acres), while there was a decrease of 275 acres in Kamrup, of 1,271 acres in Darrang, and of 133 acres in Nowgong. *Area under tea cultivation in each district.*

333. The total outturn of tea showed a decrease from 141,118,644 lbs. to 134,896,317 lbs. *Total outturn of the province.*

334. The total outturn in each district during the past two years is shown in the following table : *Outturn by districts.*

District.	Rate of outturn per acre.		Total yield.		Increase or decrease.	Percentage of increase or decrease.
	1900.	1901.	1900.	1901.		
1	2	3	4	5	6	7
	lbs.	lbs.	lbs.	lbs.	lbs.	
Cachar	532	533	30,789,171	31,087,564	+ 298,393	+ 0·97
Sylhet	524	470	35,041,973	31,277,810	-3,764,163	- 10·74
Khasi and Jaintia Hills	133	...	4,000	...	- 4,000	- 100·00
Goalpara	330	302	158,324	149,692	- 8,632	- 5·45
Kamrup	207	185	768,230	629,350	- 138,880	- 18·08
Darrang	418	373	15,311,348	13,943,079	-1,368,269	- 8·94
Nowgong	371	373	4,330,000	4,470,548	+ 140,548	+ 3·25
Sibsagar	417	370	29,017,128	26,799,926	-2,217,202	- 7·64
Lakhimpur	472	459	25,698,470	26,538,348	+ 839,878	+ 3·27
Total	468	437	141,118,644	134,896,317	-6,222,327	- 4·41

* Revised figures.

Production and Distribution.

While there was an increase of 859 acres, or '2 per cent., in the cultivated area, the outturn decreased by 4'41 per cent. This decrease was not altogether unexpected. It has been recognised that the low prices which have been obtained for tea during the past few years have been the result of over-production. In order to remedy this, finer plucking was resorted to, the result being a smaller outturn as well as a better quality of tea. The weather, too, was not favourable for tea cultivation throughout the greater part of the province. In Lakhimpur and Nowgong, favourable weather was experienced, and these districts showed an increase in outturn. In Cachar, the increase was attributed to the larger area under mature plants.

Yield per acre.

335. The figures in the margin show the yield per acre for the Surma Valley, the Brahmaputra Valley, and for the whole province, according to the district returns.

	1900. lbs.	1901. lbs.
Surma Valley ...	528	459
Brahmaputra Valley ...	426	395
For the whole province	468	437

Tea-seeds.

336. One hundred and ninety-eight maunds of tea-seed were returned as exported, against 2,672 maunds in the previous year. No tea-seed was imported into the Brahmaputra Valley during 1901. Seed is now usually obtained locally. The imports from Manipur amount to 28 maunds, against 36 maunds in 1900.

Prices.

337. The average prices per pound of tea in Calcutta, as furnished by the Secretary to the Indian Tea Association, are given in the margin. These average figures show a slight improvement as compared with 1900.

	1900. As. p.	1901. As. p.
Surma Valley teas ...	4 6	4 7
Brahmaputra Valley teas ...	5 9	6 1

SECTION 6.—TRADE.

[For detailed figures of Foreign Trade, see statements appended to the Foreign Trade Report of Assam for 1901-1902 and also Accounts relating to the trade by land of British India with foreign countries, No. 12.]

[For detailed figures regarding inter-provincial trade, see statements appended to the Report on the Rail and River-borne Trade of Assam for 1901-1902, and also Tables I to VIII of "Accounts of the Trade carried by Rail and River in India" issued by the Director General of Statistics.]

Foreign trade.

338. Trade was carried on with the following foreign tribes and countries :

- | | | |
|---------------------------|--|--|
| (1) Bhutan. | \| | (4) Abor, Mishmi, Khamti, Miri, and Naga tribes. |
| (2) Towang. | | (5) Manipur. |
| (3) Aka and Dafla tribes. | | (6) Hill Tipperah. |

Registration and supervision.

339. There was no change either in the manner in which the trade statistics were obtained, or in the number and position of the registering stations. There were four such stations, one at Jirighat in Cachar, where the trade with Manipur is registered, one at Mao thana on the Golaghat-Manipur cart-road to register the trade between Manipur and Kohima in the Naga Hills and the Assam Valley, and two in Sylhet (at Muchikandi and Noakhali) to register the trade with Hill Tipperah.

Elsewhere, no proper check stations exist, and estimates of the trade between Assam and the other adjoining countries and tribes are framed by tahsildars, mauzadars, and the police.

Value of imports and exports.

340. Imports fell in value from Rs. 9,87,477 to Rs. 8,74,386, chiefly owing to a decrease in the value of caoutchouc and other forest produce imported, while exports rose from Rs. 4,58,284 to Rs. 4,94,017.

Proportion of trade with each frontier tribe.

341. Forty per cent. of the trade is carried on with Hill Tipperah, 31 per cent. with Manipur, and 15 per cent. with Bhutan, the balance being divided among the remaining frontier tribes.

**Bhutan Pro-
per.**

342. The duties formerly levied by the Bhutan Government on exports to that country were removed during the year, with the result that exports to Bhutan increased in value from Rs. 41,066 to Rs. 146,564. The value of imports from Bhutan was Rs. 63,391, as compared with Rs. 59,088 in the preceding year.

The principal imports are caoutchouc, wax, ponies, and blankets. The principal exports are cotton piece-goods, European and Indian cotton twist and yarn, brass and copper, and silk, raw and manufactured. In 1901-1902, the value of the silk exported amounted to Rs. 1,08,112, as compared with Rs. 22,667 in the previous year, and there was also a large increase in the export of cotton piece-goods (from Rs. 7,292 to Rs. 23,135).

343. The trade with Towang is of the same character as that with Bhutan, and is not of any very great importance. The value of the imports during the year was Rs. 26,134, and that of exports Rs. 10,503.

Production and Distribution.

Towang.

344. The trade with the Aka and Dafa tribes is carried on with the districts of Darrang and Lakhimpur. In 1901-1902 the value of the imports fell from Rs. 96,551 to Rs. 27,188, and that of exports from Rs. 16,710 to Rs. 2,740.

Aka and Dafa tribes.

The great decrease in trade was attributed to hostilities having broken out between the Akas and Dafas, and also, though this is to some extent a matter of conjecture, to the rubber forests beyond the Darrang frontier having been exhausted by over-tapping. Rubber is practically the only article of import, and the exports consist of piece-goods, rice, iron, salt, and silk.

345. Trade with the inhabitants of the Abor and Mishmi Hills is almost confined to the district of Lakhimpur.

Abor, Mishmi, etc., Hills.

Rubber is the only article of any value imported from these hills, and cotton piece-goods, silk, and salt are the main articles of export. The value of the imports in 1901-1902 was returned as Rs. 1,06,540, and that of exports Rs. 2,673.

346. The trade with Manipur is registered at Jirighat in the Cachar district and at Mao thana on the Golaghat-Manipur cart-road. The imports and exports during the year were valued at Rs. 2,42,763 and Rs. 1,88,409, respectively.

Manipur.

The principal imports from Manipur are cattle, caoutchouc, canes, and rattans, timber, bamboos, and husked rice. The trade in the latter article has received a great stimulus from the opening of the Assam-Bengal Railway to Dimapur, and the value of the grain that left the State in 1901-1902 (Rs. 1,11,482) was nearly three times that of the rice exported in 1898-99.

The trade in tea-seed, which in 1896-97 was valued at one and three quarter lakhs of rupees, has almost entirely disappeared, as the demand for seed can be met without difficulty from the gardens in the province. On the other hand, there were considerable importations of rubber, timber, and other forest produce, which with rice are likely to form the staple exports from the State in future. The principal exports from Assam to Manipur are cotton yarn and piece-goods, mineral oils, dried fish, and betel-nuts.

347. The most important foreign trade of the province is still that which is carried on between Hill Tipperah and the neighbouring district of Sylhet. The imports and exports registered at Muchikandi and Maulvi Bazar were valued at Rs. 4,08,370 and Rs. 1,43,128, respectively. Trade which goes by land and by the smaller rivers, such as the Juri and Longai, escapes registration.

Hill Tipperah.

348. There was an increase of 5 per cent. in the value of the imports and a decrease of 9 per cent. in the value of the exports, the total value of the former being 423 and of the latter 574 lakhs of rupees. Large importations of rice which were brought into the province to supplement the poor harvest of 1900 accounted for the increase in the value of the import trade, while under exports the decrease was most noticeable in the cases of tea, unhusked rice, bamboos, and lime.

Inter-Provincial Trade.

349. The quantities and values of the principal articles imported into Assam during the years 1900-1901 and 1901-1902 are shown below in thousands of maunds and lakhs of rupees :

Imports.

	1900-1901.		1901-1902.		
	Quantity, maunds (thousands).	Value, Rs. (lakhs).	Quantity, maunds (thousands).	Value, Rs. (lakhs).	Percentage of value on total values.
1	2	3	4	5	6
Total imports	5,360	403.0	6,441	423.3	...
Husked rice	1,014	38.4	2,040	86.2	20
Cotton piece-goods	121	86.7	141	82.8	19
" twist and yarn	23	9.1	21	6.9	1
Salt	644	20.7	700	22.2	5
Sugar, unrefined	282	15.4	314	18.3	4
" refined	69	6.8	58	5.7	1
Mustard and rape oil	118	18.8	113	15.1	3
Kerosine oil	277	11.7	357	14.8	3
Gram and pulse	466	13.8	455	14.2	3
Other metals	166	18.7	115	13.0	3
Tobacco	158	14.0	142	9.6	2
Iron and steel	241	17.2	172	9.4	2

*Production
and Dis-
tribution.*

Husked rice.—The imports of husked rice were more than double those of the previous year, in consequence of the bad harvest of 1900, the increase being especially pronounced in the Surma Valley. The net import of rice, after allowing for exports of rice and paddy, was only eight lakhs of maunds.

Cotton piece-goods.—There was an increase of 19,000 maunds in the quantity imported into the Surma Valley. Imports to the Brahmaputra Valley were much the same in weight as in the previous year, but there was a decrease of fourteen lakhs in the reported value, due to a large proportion of the goods being packed in bales, which have a lower nominal value than goods in boxes.

Cotton twist and yarn.—The value of imports decreased by more than two lakhs of rupees, for which the Assam Valley alone was responsible.

Sugar.—There was a decrease of 16,000 maunds in the imports of refined sugar into the Brahmaputra Valley, but an increase of 6,000 maunds in the imports into the Surma Valley. The imports of unrefined sugar increased in both the valleys both in quantity and value.

Iron and steel.—The value of the imports decreased by 45 per cent., a fact for which the depressed condition of the tea industry and the gradual completion of the Assam-Bengal Railway are probably largely responsible.

Exports.

350. The quantities and values of the principal articles exported from Assam during the years 1900-1901 and 1901-1902 were—

	1900-1901.		1901-1902.		
	Quantity, maunds (thousands).	Value, Rs. (lakhs).	Quantity, maunds (thousands).	Value, Rs. (lakhs).	Percentage of value on total value.
1	2	3	4	5	6
Total exports	11,214	634.7	10,662	573.5	...
Tea	1,588	446.7	1,529	417.9	73
Rice in the husk	1,855	31.4	1,321	26.0	5
Rice not in the husk	322	8.7	356	10.8	2
Oil-seeds	506	25.9	429	22.0	4
Coal and coke	1,840	9.5	2,663	17.6	3
Wood	912	15.0	909	14.5	2
Jute, raw	254	14.8	262	10.5	2
Lime	1,952	12.2	1,546	4.6	1
Hides of cattle	20	5.4	17	4.3	1
Raw cotton	51	3.2	55	3.6	0.6
Lac	18	2.9	30	3.6	0.6
Oranges	17	1.2	74	2.8	0.5
Silk piece-goods	0.3	0.9	0.5	2.1	0.3

Tea.—The quantity of tea exported decreased by 59,000 maunds in weight and by 29 lakhs of rupees in value, in consequence of a short crop due to unfavourable weather and finer plucking. The price per pound obtained was slightly better than in the preceding year.

Rice in the husk.—There was a decrease in the quantity exported of 533,000 maunds, but owing to the rise in the price of grain, the decrease in value was only five lakhs of rupees. The export trade was affected by the bad harvest in Assam of 1900-1901, and is always liable to strongly marked fluctuations. Ninety-five per cent. of the total exports went from the Surma Valley.

Oil-seeds.—The value of exports decreased by about four lakhs of rupees and the quantity by 76,000 maunds. Under rape and mustard alone, there was a decrease of 82,000 maunds, and the exports of mustard from the Assam Valley were the lowest recorded for many years.

Coal and coke.—There was an increase of 85 per cent. in the value and 44 per cent. in the amount sent out of the province, but in spite of this, the quantity exported was only a little more than one-third of the total quantity extracted from the mines in Lakhimpur. Large quantities of coal are, however, used on tea gardens and on the river steamers.

Wood, bamboos, etc.—There was very little variation in the timber trade, almost the whole of which is carried on with the Brahmaputra Valley. Bamboos and mats are

exported from the Surma Valley, and the exports of the last-named articles, which are made of *murta, nal*, and bamboo, were valued at over eight lakhs of rupees.

Production and Distribution.

Jute, raw.—There was a small increase in the quantity exported, but a decrease of 27 per cent. in value, owing to a fall in the price of the staple.

Lime.—The price of lime during the year was low, and there was in consequence a decrease of 21 per cent. in the weight of exports, but if stone, the great bulk of which is limestone, be included, there was an increase in weight of 9 per cent.

Hides of cattle.—There was a decrease both in quantity and value in both valleys, which was probably due to the absence of cattle-disease in an epidemic form over any considerable area in the province.

Raw cotton.—There was an increase both in the quantity and value of the exports, due to the good crop in the Garo Hills.

Lac.—There was an increase of 82 per cent. in the value of the lac exported which consists entirely of stick lac.

Oranges.—The orange trade is confined to the Surma Valley. The exports showed an increase during the year both in quantity and value, and now stand at a higher figure than they did in the years immediately preceding the earthquake.

Silk piece-goods.—Silk piece-goods showed a large increase, the value of the exports in the previous year having been unusually low.

351. In the Assam Valley, 98 per cent. of the weight of the trade is still carried by water, and the river will probably continue to monopolise the traffic till through communication has been established with Bengal, either *via* Haflong or Dhubri. In the Surma Valley 22 per cent. of the total trade went by rail, as compared with 11 per cent. in the preceding year. The railway carried 32 per cent. of the imports to Sylhet and 72 per cent. of the imports to Cachar, but exports still go chiefly by river, only 14 per cent. of those from Cachar and 9 per cent. of those from Sylhet leaving the province by land. Seventeen per cent. of the total Sylhet trade went by rail and 55 per cent. of that of Cachar. The Assam-Bengal Railway carried 82 per cent. of the husked rice which entered the Surma Valley, and has obtained a large share of the tea trade (62 per cent.) in Sylhet, where many of the gardens are within easy reach of the line. From Cachar 88 per cent. of the tea still goes by river.

Proportion of rail and river-borne trade.

352. Almost all the trade of Assam is with Bengal, and that with other provinces forms less than one per cent. of the whole. The bulk of the trade is with Calcutta, which sent 60 per cent. in value of the imports, and took 72 per cent. in value of exports.

Direction of trade.

SECTION 7.—PUBLIC WORKS.

353. The total Public Works revenue amounted to Rs. 62,915 as detailed below : *Revenue.*

	Rs.
Imperial	6,391
Provincial	55,022
Local	1,502
	<hr/>
Total revenue	62,915

Rents of buildings produced Rs. 36,923 and ferry receipts Rs. 15,278 ; the remaining revenue was made up of various miscellaneous items of revenue, such as sales of old material, old tools and plant, etc.

354. The total expenditure on Public Works in Assam controlled by the Public Works Department, exclusive of railways, amounted to Rs. 26,03,380, as noted below : *Expenditure.*

	Rs.
Imperial Military	1,43,070
Imperial Civil	45,924
Provincial „	16,94,694
Local Funds	6,47,481
Contribution Works	72,211
	<hr/>
Total	26,03,380

In addition to the above, a net expenditure of Rs. 3,238 was incurred on the railways under the Administration.

Production
and Dis-
tribution.
Imperial
Military
Works.

355. The outlay on Imperial Military Works was Rs. 1,43,070, of which Rs. 60,599 were expended on original works and Rs. 54,857 on repairs. The remainder was principally on account of establishment charges.

The only important work in progress was the Manipur Cantonment project on which Rs. 49,996 were expended during the year, bringing the total expenditure on the work to Rs. 5,94,900. A revised estimate for Rs. 6,56,730 is under consideration by the Government of India; it includes the 4 single men's barracks, which remain to be built. The hospital, with its out-buildings, was completed during the year, and the double subalterns' quarters No. 1. The scheme for building a defensive post has been abandoned.

A survey for a much-needed water-supply for the cantonments and civil station of Manipur was completed towards the end of the year at a cost of Rs. 2,768. The estimate for the water-supply project is under preparation.

The reconstruction of the military hospital at Sadiya was taken in hand, and nearly completed by the close of the year, and a survey was made for a new rifle range at Dibrugarh. Improvements to certain military buildings at Silchar were also carried out at a cost of Rs. 3,089, the major portion of which was expended on addition to the Mess-house.

Imperial Civil
Works.

356. The outlay on Imperial Civil Works was Rs. 45,924, of which Rs. 26,955 were expended on Original Works, Civil Buildings, Rs. 10,098 on repairs to buildings. On the construction of post and telegraph buildings Rs. 26,366 were expended. The residence for the Assistant Superintendent of Telegraphs at Silchar, which was well in hand at the close of the previous year, was completed at a total cost of Rs. 7,816. Important additions and alterations were carried out in the Dibrugarh Telegraph office building in order to provide better accommodation for the married signallers. The residence for the Assistant Superintendent of Telegraphs at Gauhati, which was commenced in the previous year, was completed during the year under report at a total cost of Rs. 11,454. The new post office at Gauhati was almost completed by the close of the year, the total cost up to 31st March 1902 having amounted to Rs. 8,037. The construction of a new telegraph office at Dimapur in the Naga Hills division was commenced in March 1902, and Rs. 4,655 were expended on the work, principally in the collection of materials.

Provincial
Works. Civil
Buildings.

357. On Civil Buildings Rs. 4,26,944 were expended, *vis.*, Rs. 3,29,338 on original works and Rs. 97,606 on repairs.

Residences
for the Local
Administra-
tion and Go-
vernment
officials.

358. A sum of Rs. 34,871 was expended on the construction of the new Government House at Shillong, bringing the expenditure to date to Rs. 1,24,934. A revised estimate amounting to Rs. 1,86,398 has been sanctioned by the Government of India for the above work. A guard-house in the grounds of Government House was constructed during the year at a total cost of Rs. 4,679. A sum of Rs. 1,294 was expended in the collection of materials for a subdivisinal residence at Barnagar, to which place the station of Barpeta will be transferred. The residences for the Civil Surgeon and Superintendent of the Berry-White Medical School and the District Superintendent of Police at Dibrugarh, which were commenced in 1900-1901, were completed at a cost of Rs. 14,447 and Rs. 11,802, respectively, the year's expenditure on each building being Rs. 6,539 and Rs. 7,794.

The construction of a residence for the District Superintendent of Police, Sibsagar, by altering the old Executive Engineer's bungalow, was nearly completed by the 31st March 1902 at a cost of Rs. 4,465. The Military Police Commandant's bungalow at Dibrugarh was considerably improved by additions and alterations at a cost of Rs. 4,516. In the Naga Hills division a sum of Rs. 8,363 was expended on the construction of a residence for the Civil Subdivisional Officer at Mokokchang. The Assistant Superintendent's bungalow at Aijal was completed in March 1902 at a further cost of Rs. 5,651, or a total expenditure of Rs. 5,936. A sum of Rs. 2,385 was expended in the Cachar division for providing temporary accommodation for His Excellency the Viceroy and party at Silchar and Jirighat.

Secretariat
offices.

359. A further expenditure of Rs. 3,538 was incurred in the Assam Secretariat Printing Offices, which were completed at a total cost of Rs. 1,16,924. The offices consist of five large blocks, with a total floor space of 27,904 square feet, of which only 4 blocks are occupied by the Press. Eaves, gutters, and rain pipes were supplied to the Public Works Secretariat and Examiner's office at a cost of Rs. 1,654.

Deputy Com-
missioner's
and Subdivi-
sional Courts
and circuit-
houses, tahsil
kutcheries,
etc.

360. Rupees 2,447 were expended in collecting material for a new subdivisinal court-house at Barnagar, the new headquarters of the Barpeta subdivision, and a tahsil kutcherry was completed at Chhaygaon at a total cost of Rs. 1,981. The Deputy Commissioner's court buildings at Sylhet were practically completed and made over for occupation by the close of the year, the total expenditure up to the 31st March

1902 having amounted to Rs. 1,69,138. A Sub-Registrar's office at Habiganj and one clerk's quarters were completed for Rs. 2,097 and Rs. 1,245, respectively. Rupees 5,782 were expended during the year in improvements to the Deputy Commissioner's court-house at Dhubri. The combined treasury and record-room at Aijal were completed at a total cost of Rs. 6,090. This work was carried out by the Superintendent, Lushai Hills, with his district staff. Iron record-racks were supplied to the subdivisional court-house at North Lakhimpur at a cost of Rs. 963.

Production
and Dis-
tribution.

Tahsil kutcherries at Roha and Athgaon in the Nowgong and Sibsagar districts were constructed during the year at a cost of Rs. 2,059 and Rs. 2,913, respectively.

361. A further expenditure of Rs. 30,283 was incurred on the Judge's Court, Sylhet, bringing the total to Rs. 59,260, against an estimate of Rs. 61,965. The work was nearly completed by the close of the year.

Judge's
Court.

362. A Public Works Department subdivisional office and store godown at Shillong were completed at a total cost of Rs. 5,031, and a further expenditure of Rs. 1,854 was incurred on the Sanitarium bungalow at Upper Shillong, bringing the total cost to Rs. 7,232.

Public
Works De-
partment
buildings.

Quarters for one upper subordinate, one lower subordinate, one store-keeper and one accountant of the District Engineer's office, three married clerks of the Superintendent's office, and two married clerks of the Military Police Commandant's office at Aijal were constructed during the year at a total cost of Rs. 7,970. Two similar quarters have been nearly completed from funds supplied from the Superintendent's Political budget. Rupees 2,333 were expended in dividing the rations godown at Lungleh to provide accommodation for a school, the Subdivisional Officer's and P. W. D. subdivisional offices, P. W. D. store, and political rations.

363. Rupees 6,561 were spent in improving the existing jail buildings at Shillong, constructing a new guard-house, a hospital and dispensary and a five-seated latrine. The reconstruction of the jail buildings at Sylhet was completed during the year at a total cost of Rs. 1,65,353. A sum of Rs. 2,662 was expended on the sinking of a well in the jail compound, and materials were collected for constructing a new jail office, estimated to cost Rs. 4,223. Four additional solitary cells and a paddy godown were also completed at a cost of Rs. 1,285 and Rs. 2,075, respectively. A lock-up building was constructed for the subsidiary jail at Sunamganj for Rs. 2,584. A lock-up at North Lakhimpur was completed for Rs. 7,655, and Rs. 6,076 were expended in the construction of another at Golaghat, which is estimated to cost Rs. 9,925.

Jails.

364. The police barrack at Gauhati was completed during the year at a further cost of Rs. 2,112, and a total of Rs. 5,497. In the Sylhet division the following buildings were completed for the amounts noted against each: Police buildings at Habiganj Rs. 7,930, Maulvi Bazar Rs. 7,823, Karimganj Rs. 7,517; police barracks in the Sylhet sadar station Rs. 3,715; raising the site of the police station at Chhatak Rs. 1,140. The police buildings at Kanairghat were also nearly completed during the year, and materials for police buildings at Jaintia were collected. In the Naga Hills division the Military Police buildings at Tessima were completed for Rs. 5,252, and an outpost building for the Civil Police at Nichuguard was nearing completion at the close of the year. The police thana buildings at Roha, Samaguri, and Paneri, which were commenced in the previous year, were completed at a further cost of Rs. 3,751. Rupees 6,203 were expended during the year on new thana buildings at Behali and Kalaigaon, which were in progress at the close of the year. Three blocks of barracks for married men in the Military Police lines at Dibrugarh, which were under construction in the previous year, were completed at a further cost of Rs. 3,839, and one more barrack similar to the above was added to the lines at a cost of Rs. 4,152. A thana building at Bortola in the Sibsagar district was completed, and another at Tinsukia in the Lakhimpur district, with a constable's barrack and a *pucca* well, were nearly completed. Rupees 2,703 were expended in the construction of a thana building at North Lakhimpur, which was in progress at the close of the year.

Police.

365. Improvements costing Rs. 4,028 were carried out in the boarding-house of the Gauhati College, and furniture and fittings costing Rs. 4,350 were supplied to the College. An additional school building at Silchar was completed at a total cost of Rs. 4,200. A high school building at Dhubri was completed at a further cost of Rs. 5,782 and a total of Rs. 9,357.

Educational
buildings.

366. Quarters for the Hospital Assistant in charge of the Kohima charitable dispensary were practically completed at a cost of Rs. 1,242. The construction of a surgical theatre for the Berry-White Medical School at Dibrugarh was sanctioned for Rs. 5,325, and materials to the value of Rs. 488 were collected for the work. A *post-mortem*

Medical.

Production and Distribution. house was completed at Dhubri, and certain improvements were carried out in the Lunatic Asylum at Tezpur.

Ecclesiastical. 367. A further sum of Rs. 5,970 was spent on the new church at Shillong, bringing the total expenditure to Rs. 17,332, against the estimated cost of Rs. 21,297, of which Rs. 15,000 is contributed by Government. Rupees 1,631 were also expended in supplying furniture to the Shillong church, and materials to the value of Rs. 1,200 were collected for the construction of a new cemetery at Manipur.

Monuments. 368. Rupees 1,782 were expended in partially restoring the monument to the late Mr. Quinton and the officers killed in Manipur, and a chain fence for the McCabe memorial at Kohima was obtained at a cost of Rs. 500.

Miscellaneous Public Improvements. 369. A further expenditure of Rs. 1,957 was incurred on the work of raising the Goalpara Bazar road and the Agia road, bringing the total to Rs. 8,310. The work was incomplete at the close of the year. The restoration of the Darika *bund* in the Sibsagar district cost Rs. 4,571, and a large breach in the Dehing *bund* was also repaired. Rupees 1,743 were expended in the construction of spurs in the river Khoai at Habiganj. In the Lushai Hills Rs. 4,135 were expended in improving the waterworks at Aijal and Rs. 5,161 in improving the navigation of the Dhaleswari river by the removal of rocks and snags.

Contribution Works. 370. A revised estimate, amounting to Rs. 22,127, was sanctioned by the Shillong Municipality for remodelling the water-supply of the civil station. The work was nearly completed by the close of the year at a total expenditure of Rs. 21,108. The year's expenditure was Rs. 5,370. A sum of Rs. 6,534 was expended during the year in the construction of a public Town Hall for Gauhati, estimated to cost Rs. 9,010. A coolie depôt for the use of tea-garden coolies proceeding by rail was constructed at Gauhati for Rs. 3,328, and Rs. 3,888 were expended in collecting materials, etc., for latrines and urinals in the Shillong Cantonment, estimated to cost Rs. 7,455. A cook-shed and two latrines for the charitable dispensary at Silchar were completed for Rs. 1,249. The dispensary well at Golaghat was successfully completed during the year, a spring having been struck by boring to a depth of 54 feet.

Roads. Communications. 371. On original road works, a sum of Rs. 2,46,789 was expended. This expenditure is divided as follows :

	Rs.	Rs.
(a) Expenditure on bridges		43,324
(b) Ditto on new cart-roads		1,25,694
<i>vis.</i> , (1) Sylhet Hill cart-road from the Bogapani river to the Sylhet plains, 43½ miles, width 12 feet..	1,08,914	
About 7 miles of this road have been cut out to the full width from its junction with the old Cherra road, and excavation was in progress in 20 miles out of the remaining 36½ miles. The expenditure up to the end of March 1902 was Rs. 5,10,720. Work has been suspended. The question of constructing a bridle-path on the cart-road alignment is under consideration.		
(2) Aijal-Sairang cart-road, 12½ miles, width 14 feet	16,780	
	1,25,694	
(c) Expenditure on new bridle roads		34,853
(1) Bridle-path between Therria and Companyganj, 7½ miles, width 6 feet in hill side, with 3 feet formation width in the plains	3,894	
(2) Survey for bridle-path to connect Uthmar, the terminus of the Sylhet Hill cart-road, with Therria and with the Companyganj-Salutikar road ...	1,403	
(3) Aijal-Falam road, 104½ miles, width 6 feet ...	10,955	
(4) Aijal-Lungleh road, first section, 55 miles, width 5 feet	10,355	
(5) Aijal-Lungleh road, second section, 52 miles, width 5 feet (excluding Rs. 2,572 expended for camps)	4,196	
(6) Aijal-North Vonlaiphai road, 37 miles, width 3 feet	1,987	
(7) Re-aligning, cutting and surveying a 2-foot trace from Lungleh to Demagiri, 27 miles	2,063	
	34,853	
(d) Expenditure on dak and inspection bungalows ...		23,076
The remainder was spent on improvements to existing roads		19,842

A brief description of the principal works is given below.

Production and Distribution.
Assam Trunk Road.

372. The Bolbola and Gara bridges, which were nearing completion at the close of 1900-1901, were completed during the year, the total expenditure on each bridge having amounted to Rs. 19,387 and Rs. 17,171, respectively. A further expenditure of Rs. 1,524 was incurred on the Krishnai bridge, bringing the total cost to Rs. 42,482. A portion of the road, 22,500 feet in length between the 70th and 75th miles, was raised at a cost of Rs. 6,392, and some bad portions in the 92nd to the 120th mile were sanded to a width of 10 feet at a cost of Rs. 1,350. Rupees 993 were expended in the collection of materials for 7 permanent bridges between Nokhla and Amlighat, estimated to cost Rs. 6,245. The Duria bridge in the 169th mile was completed during the year at a total cost of Rs. 16,097. The bridge consists of three spans of 30 feet with brick well piers and abutments, and iron superstructure. The estimate amounted to Rs. 16,885. Materials were collected for the construction of a permanent bridge of three central spans of 50 feet and two land spans of 30 feet each over the Bhogdoi river at Jorhat, estimated to cost Rs. 27,477.

373. An expenditure of Rs. 3,817 was incurred in raising the road between Tipling Ghat and Tengakhat. The estimate for the work amounts to Rs. 29,825. *Jaipur Road.*

374. The first 2¼ miles from Aijal have been widened to 14 feet. In the next 9¼ miles, about 1 mile has been widened to between 10 and 14 feet. The fourth mile is in progress. The total expenditure to the end of the year amounted to Rs. 29,896. *Aijal-Sairang cart-road.*

375. In the first 40 miles a great portion of the road passes through dense bamboo jungle; the road in these places has been widened to 6 feet. There is still a great deal of work to be done to widen the road to 6 feet throughout its length. The total expenditure to the close of the year amounted to Rs. 43,258. *Aijal-Falam road.*

376. The 2nd, 3rd, and part of the 4th mile have been widened to 6 feet. All bamboo jungle has been removed between Aijal and Tenzol. The total expenditure to the close of the year amounted to Rs. 67,678. *Aijal-Lungleh Road, 1st section.*

The suspension bridge at Tuichong (320 feet span) on the Demagiri-Lungleh road was re-erected and painted during the year at a cost of Rs. 2,629.

377. *Realigning and cutting a 2-foot trace from Lungleh to Demagiri.*—A trace, 2 feet wide, has been cut for about half the distance. When the trace has been cut out to 6 feet, it will enable the journey from Demagiri to Lungleh to be made in 3 days, instead of 4, as at present.

378. Rupees 1,040 were expended in the construction of a floating dak bungalow at Dikumukh. Five inspection bungalows were constructed at Theria in the Khasi and Jaintia Hills, Lakhema in the Naga Hills, and at Bangshi, Charan and Sansak in the Garo Hills. Two others at Dimapur and Kalaigaon were under construction. The latter building is to replace one destroyed by fire. *Dak and inspection bungalows.*

379. On the maintenance of Provincial roads, a sum of Rs. 5,33,026 was expended, as follows: *Provincial Roads.*

- (i) *Unmetalled cart-roads (including short metalled lengths aggregating 21·17 miles), 1,486·87 miles.*—Cost Rs. 2,31,165, or Rs. 155·47 per mile.
- (ii) *Metalled roads.*—Excluding 3·75 miles of metalled roads in the Shillong Cantonment and 21·17 miles of short metalled lengths of unmetalled roads, 98·50 miles of metalled roads were maintained at a cost of Rs. 1,10,655, or Rs. 1,123 per mile.
- (iii) The length of bridle-roads maintained was 1,777·60 miles, of which 1,216·60 miles were maintained by the Public Works Department and the Superintendent, Lushai Hills, at a cost of Rs. 80,153, or Rs. 65·88 per mile, and 561 miles were maintained by civil officers in the North Cachar Hills, the Khasi and Jaintia Hills, and the Naga Hills from Public Works Department funds at a cost of Rs. 16,333, or Rs. 29·11 per mile.
- (iv) The following metalled roads were maintained:

	Miles.
1. Gauhati-Shillong cart-road	52·50
2. Shillong-Dumpep road	17·25
3. Mauphlang branch road	9·00
4. Cherra circular road	1·00
5. Assam Trunk road and Strand road, Gauhati	16·00
6. Sylhet-Companyganj road, within Sylhet station	1·50
7. Rehabari station road	1·00
8. Branch road to P. W. D. Workshop, Dibrugarh	0·25
Total	98·50

Production
and Dis-
tribution.
Railways and
Tramways.

380. The only Provincial Railway open during the year was the Jorhat State Railway (gauge 2 feet, length 30 miles). The total capital outlay on the line up to the 31st December 1901 amounted to Rs. 9,01,038, the cost per mile being Rs. 30,034·6. The gross earnings for the year ending the 31st December 1901 amounted to Rs. 83,184, and the working expenses to Rs. 87,358, showing a loss of Rs. 4,174.

The Cherra-Companyganj State Railway (gauge 2 feet 6 inches, length 8 miles) was closed to traffic from the 25th March 1900 and finally abandoned from 15th October 1901. A quarry siding was, however, in use for some time during the year. The gross earnings were Rs. 2,829 and the working expenses Rs. 11,423, showing a loss of Rs. 8,594. The materials of the railway are being sold.

The Dibru-Sadiya Railway (metre gauge, length 77·50 miles) is worked by the Assam Railways and Trading Company, the Government guaranteeing a subsidy, for twenty years from the date of opening, equal, with the net earnings, to 5 per cent. of the paid-up capital, but not to exceed Rs. 1,00,000 in any year. The total capital outlay on this line up to the 31st December 1901 amounted to Rs. 82,00,747, the cost per mile being Rs. 1,05,816. The gross earnings for the year amounted to Rs. 9,28,578 and the working expenses to Rs. 4,55,271, giving a profit of Rs. 5·77 per cent. on capital.

The Tezpur-Balipara Railway (gauge 2 feet 6 inches, length 20·10 miles, is also worked by a Company, which receives a subsidy of Rs. 5,000 a year from the Tezpur-Local Board. The total capital outlay up to 31st December 1901 amounted to Rs. 4,87,240, the cost per mile being Rs. 24,362. The gross earnings for the year 1901 were Rs. 83,840, and the working expenses Rs. 66,942, showing with the subsidy a profit of Rs. 21,898, or a percentage of 4·49 on capital.

The most important railway in the Province is the Assam-Bengal Railway, which is not controlled by the Administration. The portion of the main line from Nazira to Lakwah (10·75 miles) was opened during the year. The hill section from Damcherra to Lumding, and the portion from Lakwah to Tinsukia were under construction. It was expected that the latter portion would be opened by the 31st December 1902, thus establishing through railway communication between Gauhati and Dibrugarh.

The extension of the Eastern Bengal State Railway to Dhubri was under construction.

Establish-
ment.

381. The total charges for Public Works Department establishment amounted to Rs. 4,61,473, including Rs. 6,957 debited to contribution works. For the execution of Imperial Military and Civil Works a charge of 23 per cent. on the cost of the work is made, the amount charged being Rs. 34,254. The expenditure on Local Fund establishment amounted to Rs. 67,406, including a sum of Rs. 12,696, at the rate of 2 per cent. on all Local Fund expenditure, on account of supervision and audit by the Public Works Department.

The remaining cost of establishment, *viz.*, Rs. 4,54,516, was debited to Provincial works, and amounts to a percentage of 36·8 on the cost of the works carried out. All the Imperial and Provincial works were supervised by the Executive Officers of the Public Works Department, except the works in the Lushai Hills, on which Rs. 1,46,273 were expended, which were carried out by the Superintendent with his district Public Works staff, and works amounting to Rs. 25,532, which were carried out in remote parts of the hill districts by Civil Officers. Local Fund Works to the value of Rs. 38,325 were executed by Public Works Department Officers, while the establishment under the Boards carried out works to the value of Rs. 5,39,880, the total Local Fund expenditure on works being Rs. 5,78,205.

CHAPTER V. Revenue and Finance.

(a) GROSS REVENUE.

382. The receipts and expenditure of the province during 1901-1902 were as follows :*

Receipts.

Heads of Accounts.	1901-1902.				Heads of Accounts.	1901-1902.			
	Imperial.	Provincial.	Local.	Total.		Imperial.	Provincial.	Local.	Total.
1	2	3	4	5	1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
A.—PRINCIPAL HEADS OF REVENUE.					E.—MISCELLANEOUS CIVIL RECEIPTS.				
I.—Land Revenue...	12,70,382	48,96,897	...	61,67,279	XXII.—Receipts in aid of superannuation.	12,303	5,133	...	17,436
II.—Opium ...	4,09,849	...	...	4,09,849	XXIII.—Stationery and Printing.	1,961	1,890	...	3,851
IV.—Stamps ...	2,37,014	7,11,041	...	9,48,055	XXV.—Miscellaneous...	6,736	24,740	19,522	50,998
V.—Excise ...	21,24,773	7,08,258	...	28,33,031					
VI.—Provincial Rates ...	...	...	6,62,595	6,62,595	Total E.—Miscellaneous	21,000	31,763	19,522	72,285
VIII.—Assessed Taxes	1,49,541	1,49,541	...	2,99,082					
IX.—Forests ...	2,56,481	2,56,482	...	5,12,963	H.—RAILWAYS.				
X.—Registration ...	27,595	27,595	...	55,190	XXVI.—State Railways (Gross Receipts).	20,92,758	86,138	...	21,78,896
XI.—Tributes ...	50,375	...	...	50,375					
Total A.—Principal Heads of Revenue.	45,26,011	67,49,814	6,62,595	1,19,38,419	K.—BUILDINGS AND ROADS.				
B.—INTEREST.					XXXI.—Military Works	6,391	...	...	6,391
XII.—Interest ...	403	1,063	...	1,466	XXXII.—Civil Works...	...	1,01,533	1,05,912	2,07,445
D.—RECEIPTS BY CIVIL DEPARTMENTS.					Total K.—Buildings and Roads.	6,391	1,01,533	1,05,912	2,13,836
XVIA.—Law and Justice—Courts of Law.	...	76,790	...	76,790	ADJUSTING HEADS.				
XVIB.—Law and Justice—Jails.	...	30,942	...	30,942	Contribution between Provincial and Local.	...	4,404	2,42,913	2,47,317
XVII.—Police ...	...	1,14,408	74,254	1,88,662					
XVIII.—Marine ...	...	38	...	38	Grand total	66,46,562	72,66,824	11,67,842	1,50,81,228
XIX.—Education ...	...	62,537	466	63,003					
XX.—Medical ...	...	7,394	...	7,394					
XXI.—Scientific and other Minor Departments.	...	...	62,180	62,180					
Total D.—Receipts by Civil Departments.	...	2,92,109	1,36,900	4,29,009					

* Details of these figures by Major Heads will be found in the civil estimates of the province for 1902-1903 and 1903-1904, respectively.

Revenue and Finance.

Expenditure.

Heads of Accounts.	1901-1902.				Heads of Accounts.	1901-1902.			
	Imperial.	Provincial.	Local.	Total.		Imperial.	Provincial.	Local.	Total.
1	2	3	4	5	1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.
A.—DIRECT DEMANDS ON THE REVENUE.					E.—MISCELLANEOUS CHARGES.				
1.—Refunds and Drawbacks.	5,929	10,566	602	17,097	27.—Territorial and Political Pensions.	8,142	...	...	8,142
2.—Assignments and Compensations.	41,230	...	...	41,230	29.—Superannuation Allowances and Pensions.	626	1,12,616	...	1,13,242
3.—Land Revenue ...	...	9,41,848	...	9,41,848	30.—Stationery and printing.	...	1,12,044	828	1,12,872
6.—Stamps ...	9,729	29,186	...	38,915	32.—Miscellaneous ...	11,791	25,619	22,066	59,476
7.—Excise ...	8,661	2,887	...	11,548	Total E.—Miscellaneous Charges.	20,559	2,50,279	22,894	2,93,732
8.—Provincial Rates...	...	...	2,490	2,490	F.—FAMINE RELIEF AND INSURANCE.				
10.—Assessed Taxes ...	619	620	...	1,239	33.—Famine Relief ...	...	...	7,478	7,478
11.—Forests ...	1,64,556	1,64,557	...	3,29,113	H.—RAILWAY REVENUE ACCOUNT.				
12.—Registration ...	16,456	16,457	...	32,913	38.—State Railways—Working Expenses.	16,96,273	92,355	...	17,88,628
Total A.—Direct Demands on the Revenue.	2,47,180	11,66,121	3,092	14,16,393	39.—Guaranteed Companies.	...	...	...	...
B.—INTEREST.					40.—Subsidized Companies.	...	2,049	...	2,049
13.—Interest on ordinary debt.	...	869	...	869	Total H.—Railway Revenue Accounts.	16,96,273	94,404	...	17,90,677
14.—Interest on other obligations.	450	...	...	450	K.—OTHER PUBLIC WORKS.				
Total B.—Interest ...	450	869	...	1,319	44.—Military Works ...	1,43,070	...	...	1,43,070
C.—POST OFFICE, TELEGRAPH AND MINT.					45.—Civil Works ...	45,924	17,59,977	6,48,355	24,54,256
15.—Post Office ...	...	7,527	41,386	48,913	45A.—Construction of Railways charged to Provincial or Local Revenues.	...	—5,028	...	—5,028
D.—SALARIES AND EXPENSES OF CIVIL DEPARTMENTS.					Total K.—Other Public Works.	1,88,994	17,54,949	6,48,355	25,92,298
18.—General Administration.	55,107	2,85,877	2,801	3,43,785	N.—CAPITAL OUTLAY ON RAILWAYS.				
19A.—Law and Justice—Courts of Law...	...	6,19,750	527	6,20,277	48.—State Railways ...	70,47,915	...	...	70,47,915
19B.—Law and Justice—Jails ...	...	1,54,740	...	1,54,740	ADJUSTING HEADS.				
20.—Police ...	...	17,21,709	665	17,22,374	Contribution between Provincial and Local.	...	2,42,913	4,404	2,47,317
21.—Marine ...	...	94,132	...	94,132	Grand total	93,23,984	71,20,402	11,47,837	1,75,92,223
22.—Education ...	...	2,35,819	2,24,208	4,60,117					
23.—Ecclesiastical ...	21,630	...	...	21,630					
24.—Medical ...	...	2,81,679	1,33,505	4,15,184					
25.—Political ...	...	1,95,654	...	1,95,654					
26.—Scientific and other Minor Departments.	45,876	13,980	58,432	1,18,288					
Total D.—Salaries and Expenses of Civil Departments.	1,22,613	36,03,340	4,20,228	41,46,181					

Expenditure—concluded.

Revenue and Finance.

	1900-1901.			1901-1902.			1901-1902, compared with 1900-1901.			
	Receipts.	Expenditure.	Net receipts + or net expenditure —.	Receipts.	Expenditure.	Net receipts + or net expenditure —.	Increase of revenue.	Decrease of revenue.	Increase of expenditure.	Decrease of expenditure.
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I.—(a) Principal Heads of Revenue.	1,21,32,524	15,10,645	+ 1,06,21,879	1,19,38,419	14,16,393	+ 1,05,22,026	...	1,94,105	...	94,252
II.—Departmental Heads—										
(b) Interest ...	1,545	976	+ 569	1,466	1,319	+ 147	...	79	343	...
(c) Post Office, etc.	...	49,507	—49,507	...	48,913	—48,913	...	...	...	594
(d) Civil Departments.	4,58,046	39,64,287	—35,06,241	4,29,009	41,46,181	—37,17,172	...	29,037	1,81,894	...
(e) Miscellaneous	68,187	3,24,346	—2,56,159	72,285	2,93,732	—2,21,447	4,098	...	...	30,614
(f) Famine Relief and Insurance.	...	...	...	...	7,478	—7,478	...	...	7,478	...
(g) Construction of Railways.	...	...	...	...	...	...	...	...	...	...
(h) Railway Revenue Account.	19,11,880	16,02,370	+ 3,09,510	21,78,896	17,90,677	+ 3,88,219	2,67,016	...	1,88,307	...
(k) Other Public Works.	2,02,314	29,59,985	—27,57,671	2,13,836	25,92,298	—23,78,462	11,522	...	...	3,67,687
(n) Capital Outlay on Railways.	...	90,68,316	—90,68,316	...	70,47,915	—70,47,915	...	...	...	20,20,401
Adjusting Heads...	2,50,579	2,50,579	...	2,47,317	2,47,317	...	...	3,262	...	3,262
Total Departmental Heads.	28,92,551	1,82,20,366	—1,53,27,815	31,42,809	1,61,75,830	—1,30,33,021	2,82,636	32,378	3,78,022	24,22,558
Grand total ...	1,50,25,075	1,97,31,011	—47,05,936	1,50,81,228	1,75,92,223	—25,10,995	2,82,636	2,26,483	3,78,022	25,16,810

The figures shown against "State Railways" in the above statement include the receipts and expenditure of the Assam-Bengal Railway, which are not audited in this province. The expenditure shown against Civil Works includes outlay on works in charge of Civil Officers.

(b) IMPERIAL REVENUE AND FINANCE.

SECTION 1.—LAND REVENUE.

383. There was a decrease in the receipts under this head of Rs. 47,418, as compared with the preceding year. The circumstances which affected the collections of "Ordinary" and "Miscellaneous" land revenue have been discussed in Chapter II of this report. In expenditure, against land revenue, there was a decrease of Rs. 44,897, of which Rs. 32,581 occurred under "Charges of district administration," being partly attributable to the absence of senior officers on leave. A saving of Rs. 11,000 was effected by the amalgamation of revenue and judicial process-serving establishments, and there was a decrease of Rs. 6,000 under "Charges on account of land revenue collections," owing to short collections, and consequent short payment of commission to mauzadars, in the Assam Valley. Under "Survey and Settlement" there was a reduction of Rs. 5,000.

Imperial revenue and finance.

(c) SOURCES OF IMPERIAL REVENUE OTHER THAN THE LAND.

SECTION 2.—OPIUM.

384. The cost price of opium sold in the Excise Department is credited to this head, which shows a decrease of Rs. 29,256, as compared with the preceding year, owing to a decrease of 86 maunds in the quantity of opium issued from the treasuries.

Sources of Imperial revenue other than the land.

Revenue and Finance.

SECTION 3.—EXCISE.

[For detailed figures, see appendices to the Excise Administration Report of Assam for 1901-1902 and also tables 2, 3, 5, 8 and 16, Part V, of the "Financial and Commercial Statistics of British India."]

Total revenue demand and incidence of the demand.

385. The total excise revenue demand of the province for the year 1901-1902 was Rs. 28,83,238, a decrease of Rs. 49,341 as compared with the preceding year. Of this decrease, the Surma Valley was responsible for Rs. 48,385 and the hill districts for Rs. 1,204. The revenue derived from country spirits increased by over Rs. 38,191; but there was a decrease of Rs. 81,144 in the revenue from opium. The incidence of the revenue demand per head of population (excluding the Lushai Hills and Manipur) was eight annas.

Revenue demand under each head of excise.

386. The total demand of Rs. 28,83,238 was derived from the different heads in the following proportions :

Country spirits 25.53 per cent., rum 1.15, imported wines 0.60, *tari* 0.01, *pachwai* 0.03, *charas* 0.06, *ganju* 13.83, opium 59.77, miscellaneous 0.02 per cent.

Demand, collections, remissions, and outstanding balances.

387. Of the total demand, Rs. 2,38,015 was realised in advance in 1900-1901. The total collections, including Rs. 716 arrears and Rs. 1,94,850 of advance collections for 1902-1903, amounted to Rs. 28,33,034, against a total collection of Rs. 29,33,390 in the previous year. The demand for the year and the advance collections for 1902-1903 both show a decrease. Rupees 6,945 were remitted during the year, chiefly on account of country spirits and *ganja*. The outstanding balance at the close of the year was Rs. 3,267, of which a sum of Rs. 1,462 was due from Cachar alone.

Expenditure.

388. The total expenditure of the Excise Department was Rs. 11,546, against Rs. 13,114 in 1900-1901. Under the orders of the Board of Revenue, Lower Provinces, no refunds on account of short weight of opium were allowed. Rewards in excise cases decreased by Rs. 585. The small preventive force of one Inspector, 2 Sub-Inspectors, and 5 chaprasis, which was sanctioned by the Chief Commissioner in September 1900, was entertained during the year, and this caused an increase of Rs. 5,348 in expenditure. A sum of Rs. 1,700 was paid on account of rewards in opium cases and debited against the budget of the Opium Agent, Bihar.

Settlement for the ensuing year.

389. The total number of shops sanctioned for settlement for the year 1902-1903 is 1,426. Of these, 1,276 have been settled at a total license fee of Rs. 11,64,018.

Country spirits.

390. Of 224 country spirit shops sanctioned for settlement during the year under review, 218 were settled. In 1900-1901, 217 shops were settled out of 224 sanctioned. The total revenue demand was Rs. 7,35,775, against Rs. 6,97,584 in the preceding year. The increase was contributed by the districts of Goalpara, Kamrup, Nowgong, and Lakhimpur, the remaining districts showing a decrease. In Lakhimpur, the revenue rose from Rs. 1,56,531 to Rs. 2,17,948, the result of keen competition between rival *abkars*. The largest decrease (Rs. 12,716) occurred in Sylhet, and was due to a strong combination among the influential *Shahas*, who practically monopolise the excise business of the district, and are strong enough to keep off outside competition. In Cachar, there was a decrease of Rs. 10,282, which was due mainly to the closing of two important shops in the North-Cachar Hills. Decrease in the railway population had reduced the demand. The incidence of the country spirit revenue per head of population (the Lushai Hills and Manipur being excluded) was 2 annas 1 pie.

Of the total demand of Rs. 7,35,775, a sum of Rs. 1,14,503 was realised in advance in the year 1900-1901. The total collections of the year include Rs. 6,15,898 of current, Rs. 20 of arrear, and Rs. 86,896 of advance collections for 1902-1903, the aggregate being Rs. 7,02,814, against Rs. 6,95,997 in the preceding year. A sum of Rs. 5,190 was remitted. Of this amount, Rs. 3,500 were remitted in connection with the temporary closure and ultimate transfer of site of two shops in Darrang, the lessees of which suffered considerable loss owing to a riot. Their shops were looted and business was suspended for some time. There was an outstanding balance of Rs. 184 at the close of the year.

Rum.

391. The total revenue demand on rum was Rs. 4,269, against Rs. 3,537 in the preceding year. Of this, a sum of Rs. 796 was collected in advance in 1900-1901. The total collections, including Rs. 354 collected in advance for 1902-1903, were Rs. 3,683. A sum of Rs. 144 was remitted. One wholesale and fifteen retail licenses were sanctioned for the year, and of these one wholesale and eleven retail licenses were issued.

Imported liquors.

392. The total revenue demand on account of imported liquor licenses of all descriptions was Rs. 17,369, against Rs. 22,995 in the preceding year, the decrease

being due to the decline in value of the North Cachar imported liquor shops. Of the total demand, a sum of Rs. 1,638 was collected in advance in 1900-1901. The total collections, including Rs. 3,229 collected in advance for 1902-1903, amounted to Rs. 19,077, against Rs. 19,569 in the preceding year. There was an outstanding balance of Rs. 1,798 at the end of the year, due mostly to arrears in Cachar. Rupees 183 were remitted. Ninety-four licenses (wholesale 32, railway refreshment-rooms 2, hotel or public house 9, dining car 1, and general shop retail 50) were sanctioned for the year, of which 86 of all kinds were actually settled.

393. The revenue demand from *tari* was Rs. 417, and the total collection Tari. Rs. 251. A balance of Rs. 222 was outstanding at the end of the year. Ten licenses (2 fermented and 8 unfermented) were sanctioned and 9 were settled.

394. The revenue demand from *pachwai* was Rs. 876, of which a sum of Rs. 177 Pachwai. was collected in advance in 1900-1901. The total collections amounted to Rs. 860, and included Rs. 60 of arrear and Rs. 98 collected in advance for 1902-1903. Eleven licenses were sanctioned and seven were settled.

395. As in the preceding year, one license for the sale of *bhanga* was issued in Bhanga. Cachar. The revenue demand for the year and the advance collections for 1902-1903 were unchanged.

396. As in the preceding year, three licenses were issued in the district of Cachar. Charas. The total demand was Rs. 1,740 (license fees Rs. 1,310 and duty Rs. 430), of which a sum of Rs. 218 was realised in advance in 1900-1901. The total collections for the year, including a sum of Rs. 54 realised in advance for 1902-1903, amounted to Rs. 1,576, against Rs. 2,525 in the preceding year.

397. The number of *ganja* shops sanctioned for settlement was 299, of which Ganja 293 were actually settled. In the preceding year 291 only were settled. The total revenue demand on account of both license fees and duty was Rs. 3,98,910. The revenue derived from license fees was Rs. 2,16,891, and that from duty Rs. 1,82,019, the figures for the preceding year being Rs. 2,02,755 and Rs. 1,96,193, respectively. In the Sylhet district, several shops remained unsettled and several licenses were surrendered.

Of the total demand of Rs. 3,98,910, a sum of Rs. 34,015 was realised in advance in 1900-1901. The collections amounted to Rs. 3,93,126, which included Rs. 47 of arrears, and Rs. 29,687 collected in advance for 1902-1903. A sum of Rs. 1,245 was remitted, of which Rs. 616 were due from a lessee of Lakhimpur, who left the province. Rupees 338 were outstanding at the close of the year. The total consumption of hemp drugs was 564 maunds 25 seers 8 chattacks, against 644 maunds 39 seers 2 chattacks in the preceding year. There was, however, an increase of nearly 45 maunds in the issue of *chur ganja*, which pays the highest duty and contains the least proportion of waste material.

The decrease in consumption, coupled with the increase in the license fees, was not satisfactory. It was marked in all districts, except Nowgong and the Naga Hills. The decrease in consumption in Cachar and Sibsagar was doubtless to some extent due to the completion of work on the Assam-Bengal Railway. In Sylhet, it was attributed to the scarcity which prevailed in the early part of the year. The decrease in Sibsagar is also explained by the large issues of *ganja* in the preceding year, which were not exhausted, illicit trade in foreign *ganja*, and illicit cultivation of *ganja*.

398. The total number of opium shops sanctioned for 1901-1902 was 798, of which Opium. 775 were actually settled, the others remaining temporarily closed for want of adequate bids. The total revenue demand for the year for opium, both license fees and duty, was Rs. 17,23,238, against Rs. 18,04,382 in the preceding year. The demand under license fees increased by Rs. 16,950, while that under duty decreased by Rs. 98,094. The increase under license fees was contributed to by all districts, except Cachar, Sylhet, the Naga Hills, and the Garo Hills, while all districts, except the Naga Hills and the Khasi Hills, shared in the decrease under duty. It would appear that much of the value of a license to sell opium lies in the facilities it affords for trafficking in the contraband article.

The total collections amounted to Rs. 17,11,002, against Rs. 18,05,140 in the preceding year, and included Rs. 58 on account of arrears, Rs. 467 collected in excess, and Rs. 74,522 collected in advance for 1902-1903. A sum of Rs. 183 was remitted, and a balance of Rs. 721 was outstanding at the close of the year. The incidence of opium revenue per head of population (the Lushai Hills and Manipur excluded) was 4 annas and 9 pies. The total quantity of opium issued from the treasuries was 1,205 maunds 17 seers 7 chattacks, against 1,291 maunds 19 seers 4 chattacks in 1900-1901. The consumption of treasury opium has steadily decreased

Revenue and Finance.

since 1899-1900, and the figures for 1901-1902 are the lowest on record. Different explanations of this have been put forward, but it seems probable that smuggling is the chief cause of the general decrease.

Offences against the excise laws.

399. The total number of cases brought to trial during the year was 378, against 377 in the preceding year, the majority of the cases being of little importance. Seventy-nine per cent. of the persons arrested were convicted. The total amount of fines imposed was Rs. 6,902, of which Rs. 6,094 were realised.

Working of the excise preventive establishment.

400. The Inspector and the two Sub-Inspectors appointed to the preventive staff commenced their duties in June 1901. Their instructions were to travel in plain clothes and to confine their attention strictly to smuggling and other serious offences against the opium laws.

The preventive staff for a long time had no results to show, but towards the close of the year two important cases were detected by them. A Panjabi at Lumding was found in possession of one seer and twelve chattacks of opium grown in the Manipur State. He was tried by the Deputy Commissioner of the Naga Hills, and was sentenced to six months' imprisonment and to pay a fine of Rs. 500. The same sentence was passed in the other case, in which a native of Sylhet was found in possession of three seers and four tolas of opium, which the Superintendent of the Patna Factory declared to be contraband and adulterated.

SECTION 4.—STAMPS.

[For detailed figures, see statements appended to the Stamp Report of Assam for 1899-1900 to 1901-1902, also Tables 12-14, Part VII, of the "Financial and Commercial Statistics of British India."]

Receipts.

401. The gross revenue derived from stamps during 1901-1902 was Rs. 9,48,055, against Rs. 9,46,531 in the previous year. The receipts under the Indian Stamp Act decreased by over Rs. 5,000, while there was an increase of nearly Rs. 7,000 in the receipts under the Court Fees Act. Of the increase under the Court Fees Act, the bulk occurred from the sale of court-fee stamps in Sylhet, the increase from this head alone in that district amounting to Rs. 7,649. The falling off in the receipts under the Indian Stamp Act occurred mainly in the districts of Cachar, Sibsagar, and Kamrup. The decrease in Kamrup was largely due to the diminished sale of document stamps or contracts with the Assam-Bengal Railway.

Penalties under the Stamp Act realised by Civil Courts and Collectors amounted to Rs. 1,932 and Rs. 2,168, respectively, against Rs. 2,108 and Rs. 1,955 in the previous year. The provisions of the Stamp Law are now enforced with greater strictness.

Charges.

402. The total charges of the department, excluding cost of stamps and plain paper supplied from the central depôt, but including refunds, amounted to Rs. 24,595, a decrease of Rs. 1,173 as compared with the previous year. This decrease occurred under "Refunds," a sum of only Rs. 4,973 having been refunded, as compared with Rs. 6,199 in 1900-1901.

Prosecutions.

403. The number of prosecutions fell from 54 in 1900-1901 to 40 during the year under report.

SECTION 5.—INCOME-TAX.

[For detailed figures, see statements appended to the Income-Tax Report of Assam for 1899-1900 to 1901-1902; also Tables 2, 3, 6, and 7, Part VIII, of the "Financial and Commercial Statistics of British India."]

404. The number of persons finally assessed to income-tax during the year was 8,295, of whom 1,052 were Government servants. The final demand was Rs. 3,19,287, of which Rs. 20,320 were due on account of penalties and arrears. The net revenue amounted to Rs. 2,98,673, an increase of Rs. 1,507, as compared with the previous year. There was a decrease in the receipts under Part I, but this was more than counter-balanced by increased receipts under Part IV. The increase under Part IV occurred mainly in the district of Cachar, where collections increased from Rs. 11,879 to Rs. 15,420.

The year 1901-1902 closed with an outstanding balance of Rs. 18,848 under all Parts of the Act. The districts of Cachar, Lakhimpur, Sylhet, and Sibsagar showed the largest amounts uncollected, *viz.*, Rs. 5,740, Rs. 5,499, Rs. 3,194, and Rs. 2,583, respectively. The Deputy Commissioner of Sibsagar attributed his arrears in part to an outbreak of fever which occurred during the latter part of 1901, and which rendered it difficult to collect. This explanation does not appear to be conclusive. In Darrang, Kamrup, and Goalpara collections were good, particularly in the last named district, which realised all but Rs. 100 out of a demand of Rs. 28,919.

The following table shows in an abstract form the collections under the several sources separately, excluding penalties and fines : *Revenue and Finance.*

		Number of assessees.	Amount of tax.
			Rs.
Part I—			
Salaries, etc., paid by Government	...	1,052	46,999
Ditto, local authorities	...	82	1,056
Ditto, companies, section 9 (1)	...	1,722	1,00,834
Ditto, companies, section 9 (2)	...	378	14,033
Part II.—Profits of companies	...	7	1,062
„ III.—Interest on securities	...	...	309
„ IV.—Other sources	...	5,474	1,33,043
Total	...	8,715	2,97,336
Total of previous year	...	8,690	2,95,581

405. The demands under the head "Penalties" amounted to Rs. 3,213, and Rs. 3,172 were realised during the year. No fines were imposed during 1901-1902. *Fines and Penalties.*

406. The refunds made during the year amounted to Rs. 640, against Rs. 429 in the previous year, an increase of Rs. 211. *Refunds.*

The expenditure incurred in the assessment and collection of the tax was Rs. 1,239.

SECTION 6.—FORESTS.

407. The causes of the decrease in receipts and expenditure under this head have been discussed in section 3, Chapter IV, of this report.

(d) REVENUE AND FINANCE OTHER THAN IMPERIAL.

SECTION 7.—PROVINCIAL REVENUES.

408. The present settlement came into force from 1st April 1897, and the result of the last five years' working is as follows :

Years.	Opening balance.	Receipts.	Expenditure.	Closing balance.
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
1897-98	9,43,729	71,61,804	76,17,602	4,87,931
1898-99	4,87,931	89,56,874	80,89,460	13,55,345
1899-1900	13,55,345	71,66,900	79,82,388	5,39,857
1900-1901	5,39,857	71,04,340	71,91,170	4,53,027
1901-1902	4,53,027	72,66,324	71,20,402	5,99,449

The Provincial revenues of 1901-1902 exhibit an increase of Rs. 1,62,484 over those of 1900-1901, which is due to two special contributions made by the Imperial Government,—one of Rs. 2,00,000 in aid of the provincial resources, the second of Rs. 38,611, to meet half the cost of re-arming the Military Police with Martini-Henry rifles.

Besides the above contributions, the Government of India sanctioned special assignments of 8 lakhs in 1897-98 and 18 lakhs in 1898-99 on account of special expenditure due to the earthquake and a further assignment of Rs. 3,75,000 a year for the four years ending 1901-1902 on account of the transfer of the South Lushai Hills to Assam. There were also certain small adjustments in 1899-1900, 1900-1901, and 1901-1902, the net result of which was an addition of Rs. 23,067 to the Provincial revenues. Notwithstanding these additions, the provincial balance has been reduced by Rs. 3,44,280 as the result of the five years' working of the current settlement.

SECTION 8.—LOCAL FUNDS.

409. The following statement shows the receipts and charges of Local Funds during 1901-1902 :

	Receipts. Rs.	Expenditure. Rs.
Incorporated Local Funds—		
Local Boards	11,04,387	10,54,504
Inland Labour Transport Fund	62,180	92,668
District Chaukidari Rewards Fund	1,275	665
Total	11,67,842	11,47,837
Excluded Local Funds—		
Municipal, Union, Station, and Town Funds	2,55,892	2,45,886
Cantonment Funds	17,037	15,755
Assam Williamson Education Fund... ..	4,170	6,345
Total	2,77,099	2,67,986

The aggregate transactions of all Excluded Local Funds during 1901-1902 resulted in a surplus of Rs. 9,113. The Shillong Cantonment showed an increase of about Rs. 5,000 in its receipts, as well as in expenditure, while the falling off in the receipts and expenditure of Municipal and other funds was mainly due to the fact that in 1900-1901 the Shillong Municipality received a special grant from Provincial revenues and incurred extra expenditure towards the improvement of the water-supply of the station.

SECTION 9.—ROAD CESSES.

410. The local rate, which is assessed on landed property in Assam under the Assam Local Rates Regulation, is applied to the construction and maintenance of roads and other communications, as well as to the promotion of education, medical relief, sanitation, the district post, and miscellaneous public improvements. The current demand of this rate for the year amounted to Rs. 6,62,115, against Rs. 6,68,638 in 1900-1901, showing a decrease of Rs. 6,523, or nearly 1 per cent. Local rates vary to a great extent with the land revenue, and there was consequently a decrease in the districts of Kamrup, Darrang, Nowgong, and Goalpara, amounting to Rs. 13,184, against which must be set off an increase of Rs. 6,661 in the other districts. The total demand, including arrears, amounted to Rs. 7,23,256, and the total collections to Rs. 6,62,595.*

SECTION 10.—EDUCATION CESSES.

(Nil.)

SECTION 11.—MUNICIPAL REVENUES.

411. The subject of municipal income and expenditure has been discussed in section 8, Chapter III, of this report.

* Revised figures.

CHAPTER VI.

Vital Statistics and Medical Services.

SECTION 1.—BIRTHS AND DEATHS.

[For detailed figures, see Statements I—X appended to the Sanitary Report of Assam for 1901, and Tables 2, 3, 4, 6, 7, 8, 9, 10, 11, and 12, Part XIII, of the Judicial and Administrative Statistics of British India.]

412. According to the census of 1901 the population of the areas under registration, excluding that of the selected areas of the hill districts, is 5,275,706, and the provincial ratios have been calculated on this figure. Areas of registration of births and deaths.

413. The registered birth-rate fell from 34·96 in 1900 to 33·98 in 1901, owing chiefly to a great decline in the number of births registered in the Sylhet district. The death-rate also declined from 30·64 to 27·85. In both the valleys, as well as in every district of the province, except Darrang, the birth-rate exceeded the death-rate. Goalpara showed the highest birth-rate and Darrang the greatest death-rate. Both the birth-rate and the death-rate in the Surma Valley were in excess of those in the Assam Valley. Statistics of births and deaths registered.

414. As usual, the rate of births reported and registered was everywhere (except at Barpeta) below the probable ratio as deduced from the number of women of child-bearing age. An extremely low birth-rate, *viz.*, 12·88, was reported from the town of Tezpur. The ratios for Silchar (20·20), Maulvi Bazar (21·36), Jorhat (22·08), Habiganj (23·30), and Mangaldai (23·91) are signs of incomplete registration. The registered birth-rate of Barpeta (47·71) is so much higher than elsewhere that the idea that women do resort from other districts to Barpeta for accouchement seems to be correct. The number of prosecutions under the Compulsory Registration Act, IV (B.C.) of 1873, was 107, and convictions were obtained in 90 instances. Statistics of births and deaths in compulsory registration areas.

415. The year 1901 was a very healthy one, the total recorded mortality having been only 27·85 per 1,000, against 30·64 in 1900. Deaths from cholera showed a considerable decrease. The number of cases of mortality from small-pox was more than three times that registered in 1900, and the large increase was due to several outbreaks in the Sylhet district. There was, as usual, a considerable amount of sickness in both valleys due to malarial fever, the net result being that the death-rate of the province almost equalled the average of the last sixteen years. *Kalá-ázár* has almost disappeared from the Goalpara district, and is now prevalent to a much less extent in Kamrup. It now only exists to any serious extent in the Nowgong and Darrang districts of the Brahmaputra Valley, but there also it is on the wane. Mortality from chief diseases.

Although prices ruled high during the year, the death-rate decreased, and it does not appear that the scarcity resulting from the bad harvest of 1900-1901 was so acute as to affect the general health of the people. The registration of births is so defective that no inference can be drawn as to the effect of prices on the birth-rate.

SECTION 2.—IMMIGRATION AND LABOUR INSPECTION.

[For detailed figures, see statements appended to the Report on Labour Immigration into Assam for 1901.]

416. Act I of 1882 was in force during a part of the year, but was repealed by the new Assam Labour and Emigration Act, VI of 1901, which came into force on the 9th March 1901. Introduction of the new Act and main changes in the law.

417. The labour force of the province, including labourers on tea gardens, in the oil refinery at Margherita, in coal mines, and in a few saw-mills in Upper Assam, decreased from 662,471 on 1st January to 644,758 on 31st December 1901. The number of additions (149,027) was considerably less than in 1900 (185,545), while the deductions were greater, the net result being a decrease of 17,713, or 2·6 per cent. The decrease is exhibited by all districts of the province, except Kamrup and Lakhimpur, and the increase in these two districts is very small. Statistics of labour force.

The number of Act labourers (*i.e.*, labourers engaged on contracts under Act I of 1882 or Act VI of 1901) fell from 130,437 to 108,861, all districts sharing in this decrease. Importation added only half as many persons to this class as during the preceding year.

There was a slight increase in the total number of non-Act labourers, their number at the close of the year being 535,897, as against 532,034 at the close of 1900. In the province, as a whole, the number of non-Act adults increased from 279,658

Vital Statistics and Medical Services.

to 289,521, but there was a considerable decrease in Cachar, due to the large number of coolies who left the tea gardens. The number of children decreased by 6,000—a result which is explained by a striking reduction in the number of children imported.

Distribution of the labour force.

418. Of the total labour force of the province, 40·84 per cent. is employed in the Surma Valley and 59·16 in the Assam Valley. With the decrease in the number of Act labourers and the increase among non-Act labourers, the percentage of Act population to the total labour force fell from 20·06 to 16·8. In the Surma Valley, the Act is falling more and more into disuse, and only 2·9 per cent. of the total Act force was employed in this valley.

Nationality and sex of the adult labour force.

419. Of late years importation from the Central Provinces has been largely on the increase, but the majority of the labourers still owe their origin to Chota Nagpur and the Sonthal Parganas. In sex they are almost equally divided, the percentage of females to the total number of adults being 50·79. Among Act labourers men preponderate, while in the non-Act population the number of women is somewhat in excess. Children form 38·21 per cent. of the total labour force.

Labour force and acreage under tea.

420. The area under tea cultivation increased from 337,327 acres to 338,186 acres. With the diminished labour force, however, the number of adult labourers per 100 acres of tea fell to 119, as against 123 in the preceding year.

Provincial figures of immigration.

421. The following statement gives particulars of all classes of coolies imported into the province for labour on tea and other estates during the past five years :

Class of labourers.	1897.	1898.	1899.	1900.	1901.
1	2	3	4	5	6
Act ... { Sardari adults ...	22,490	12,080	7,571	16,728	8,102
Contractors' adults ...	18,127	10,559	11,065	13,241	6,147
Non-Act adults ...	25,711	12,877	7,236	15,075	5,638
Total of Act and non-Act adults ...	66,328	35,516	25,872	45,044	19,887
Children ...	29,603	13,653	6,036	17,689	6,336
Grand total ...	95,931	49,169	31,908	62,733	26,223

The decrease in immigration is very striking. During 1900 recruitment was promoted by the existence of famine conditions in the recruiting districts, but its contraction in 1901 was not altogether due to a return of prosperity in the Central Provinces and the hill tracts of Bengal. The present depressed state of the tea industry must have discouraged the importation of fresh labour. The low prices obtained for tea in recent years—the result of over-production—has necessitated economy in the importation of coolies as well as in other directions. The opening out of new gardens and the extension of existing gardens have, to a certain extent, ceased, and the necessity for the importation of large numbers of new coolies for this purpose no longer exists. The decrease in importation may also be attributed to the more stringent provisions of the new Labour Act, which oblige recruiters to register coolies in their districts before withdrawing them, but from a report submitted by the Secretaries of the Tea Districts Labour Supply Association, it appears that recruiting during the season ending 31st March 1902 fell off by nearly 50 per cent., the number of importations during 1901-1902 being 11,227, against 21,513 in the previous season. There is, moreover, a remarkable decrease in the proportion of *arkati* coolies imported, for, while coolies of this class imported in the season 1900-1901 numbered 6,217, or slightly less than one-third of the total number imported, such coolies imported in 1901-1902 numbered only 1,644, or one-seventh of the total number of importations.

Nationality and sex of adult immigrants.

422. The Central Provinces and the hill districts of Bengal subscribed, in almost equal proportions, 72 per cent. of the total number of adults imported. Women were rather more numerous than men—an unexpected and rather curious circumstance.

Recruitment of Act labourers by sardars and contractors.

423. Of 14,249 Act coolies imported during the calendar year 1901, 8,102 were engaged by sardars and 6,147 by contractors (*arkatis*), these proportions being very similar to those of the previous year. The average number of recruits per sardar was 1·8, against 3·9 in 1900 and 1·4 in 1899. The number of certificates granted to sardars was slightly higher than that of 1900, 4,340, as against 4,243.

424. Sixty-nine deaths occurred among all classes of immigrants during transit between the port of embarkation and their destination in the Assam Valley, of which 48 were from cholera. There was very little cholera on the mail steamers during the year.

Vital Statistics and Medical Services.

425. In the Surma Valley, the Assam-Bengal Railway is now being largely used for the conveyance of coolies to tea gardens. In Sylhet, of 2,947 immigrants, only 803 made use of the river depôts, the remainder having passed through the district by means of the railway, while of a total number of 2,512 coolies imported into the district of Cachar, 1,536 coolies were imported by railway and 976 by steamer. In this area also the mortality among coolies in transit shows a considerable decrease, there having been no deaths *en route*, and only 2 deaths at the river depôts, against 26 and 42, respectively, in 1900.

Mortality at Dhubri and during transit on the Brahmaputra.

Transit of immigrants in the Surma Valley.

426. A debarkation depôt was opened from the 1st November 1901 at Gauhati, but has remained unused, as no coolies have as yet been sent up to Nowgong, Sibsagar, and Lakhimpur by train. The line will probably be put to more use for this purpose when through communication is open to Dibrugarh. The proportion of coolies who passed through the depôts in 1901 was 95.7 per cent. of the total number of immigrants, as against 98.8 per cent. in 1900.

Debarcation depôts.

427. The number of complaints of fraud or irregularity in recruitment fell from 124 to 63, a decrease which must be attributed partly, if not mainly, to the decrease in the number of importations.

Fraudulent and irregular recruitment.

428. The number of labour contracts made in 1901, as compared with the preceding year, is given below :

Number of contracts made.

	1900.	1901.	Percentage of increase or decrease.
1	2	3	4
In the actual labour districts under section 118 of the Act...	8,223	6,855	-16.63
In the actual labour districts under section 121 of the Act...	15,738	17,597	+11.81
At Dhubri under section 112A of Act I of 1882 ...	6,432	1,447	-77.50
In the recruiting districts	23,265	12,802	-44.97
Contracts executed under section 492 of the Indian Penal Code	2,364	931	-60.61
Total	56,022	39,632	-29.25

Contracts were executed at Dhubri under section 112A of Act I of 1882 only for a period of three months, *i.e.*, January to March 1901, after which Act VI of 1901 came into force.

There was, generally, an increased use of the Labour Act as a basis for local contracts. But a contrary tendency is manifesting itself in some portions of the Assam Valley—the Golaghat and Jorhat subdivisions and the Darrang district—where Act XIII is gaining in favour upon the more elaborate enactment which has been specially designed for Assam. In Sylhet and Cachar the Labour Act has practically fallen into disuse as a basis for local contract. The Deputy Commissioner, Sylhet, remarks that Act VI of 1901 is not in favour with the planters of that district, and he is of opinion that there would be no serious objection to its abolition. In Cachar, Act XIII of 1859 has for some time been preferred by managers as sufficient for all the requirements of local contracting.

District.	Total for verification.	Total verified.	Verification of contracts.
Cachar	verification by an Inspector, and the total number of contracts verified, are given in the margin. The results show a considerable improvement, as compared with the previous year, the percentage of contracts verified having risen from 74.05 to 87.5. The number of contracts left unverified were for the most part executed after the date on which the garden was inspected, and shortly before the close of the year.
Sylhet	10	10	
Kamrup ... ..	...	...
Darrang	1,826	1,625	
Nowgong	377	270	
Sibsagar	2,520	2,271	
Lakhimpur	3,789	3,284	
Total	8,522	7,460	

430. The number of contracts cancelled under section 10 fell from 93 to 36, of which 14 were contracts of women who had come to the province unaccompanied by

Expiry and cancellation of contracts.

Vital
Statistics
and Medical
Services.

husband or guardian. Of the coolies whose contracts were cancelled, 34 were repatriated. Three hundred and fifty-nine contracts were cancelled under section 131 of the Act on account of permanent incapacity to labour, against 404 in 1900. Of the contracts cancelled on this ground, 259 were those of contractors' coolies and 95 of sardari coolies. The contracts of 122 newly-imported coolies were cancelled under section 131. In Sibsagar, the contracts of 4 coolies were cancelled by the Civil Surgeon at the request of a manager, under section 156 of Act VI of 1901. Twenty contracts were redeemed—3 in Darrang, 9 in Sibsagar, and 8 in Lakhimpur. In 1900, 24 contracts were redeemed and in 1899, 10. The number of contracts dissolved by mutual consent during 1901 was 2,175, against 2,533 in 1900. There was a considerable decrease in the number of contracts so cancelled in Sibsagar, but in Darrang, the number rose from 157 to 443, owing to the cancellation of 341 contracts on one tea estate in the Mangaldai subdivision.

In Cachar, 17 contracts were cancelled under section 200, the labourers concerned having actually suffered imprisonment for terms amounting in the whole to six months for desertion. The contracts of ten coolies of the Nonoi tea estate in Nowgong were cancelled under section 152 (1) (d) on account of the ill-treatment to which they had been subjected, compensation being at the same time paid to each of them.

The provisions of sections 130 and 192 of the Act, by which periods of absence through sickness for more than 30 days and of absence from work without reasonable cause, are added to the terms of contracts, are rarely resorted to by employers. Cases occurred in three districts only, *viz.*, Cachar, Sibsagar, and Lakhimpur, and of these the number in Cachar and Lakhimpur was wholly insignificant. In Sibsagar, there were 120 endorsements extending the term of contracts on account of absence from work.

Repatriation
of labourers.

431. It is interesting to note that of 457 coolies who were offered repatriation, 167 preferred to remain on the garden or in the labour district, only 286 electing to be sent to their homes.

Wages.

432. The following figures, which show the average monthly wage earnings of Act coolies, have been abstracted from the monthly wage returns which were rendered by planters during the last six months of the year :

Subdivision.	Average monthly cash wage, including allowances paid under sections 128(1) and 130(1), value of diet in lieu of such allowances and of rations provided under section 134(a), and also including <i>ticca</i> earnings.		Monthly average of payments made as bonus.	
	Men.	Women.	Men.	Women.
1	2	3	4	5
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
Cachar sadr	4 14 7	4 1 1	0 0 11	0 0 11
Hailakandi	4 11 4	3 13 11	...	...
North Sylhet	4 7 2	3 4 2	...	...
Karimganj	4 6 0	3 7 3	0 0 2	0 0 2
South Sylhet	4 8 5	3 6 2	0 0 3	0 0 5
Habiganj	5 2 8	4 1 2	0 0 2	...
Kamrup	4 14 0	3 10 1	0 0 5	0 0 4
Darrang sadr	4 10 7	4 2 9	0 2 6	0 1 9
Mangaldai	4 15 0	3 15 10	0 1 7	0 1 2
Nowgong	5 1 8	4 7 9	0 4 9	0 2 9
Sibsagar sadr	5 1 8	3 15 2	0 10 7	0 6 10
Jorhat	4 7 3	3 15 0	0 4 3	0 1 7
Golaghat	4 12 2	3 13 1	0 1 7	0 0 8
Lakhimpur sadr	5 12 6	4 9 3	0 5 6	0 4 5
North Lakhimpur	5 3 7	4 1 10	0 6 1	0 4 7
Average*	5 3 1	4 3 8	0 5 3	0 3 8

* The provincial averages are not the means of the district averages, but are calculated independently by dividing the average amount paid monthly to Act labourers throughout the province during the last six months of the year by the average number of Act labourers in employ each month. The provincial average is raised by the large proportion of labourers employed in the Lakhimpur district on higher wages than the ordinary.

Non-Act labourers consist generally of coolies whose agreements under the Act have expired, and who remain on the garden on contracts under Act XIII of 1859, or as free labourers. These coolies are employed on the same kind of work as Act labourers, and the tasks are also similar. Coolies giving an agreement under Act XIII receive a bonus, the fair rate of which is Rs. 12 for a man and Rs. 10 for a woman for each year of engagement. Their monthly rate of pay is generally the same as that of Act labourers in the first three years of their contract, *viz.*, Rs. 5 for men and Rs. 4 for women, while children are employed at a monthly rate of wage varying from Re. 1-8 to Rs. 4 according to age. Non-Act labourers, however, are able to earn more by *ticca* work than Act labourers, and accordingly enjoy a higher average pay. Many of them, by the time their contracts under the Act expired, have managed to acquire a piece of land, and, as non-Act labourers, they are generally allowed a considerable amount of leave to cultivate this land. Non-Act coolies, too, are generally employed in the well-paid posts on the gardens, as sardars, carpenters, chaukidars, etc., and may earn very high pay, amounting in some cases to Rs. 15 per month. The average daily rate of wage paid to free labourers differs in different districts and on different gardens, and ranges from 3 to 5 annas for men and from 2 annas 9 pies to 3 annas 6 pies for women. In the Brahmaputra Valley, Kacharis from the lower districts visit the upper districts to work on tea gardens during the greater part of the cold weather. These labourers generally make it a condition of their employ that they shall be allowed to earn *ticca* and manage to earn as much as Rs. 10 a month or even more.

Vital
Statistics
and Medical
Services.

433. The birth-rate upon gardens showed a satisfactory increase, and stands at 29.1 per mille of total and 93.2 per mille of adult female population. More careful registration was generally given as the cause of the rise. But the Deputy Commissioner, Lakhimpur, advances the opinion that the practice of procuring abortion is not nearly so prevalent as it used to be.

Birth-rate.

The birth-rate among tea-garden coolies, however, remains materially lower than the provincial birth-rate, which was 33.98 per thousand on the total population and 101.8 on the total adult female population.

434. The death-rate fell substantially, and was no more than 25.8 per mille of the whole labour force. The year was a healthy one, and the fact that there were fewer importations of new coolies, especially contractors' coolies, naturally exercised a favourable influence on the health of the labour force. At the same time, there can be little doubt that the improved health should be in part ascribed to the care which was taken to ensure that sanitary regulations were properly enforced.

Death-rate
for the year.

435. The death-rate amongst Act labourers was considerably higher than that of the labour force as a whole, being 37.2 per mille. But this represents a great improvement on the conditions of the preceding year, when the rate was as high as 43.5 per mille. Mortality decreased in all districts, except Cachar and Kamrup. In Cachar the ratio rose from 44.5 to 60.3, a large number of deaths being due to diarrhoea and dysentery. In Kamrup the ratio rose from 61 to 78.9, due to an outbreak of cholera on the Barduar tea estate in that district. The number of Act coolies in these two districts is, however, very small, and offers no fair basis for calculating a rate.

Death-rate
and causes of
death among
Act labour-
ers.

	1900.	1901.
Mean strength	133,398	119,649
Deaths from—		
Cholera ...	635	394
Diarrhoea ...	569	425
Dysentery ...	1,270	963
Malarial fever ...	492	443
Anæmia ...	864	547
Respiratory dis- eases.	842	675
Other causes ...	1,143	1,007
Total ...	5,815	4,454

The marginal statement compares the mean strength of the total Act labour force and the number of deaths from different diseases in 1900 and 1901. The figures show a considerable decrease in the number of deaths from cholera, diarrhoea, and dysentery. The death-rate among Act labourers from the effects of malarial poisoning shows a slight increase, and this feature is also observable in the mortality statistics of the province. The year 1901 was distinctly more malarious than 1900, and the provincial death-rate from malarial fever rose from 14.70 to 15.86 per mille.

436. The death-rate among non-Act adults (25.2 per thousand) shows a slight improvement as compared with the rate for 1900 (26.2). In Nowgong the rate increased from 31.7 to 38, a rate which, compared with other districts, is very high for non-Act labourers.

Deaths
among non-
Act labour-
ers.

437. The death-rate among children fell from 25.4 per mille in 1900 to 21.0 in 1901, due to the general healthiness of the year. Registration of infant mortality is, however, still very defective.

Death-rate
among chil-
dren.

438. The number of time-expired coolies treated as in-patients in Government dispensaries in 1901 was 654, as compared with 786 in 1900. Of 947 pauper and destitute coolies admitted into public dispensaries during 1901, 421 appear to have

Sick and
destitute
coolies.

Vital
Statistics
and Medical
Services.

drifted from tea gardens, 150 were railway coolies, and the remainder belonged to the cultivating and labouring classes.

Four shelters attached to dispensaries were maintained in Cachar and seven in Sylhet as refuges for sick and destitute coolies. Of 292 persons relieved at these shelters, 169 were from tea gardens, 89 were free labourers, and 34 came from the railway and other works. The condition of these waifs and strays is miserable in the extreme, and 55 of them died under treatment. But their numbers represent a negligibly small percentage on the total coolie population of these districts. The total expenditure incurred in connection with these shelters was Rs. 2,472-7-5.

Unhealthy
gardens.

439. The number of gardens on the unhealthy list in 1901 was 11 out of a total of 820 gardens, against 34 out of a total of 818 in 1900, the proportion being the lowest on record.

Offences in
which tea
planters or
garden coolies
were con-
cerned.

440. Of 976 complaints by managers of absence or desertion of coolies under Act XIII of 1859 or Act VI of 1901, only 38 per cent. resulted in conviction. Cases in which coolies were brought to trial for unlawful assembly, rioting or assault upon planters or their servants, fell from 54 to 39, and convictions from 213 to 187. There was, however, a considerable increase in general criminality amongst the tea-garden population, charges for theft or burglary rising from 197 to 315. In one district (Darrang), which contributes materially to the increase, serious riots occurred in April 1901, when the Bindukuri and Balipara *hâts* were looted by a number of tea-garden coolies and others in consequence of the high prices of paddy demanded by the traders. The disturbances at these two *hâts* alone produced 5 cases of rioting with 24 persons convicted, and 14 cases of theft with 28 persons convicted. Sixty complaints were made by coolies against garden managers, charging them with the use of force or intimidation in order to procure the renewal of contracts. Of these complaints, 33 occurred in the Karimganj subdivision of Sylhet and 22 in Nowgong. In Karimganj, 8 of the 33 complaints were filed as criminal complaints, the remainder being made in the form of miscellaneous petitions. Only one of the criminal petitions was brought to trial, and resulted in the case being discharged. The other cases were settled amicably out of court, the complainants not being desirous of going further with the proceedings after they had succeeded in getting free from their employment. Of the 22 complaints which were made in the Nowgong district, 18 merely sought for the grant of a certificate of discharge. In Nowgong two coolies were convicted and sentenced to imprisonment under section 182, Indian Penal Code, for having made false statements against a manager.

Desertions.

441. Over 18,000 labourers deserted, equivalent to 4.57 per cent. of the force. For unexplained reasons desertions were more numerous than in the preceding year.

Relations
between em-
ployers and
employed.

442. There was some improvement in the relations between employers and labourers. Trouble leading to criminal proceedings occurred in 39 cases, but the majority of these disturbances were of a very trivial nature. There were ten cases of rioting and assault, in which 85 coolies were concerned, of whom two were acquitted on trial, ten were fined, and the remainder were sentenced to terms of imprisonment.

Inspections.

443. At the beginning of the year 1901, there were 818 gardens on the register. In Sylhet one garden was closed and one new garden opened. In Darrang two gardens were closed, and four new gardens were opened in Lakhimpur. The total number of gardens in the register for the province at the end of the year was thus 820. Of these, 751 were liable to inspection as employing Act labourers, or more than 50 non-Act labourers. Of the gardens liable to inspection, 744 were inspected during the year.

Relations
between
planters and
neighbouring
villagers.

444. The relations between planters and the neighbouring villagers continue to be excellent, and only three cases of friction have been reported. In one case in Sylhet, a manager and his assistant were fined for damaging *sun-grass* on village land, which was wrongly claimed as belonging to the garden. The other cases were of little importance.

Colonisation
of ex-tea-gar-
den coolies.

445. The area of Government land settled direct with time-expired coolies in the province increased from 89,597 acres in 1900 to 96,993 acres in 1901. There is an increase in all districts, except Sylhet and Nowgong. In addition to land held directly under Government, coolies rent land from the gardens on which they are employed, and they also hold land as sub-tenants of raiyats or *mirasdars*.

Inland La-
bour Trans-
port Fund.

446. The receipts and disbursements of the Inland Labour Transport Fund in Bengal and Assam during the year 1901-1902 amounted to Rs. 77,030-7-2 and to Rs. 1,07,529-6-10, respectively. The substantial balance at the credit of the fund is being largely drawn upon, and some retrenchment of expenditure will be necessary. Receipts must tend to decrease with the growing inclination to substitute Act XIII of 1859 for Act VI of 1901.

SECTION 3.—MEDICAL RELIEF.

[For detailed figures, see statements appended to the Dispensary Report of Assam for 1899 to 1901, and also Tables 2-5, Part XIV, of the Judicial and Administrative Statistics of British India.]

[For detailed figures, re Lunatic Asylum, see statements appended to the Statistical Returns of the Tezpur Lunatic Asylum Report for 1901, and Tables 1-7, Part XV, of the Judicial and Administrative Statistics of British India.]

447. On the 1st January 1901 there were 128 dispensaries in the province, and this number was increased by 3 during the year, 8 new dispensaries having been opened and 5 closed. Of these, 18 were of the first class, 106 of the second and 7 of the third class. The following table gives an abstract of the work done in the dispensaries in 1901 and the three preceding years :

Year.	Number of dispensaries.	Number of patients treated.			Ratio per cent. of women to men.	Mortality per cent. among in-patients.	Number of beds available.	Operations.	Cost of diet per patient per diem.	Gross expenditure.
		In-patients.	Out-patients.	Total.						
1	2	3	4	5	6	7	8	9	10	11
1898	108	6,977	603,290	610,267	22.17	16.07	513	14,701	As. 2 P. 9	Rs. 2,37,910
1899	115	6,217	617,586	623,803	21.46	15.15	547	15,066	2 6	2,40,266
1900	128	6,369	696,221	702,590	19.49†	14.04	592	16,035†	2 8†	2,60,969†
1901	131*	6,544	734,801	741,345	21.30†	12.11†	597	15,771	2 11†	2,52,014†

* Including private dispensaries. | † Excluding private dispensaries.

The total number of persons treated in dispensaries, including private dispensaries, rose from 702,590 in 1900 to 741,345 in 1901. The number of in-patients shows a rise from 6,369 to 6,544, with a corresponding increase in the daily average number from 334 to 361. The death-rate among the in-patients, omitting the figures for pauper and destitute coolies, was only 9.87 per cent., a great improvement on previous years. Of the total number of patients treated in the 124 dispensaries maintained from the public funds, 472,715 were men, 100,704 women and 161,263 children. There was a large increase in the attendance of women as compared with the previous years, undoubtedly due to the improved accommodation offered to female patients by the institution of separate consulting rooms. The increase in the number of children treated is no doubt due to the same cause. Of the 728,143 out-patients of public dispensaries, 477,373 attended personally, while 250,770 were represented by friends. As regards the class of patients treated, 161 were Europeans, 278 Eurasians, 444,587 Hindus, 212,437 Muhammadans and 77,219 of "other classes." The percentage of population of the province applying for medical relief was 12.1, 11.4, and 10.2 during the years 1901, 1900, and 1899, respectively, which shows that dispensaries are gradually becoming more popular.

Of the 741,345 patients, 166,386 were treated for malarial fevers and 2,592 for *kalá-ásár*. There were 16,923 cases of dysentery, 14,535 of diarrhoea, 18,717 of dyspepsia, 113,372 of worms, and 149,561 of skin diseases. Rheumatic affections were treated in 25,573 cases and diseases of the respiratory system in 24,513 cases. No less than 7,707 cases of goitre were treated during the year. There were 551 cases of general and 17,146 of local injuries, and 185 persons were found to be suffering from leprosy.

The total number of surgical operations performed during the year was 15,689, against 16,035 in 1900, most of them of a trivial character. Of the 15,689 operations, only 678 were of an important nature.

The total income of the dispensaries was Rs. 2,55,592, against Rs. 2,64,238 in 1900. The total expenditure was Rs. 2,52,014, leaving a cash balance of Rs. 3,578 in hand, and the balance of invested capital rose from Rs. 46,517 to Rs. 47,033. The amount received as subscriptions fell from Rs. 20,627 to Rs. 18,692. This decrease was, to a great extent, due to the removal of the Assam-Bengal Railway offices to Chittagong. The receipts from paying patients amounted to Rs. 1,474, or less than one-half of the receipts of the previous year, which may be attributed to the fact that a smaller number of garden coolies are now treated in our dispensaries, as almost all garden managers are evincing greater care of their sick coolies than formerly, and garden hospitals have been much improved. The average cost of each diet was Rs. 0-2-11, against Rs. 0-2-8 in 1900. The average cost of each person treated was slightly over four annas.

Vital
Statistics
and Medical
Services.

Tezpur Lunatic
Asylum.

448. On the 1st January 1901, there were 114 lunatics confined in the Asylum at Tezpur, of whom 89 were men and 25 women. Thirty-two males and 2 females were admitted during the year; 10 were discharged as cured, 3 escaped and 5 died, leaving at the close of the year 130 patients (106 men and 24 women) under restraint. Of these, 41 men and 4 women were criminal lunatics.

Of the 34 admissions, 12 were ascribed to physical causes, 1 to a moral cause, and in the remaining 21 cases the causes were unknown. Of the 12 cases ascribed to physical causes, 4 are ascribed to *ganja*-smoking, 1 to fever, 1 to dysentery, 2 to epilepsy, 3 to heredity, and 1 to pneumonia.

Of the 5 deaths that occurred in the Asylum during the year, 2 were due to *kalá-úshár*, 2 to phthisis and 1 was a case of murder by another lunatic. The death-rate was 4·19, against 13·86 in the preceding year. This decrease of mortality is mainly due to the fact that no inmate of the Asylum fell a victim to bowel-complaints, which were the cause of about 50 per cent. of the deaths in 1900. Excluding the case of murder, the death-rate falls to 3·35.

Excluding the sum of Rs. 143-14-10 received from paying patients, the total expenditure was Rs. 13,420-14-5, as compared with Rs. 13,989-6-9 in 1900. The net profit from the manufacturing department was Rs. 1,608-2-9.

Lepet Asylum.

449. On the 1st January 1901, there were 10 lepers in the Asylum at Sylhet, and during the year 38 lepers and 9 relatives were admitted, making a total of 57 patients in all. Of these, 10 were discharged relieved, 21 discharged otherwise, 2 died, and 15 remained under treatment at the end of the year. The daily average number of lepers treated was 15·76 in 1901, as against 9·47 in 1900. The total expenditure was Rs. 2,579.

SECTION 4.—SANITATION.

Expenditure
on sanitary
works.

450. Excluding the towns of Hailakandi, Sunamganj, Karimganj, and Maulvi Bazar, which have no separate income of their own, the aggregate actual income of the municipalities, stations, unions, and towns in Assam during the year 1901 was Rs. 2,24,132. Of this sum, Rs. 1,79,468, or 80·07 per cent., against 62·51 per cent. in 1900, were spent on sanitary works; but, excluding the sum of Rs. 55,539 spent on roads and bridges, the total amount spent on direct sanitation was Rs. 1,23,929, or a proportion of 55·29 per cent. of the actual income, as compared with a ratio of 44·69 in the preceding year. No large sanitary work was undertaken.

Sanitary
Board.

451. The Provincial Sanitary Board held one formal meeting during the year, and at other times views were exchanged between the members of the Board by notes.

Village Sani-
tation.

452. The sanitary works executed in rural areas were chiefly confined to the improvement of water-supply by excavation and deepening of tanks and construction and repair of wells, and to executing repairs to *hdts* and drains.

SECTION 5.—VACCINATION.

[For detailed figures, see statements appended to the Triennial Vaccination Report of Assam for 1899-1900 to 1901-1902 and Tables 2-8, Part XVI, of the "Judicial and Administrative Statistics of British India."]

Vaccination
staff.

453. The average strength of the vaccination establishment in 1901-1902 was 251, of whom 19 were inspectors, 192 paid and 39 licensed vaccinators, and one an apprentice. The total number of operations done by all agencies for the last three seasons was, respectively, 272,265, 271,466, and 280,827, a record of steady progress. Of 280,827 operations performed in 1901-1902, 271,415 were primary and 9,412 secondary vaccinations.

Percentage
of successful
cases.

454. The paid and licensed vaccinators performed 232,860 primary and 8,892 secondary operations, of which 227,344 primary, or a percentage of 97·63, and 7,207 secondary, or a percentage of 81·05, were successful. A percentage of almost 98 for primary vaccinations was reported from most of the districts, the Lushai Hills showing the lowest percentage (91·50) and the Khasi Hills the highest (99·76). The dispensary establishments performed 22,921 primary and 520 secondary vaccinations, the percentage of success in the case of primary vaccinations being 96·86 and in that of re-vaccinations 81·73. Fifteen thousand six hundred and thirty-four operations, all primary, were performed by the tea-garden agencies, of which 15,028, or 96·12 per cent., were successful. In all, 272,206 operations were successful, showing that 44·46 per 1,000 of the population were protected, as compared with 42·03 in the preceding year.

455. Sixty-four thousand seven hundred and forty-seven infants under one year of age and 175,835 between one and six years were successfully vaccinated. The corresponding figures for 1900-1901 were 53,146 and 131,457, respectively. The number of children surviving under one year of age was 144,222, and the number successfully vaccinated was 46,961, the ratio protected thus being 32·6.

*Vital
Statistics
and Medical
Services.*
Percentage
according to
age.

456. Excluding 15,634 operations done by tea-garden agencies, 265,193 persons were vaccinated during the past season. Of these, 28,808 were inspected by Civil Surgeons, 127,238 by Inspectors of vaccination, against 29,995 and 148,280, respectively, in the preceding year. The percentages of operations found to be successful by Civil Surgeons were 96·26 primary and 75·87 secondary. The native inspectors reported percentages of 97·40 primary and 87·02 secondary successful operations. The vaccinators themselves reported 97·63 of their primary and 81·05 of their secondary vaccinations to have been successful.

Vaccinations
inspected.

457. The total cost of the Vaccine Department for the year 1901-1902 was over Rs. 22,000. Of this total, Rs. 8,673 were provided from Provincial, Rs. 12,011 from Local, and Rs. 781 from Municipal funds, and Rs. 1,311 were contributed by the Manipur State. The amount of contributions by Local Boards increased to an appreciable extent, owing to the number of paid vaccinators having been raised from 186 to 192. The average cost of each successful vaccination was 1 anna and 7 pies, or one pie less than that in 1900-1901.

Cost of Vac-
cination De-
partment.

458. The total number of tubes loaded with vaccine virus at the Animal Vaccine Dépôt, Shillong, during the year 1901-1902 was 395,317, as compared with 387,557 in 1900-1901 and 317,382 in 1899-1900. The quality of the lymph was generally excellent throughout the year. In the Darrang district the first supply turned out to be of an inferior quality, probably owing to the hot weather which prevailed at the time of the arrival of the lymph in that district. No complaints were received from any other district regarding the efficacy of the lymph. The total expenditure for the year 1901-1902 was Rs. 8,069, including Rs. 762 realised from the Manipur State, against Rs. 7,868 in 1900-1901, showing an increase of Rs. 201. The increase was due to the fact that more capillary tubes had to be purchased to meet the enhanced demand.

Lymph depot
at Shillong

CHAPTER VII.

Instruction.

*SECTION 1.—GENERAL SYSTEM OF PUBLIC INSTRUCTION.*Controlling
Agencies.

459. As already stated, the Education Department is controlled by the Director of Public Instruction, who is assisted by five Deputy Inspectors and twenty-three Sub-Inspectors of Schools. The Sub-Inspectors are employed chiefly in the inspection of primary schools, while Deputy Inspectors inspect both middle and primary schools, and, as a general rule, the Director reserves to himself the inspection of Arts colleges, high schools, and training and technical schools. Inspecting officers of a lower grade, called inspecting pandits, are employed by certain Local Boards in the inspection of lower primary schools.

Classification
of institu-
tions.

460. There are two Arts colleges in the province, both of which are second-grade colleges, that is, teach only up to the standard of the First Arts Examination of the Calcutta University. One of these, the Cotton College at Gauhati, is a Government institution; the other is a private college at Sylhet, founded and maintained by Raja Girish Chandra Rai, a leading zamindar of the district.

The schools imparting general education which are recognized by the Education Department are divided into three main classes, namely, high, middle, and primary schools. The course of instruction in each of these classes of schools is complete in itself, and independent of any of the other classes. The class of middle schools comprises two sub-classes, middle English and middle vernacular, and the primary class is also divided into upper primary and lower primary schools.

The high schools are those institutions which are recognised by the Calcutta University as capable of affording suitable preparation for the Entrance Examination. In these schools boys are taught from the earliest stage of their education up to the Entrance standard, but many leave school without completing the course. There are 23 high schools in the province, of which 10 are under Government management, the salaries of the teachers being borne entirely by the Education Department; seven are aided, that is to say, private institutions towards the expenses of which the Department makes a fixed contribution; and six are unaided private schools.

The course of instruction at middle English and middle vernacular schools is the same, with the exception that English is taught in the former and not in the latter. The following are the subjects taught in the middle vernacular course :

- I. Bengali or Assamese, comprising literature, grammar, and composition.
- II. History of India, Hindu, Muhammadan, and English periods.
- III. Geography, a general knowledge of the four quarters of the globe, with special knowledge of that of India, and map-drawing.
- IV. Arithmetic, general bazar and zamindari accounts, and mental arithmetic.
- V. Elements of Euclid (Book I), mensuration of plane surfaces and surveying.
- VI. Sanitary Science.
- VII. Elements of Natural Philosophy or of Natural Science.

The majority of the middle schools are private institutions aided by fixed grants, which they receive from the Local Boards. Out of 78 middle English schools, only two are Government schools, 57 are aided, and 19 unaided private schools. Out of 45 middle vernacular schools, 15 are maintained by the Education Department, four by Local Boards, 25 are aided, and one unaided.

The upper primary schools give instruction somewhat more advanced than that of the lower primary course, detailed below, and including part of Book I of Euclid as well as Mensuration, the History of Assam or Bengal (according as the school is in the Assam or the Surma Valley), Geography, and the elements of sanitation and agriculture. There is only one Government upper primary school; of the remainder, four receive aid from Provincial Funds, 92 from Local Funds, and seven are unaided.

The grant of aid by Local Boards to middle and upper primary schools is subject to rules which have been laid down. Before making any grant, the Local Board must satisfy itself that the school will be kept up, that it meets a recognised want, that the education provided is likely to be good, and that local subscriptions of a fixed minimum amount will be forthcoming.

It is also required that grants shall be given on the principle of strict religious neutrality, that the schools receiving them shall require some fee from their scholars, that the amount of each grant shall be limited with reference to the income of the school from local sources, that the schools shall be open to inspection, and shall keep proper accounts.

The lower primary schools or *pathsalas* are those in which the most elementary instruction is provided in the vernacular.

The subjects of the course are—

- I. (a) Handwriting and dictation.
- (b) Easy questions in grammar and explanations from vernacular text books.
- II. Arithmetic, the first four rules, simple and compound, after the European method; practice, simple and compound, after the native method; and mental arithmetic, native and European methods, on the above rules.
- III. Zamindari or mauzadari and mahajani accounts, and simple mensuration after the native method.

The Readers employed include a sanitary primer, and a book containing some simple lessons in elementary science.

The lower primary schools in the plains districts receive grants-in-aid from the Local Boards, which are paid to the teachers (*gurus*), the amounts being determined by one of three methods. In the more advanced and populous localities the grants are paid in the form of rewards according to the number of pupils who pass at a periodical test examination. In places where education has made less progress, and requires more encouragement, small fixed salaries are guaranteed to the teachers in addition to rewards for passing pupils, while in specially backward localities fixed salaries of larger amount, without rewards, are given. The number of lower primary schools in the province at the close of the year 1901-1902 was 2,672, and the number of pupils attending them 78,868. It is admitted that the quality of these schools leaves much to be desired. The teachers are generally inefficient, the salaries offered being much too low to secure the services of competent men. The average earnings of lower primary *gurus* do not exceed Rs. 6 a month. The details of a scheme for improving the system of primary education are now being worked out. The scheme includes a general increase in the pay of the teachers, conditional on increased efficiency, the abolition of the system of paying teachers according to the results of examinations, and the substitution of a scale of fixed salaries supplemented by capitation grants, the rates of salary and capitation grant being dependent on the results of inspections.

In the hill districts and among the Kachari population of Darrang and the Mikirs of Nowgong, education is promoted by different missionary bodies who receive grants-in-aid from the Education Department, or from the Local Boards for their schools. The most important of these enterprises is that of the Welsh Calvinistic Methodist Mission in the Khasi and Jaintia Hills, which receives a grant-in-aid of Rs. 6,000 a year. The Government High School and Training School at Shillong are also conducted by the Mission.

Liberal scholarships are granted by the Administration for the encouragement of education in all its stages. Those awarded on the results of the Entrance examination, value Rs. 10 to 25 a month, are called junior scholarships, and senior scholarships, value Rs. 15 to 25 a month, are granted to students passing satisfactorily the First Arts examination. The rules for the grant of these scholarships are designed to give special encouragement to students from the more backward parts of the province. Junior scholarships are tenable either at the Gauhati College or at the Sylhet private College or at affiliated colleges in Bengal according to the district to which the student belongs; senior scholarships are tenable at affiliated colleges in Bengal. In each of the four divisions of middle and primary schools the course of instruction terminates in a scholarship examination according to the results of which scholarships tenable at schools of a higher grade are awarded. The Middle English scholarships are worth Rs. 5 a month, the Middle vernacular Rs. 4, and the Primary scholarships Rs. 3 a month.

461. It remains to notice the scale of fees levied from the pupils attending ^{Fees.} different classes of schools. In the lower primary schools or *pathsalas* there are no fixed rules for fees; no pupil is prevented from reading by his inability to pay a fee, those who can pay do so, and those who cannot, do not. Often the fees are given in kind, the *guru* being supplied with food and other necessaries by the parents of the pupils. In upper primary schools, the rate of fees varies from 2 pice in the lowest to 7 annas in the highest class per month. In middle schools the fees vary in different schools and in different districts: the highest taken are 5 annas in the lowest and

Instruction. Re. 1-8 in the highest class; the lowest 1 anna in the lowest class and 2 annas in the highest. The scale of fees has to be fixed, if the school is an aided one, at the time when the grant-in-aid is settled. In high schools the fees vary from 12 annas in the lowest to Rs. 3 in the highest class.

Female education.

462. With the exception of a few schools, which teach up to the middle standard, female education in Assam is confined to elementary instruction in primary schools. There are *pathsalas* exclusively for females, managed on the same principle as boys' primary schools, and, in addition, a considerable number of girls are taught in boys' *pathsalas*. Many little boys also go to girls' schools. The Khasi and Jaintia Hills is the only district in which female education has made any considerable progress. The census returns for that district show that, out of every 1,000 females, 34 are literate, the corresponding figure for the province as a whole being 4.

Training schools and classes.

463. At the close of 1901-1902, there were in the province ten training schools for teachers, of which six were maintained by Government, three were aided and one unaided. There were also twelve classes for training *gurus* attached to Government middle schools; of these institutions, only two, the Government training schools at Gauhati and Shillong, are first-grade training schools, which train teachers (*pandits*) for middle and upper primary schools, the remainder preparing lower primary *gurus* only. In these schools stipends are allowed to the pupils, subject to the condition of their accepting employment as teachers at the end of the course.

The training schools and classes for *gurus* have not given satisfactory results, and it has lately been decided to abolish those which are under Government management, and substitute a system of training by apprenticeship in middle schools.

Technical education. Medical.

464. The most successful institution for technical instruction in the province is the Berry-White Medical School, which was opened in 1900, and had 70 students on its roll at the end of the year 1901-1902. It teaches up to the civil hospital assistant standard, the course occupying four years.

This school was established with the help of a legacy left by the late Brigade-Surgeon Berry-White, and is maintained by Government. The junior scholarships awarded on the result of the Entrance Examination are tenable at this school, and four additional scholarships, value Rs. 8 to Rs. 12 a month, and six free studentships, are annually awarded by Government to natives of the province studying at the school.

The senior scholarships awarded on the results of First Arts examination are tenable for five years at an approved Medical College.

Engineering.

465. The measures taken by the Administration to encourage engineering studies have hitherto been productive of disappointing results. Under the rules in force the senior scholarships awarded on the results of the First Arts Examination may be converted into engineering scholarships tenable for five years at the Sibpur Engineering College. Six scholarships tenable in the Mechanical Apprentice Department of the same College, the instruction in which leads up to Overseers' Certificates, are offered annually to natives of the province passing the Entrance Examination. There is one engineering school in the province, the Williamson Artizan School at Dibrugarh, which is maintained from the Williamson Trust Fund, which consists of the proceeds of a bequest left by the late Mr. Williamson, a tea planter of the Sibsagar district. At this school instruction is given up to the sub-overseer's standard. Two scholarships of the value of Rs. 10 each, tenable at the school, and paid from the same Fund, have been annually awarded by the Director of Public Instruction to candidates who have passed the Entrance examination in English and Mathematics. The working of this school has not been satisfactory, and it seems that the demand for men of the sub-overseer class in Assam is insufficient to justify the maintenance of a special provincial school of elementary engineering. It has accordingly been decided to close the school, and to devote the funds available from the Williamson bequest to the establishment of scholarships tenable at an efficient engineering college elsewhere.

Mechanical.

466. A number of stipends, varying in amount from Rs. 5 to Rs. 8 a month, are granted each year from the Williamson bequest, and from Provincial Funds, to boys entering the Railway workshops at Dibrugarh and Tezpur for training as mechanics. This arrangement has had good results in adding to the supply of skilled artizans, for whom there is a demand in the province.

Surveying.

467. There are three survey schools for the training of *mandals* and *patwaris*, which are controlled by the Director of the Department of Land Records and Agriculture.

Law.

468. There are law classes in Gauhati, Sibsagar, Sylhet, and Silchar, at which lectures are delivered in the course prescribed for the Pleaders Examination, the teachers being paid by fees.

469. Under this heading are included the *tols*, *maktabs*, and *madrasas*, which are not subject to departmental inspection, and have not adopted departmental standards of instruction. They are for the most part religious in their character, and they present no pupils at the ordinary departmental examinations. At the close of the year 1901-1902 there were 255 of these schools, with 5,557 pupils.

Instruction.
Sanskrit, Persian, and Arabic schools.

In the *tols*, instruction is given in the Sanskrit language and literature, and in the various systems of Hindu philosophy (*darsana*). In the *madrasas* and *maktabs*, the Arabic and Persian languages and Muhammadan law is taught, and the Koran is learned in the lower classes. Rewards are granted to a certain number of schools of this class which compete successfully at examinations held by the department.

470. There is one small school for European and Eurasian boys and girls at Shillong, with 10 pupils on its roll (on the 31st March 1902). It is managed by the Education Department. The Administration offers annually two scholarships of Rs. 15 a month each to children of indigent Europeans or Eurasians resident in Assam. These are tenable at any approved school.

Education of Europeans and Eurasians.

SECTION 2.—EDUCATION.

[For detailed figures, see statements appended to the Report on Public Instruction in Assam for 1901-1902, also tables 1-10, Part X, of the "Judicial and Administrative Statistics of British India."]

471. The number of educational institutions in the province decreased during the year by 32, and the number of pupils attending them by 1,780. The number of such institutions at the close of the year was 3,426, and pupils in attendance numbered 108,020. Public institutions diminished in number from 3,196 to 3,171, and the number of pupils fell from 104,308 to 102,463. The new Government second-grade Arts College was opened at Gauhati on the 17th June 1901. High schools showed an improvement of 236 pupils, the number of schools remaining stationary. Middle English schools showed a falling-off in number by 3 schools and 161 pupils, but the number of middle vernacular schools advanced by 3 and the pupils by 134. One girls' middle English school, with 135 pupils, was opened during the year. The number of middle vernacular schools for girls (4) remained unaltered, but pupils in this class of schools increased by 11. Primary schools showed a decrease of 29 schools and 2,330 pupils. The number of boys attending public institutions decreased from 95,596 to 94,050, and the number of females from 8,712 to 8,413. The percentage of male pupils to male population of a school-going age was 19.95 and of female pupils 1.88. Private institutions declined in numbers by 7, but the number of pupils increased by 65.

General Summary.

472. The total expenditure, direct and indirect, on instruction was Rs. 7,63,106. Direct expenditure increased from Rs. 5,42,862 to Rs. 5,67,381, and indirect expenditure, including Direction, Inspection, Scholarships, Buildings, Furniture, and Miscellaneous, fell off from Rs. 2,79,314 to Rs. 1,95,725. The falling off is chiefly accounted for by a decrease in expenditure on "Buildings." The distribution of expenditure during the past two years was as follows :

Financial.

Source from which expenditure on education was met.	1900-1901.		1901-1902.	
	Amount.	Proportion to total cost.	Amount.	Proportion to total cost.
1	2	3	4	5
	Rs.		Rs.	
Provincial Revenues	2,61,315	31.78	2,29,611	30.09
Local Board Funds	2,15,308	26.19	2,24,617	29.43
Municipal "	6,883	.84	7,823	1.03
Fees	1,50,621	18.32	1,63,137	21.38
Miscellaneous (including subscriptions and endowments).	1,88,049	22.87	1,37,918	18.07
Total	8,22,176	100	7,63,106	100

Instruction.

The income from fees shows a further increase of Rs. 12,516 over that of the year 1900-1901, and indicates that education in Assam is advancing on healthy lines. Excluding indirect expenditure, the total cost of educating each pupil in high schools was Rs. 22-4, in middle English schools (boys) Rs. 13-9-9, in middle vernacular (boys) Rs. 11-1-4, in middle English (girls) Rs. 6-14-7, in middle vernacular (girls) Rs. 15-1-5, in upper primary (boys) Rs. 6-5-10, in upper primary (girls) Rs. 11-9-7, in lower primary (boys) Rs. 3-2-1, and in lower primary (girls) Rs. 4-0-11.

Educational Sub-committees.

473. The number of meetings held by the several educational sub-committees of Local Boards during the year under report was 57.

Conference.

474. No conference of educational officers was held, but the Deputy and Sub-Inspectors of Schools held 107 meetings of *gurus* in order to give them general instructions.

Collegiate education.

475. The Gauhati Government second-grade College had 57 students on its rolls on the 31st March 1902, the average daily attendance being 59. The Murarichand unaided second-grade College at Sylhet had 40 names on its rolls on the 31st March 1902, against 49 in the preceding year, the average daily attendance being 37, as against 31 in the preceding year.

Forty-seven students presented themselves at the First Arts Examination, of whom 25 were from the Gauhati College and 22 from the Murarichand College. Of these, 2, both from the Murarichand College, passed in the first division, 2, both from the Gauhati College, in the second division, and 14, 8 from the Gauhati College and 6 from the Murarichand College, in the third division.

The total direct cost of the Gauhati College amounted to Rs. 11,494, of which Rs. 4,491 was met from fees. The expenditure on the Murarichand College amounted to Rs. 4,370, of which Rs. 869 was met from fees, the balance being contributed by the proprietor, Raja Girish Chandra Rai.

High schools.

476. There were 23 high schools in all, of which 10 were Government, 6 aided and 7 unaided. The attendance at the Government schools rose from 2,582 to 2,711, and that of the aided schools from 1,056 to 1,218; but the attendance at the unaided schools showed a falling off from 1,269 to 1,214. The average cost of educating each pupil at Government schools was Rs. 24-4-8, at aided schools Rs. 21-0-8, and at unaided schools Rs. 18-9-6, the corresponding figures for 1900-1901 being Rs. 24-9-4, Rs. 21-14-7, and Rs. 19-8-5, respectively. Of the Government institutions, the Dibrugarh and the Jorhat high schools were self-supporting. One hundred and eighty-eight candidates appeared at the Entrance Examination of the Calcutta University, of whom 123 passed. Of these, 17 were placed in the first division, 57 in the second, and 54 in the third. The Sylhet Government school held the first position. The Government schools passed 77.36 per cent. of the candidates presented, the aided schools 64.71 per cent., and the unaided schools 41.93 per cent., the corresponding percentages for 1900-1901 being 80.85, 50, and 45.95.

Middle English schools for boys.

477. Middle English schools declined by 3 and the pupils attending them by 161. The average daily attendance at these schools also decreased by 109, and the total cost of their maintenance by Rs. 242.

Middle vernacular schools for boys.

478. The number of middle vernacular schools rose from 42 to 45 and the pupils in them from 2,686 to 2,820. The average daily attendance increased by 89 and the total cost by Rs. 1,880.

Discipline and moral training.

479. The conduct of the school boys was generally satisfactory during the year. Some cases of breach of discipline and misconduct were reported, and those concerned were suitably punished.

Boarding houses.

480. The total number of boarding houses increased from 55 to 57 and the boarders in them from 641 to 852, an increase of 33 per cent. The total expenditure on boarding houses rose by Rs. 4,923 and that from Provincial revenues by Rs. 798. Boarding houses were maintained in connection with the Cotton College and all the Government high schools, except at Sylhet, where the pupils are allowed to lodge with the teachers of the school, to whom a capitation allowance of Re. 1 per head is made for the accommodation afforded.

Physical training.

481. Cricket, football, and drill continued to be as popular as in the previous years in high, middle, and training schools at headquarters stations. They are also extending to many schools in the mufassil.

482. The annexed table compares the statistics of primary schools for boys for the last two years :

Instruction
Primary
schools for
boys.

	Upper primary.		Lower primary.		Total.	
	Schools.	Pupils.	Schools.	Pupils.	Schools.	Pupils.
I	2	3	4	5	6	7
1900-1901	107	4,393	2,678	80,853	2,785	85,246
1901-1902	104	4,346	2,672	78,868	2,776	83,214

The following table compares the direct expenditure in upper and lower primary schools for the past two years :

	1900-1901.		1901-1902.	
	Upper primary.	Lower primary.	Upper primary.	Lower primary.
I	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
Provincial	592	10,792	785	12,860
Local and Municipal	12,098	1,36,458	11,036	1,45,224
Other sources	13,158	90,671	13,779	78,879
Total	25,848	2,37,921	25,600	2,36,963
	2,63,769		2,62,563	

One hundred and fifty-two candidates, excluding private pupils and candidates from middle schools, passed the Upper Primary Examination, against 177 in 1900-1901. Two thousand and three candidates passed the lower primary test, as compared with 1,870 in 1900-1901.

483. Under this head are included training schools and classes for teachers and schools for technical instruction. There were 22 training schools and classes at the close of the year, with a total roll number of 420, and with a total average daily attendance of 319 pupils.

Special instruction.

The cost of educating each pupil rose from Rs. 57-12-2 to Rs. 58-12-5. Six pupils qualified for the English Master Certificate Examination, 17 for the Vernacular Master Certificate Examination, and 70 for the *Guru* Certificate Examination, compared with 4, 26, and 64, respectively, in 1900-1901.

The Berry-White Medical School at Dibrugarh, the only institution of its kind in Assam, continued under the management of the Medical Department. It had 70 students on its roll on 31st March 1902, with an average daily attendance of 68, as compared with 51 students and an average daily attendance of 48 in the previous year. The total direct expenditure on the school, according to the statistical returns submitted to the Education Department, was Rs. 13,297, and the total cost of educating each pupil was Rs. 188-7-4. Five pupils, all in receipt of scholarships, attended the Williamson Artizan School, and three mechanical apprentices receiving stipends were in training at the Dibrugarh Railway and Tezpur-Balipara Railway workshops.

From the four law classes, six candidates passed the Pleadership Examination.

484. The number of girls under instruction at public schools decreased from 8,712 to 8,413, of whom 380 attended secondary schools and 8,007 primary schools and 26 training schools. Four girls passed the Middle English, 5 the Middle Vernacular, 8 the Upper Primary, and 84 the Lower Primary examination. Besides these, a Khasi girl, who was educated privately, passed the Entrance Examination and was awarded a special scholarship of Rs. 25.

Female education.

485. The European and Eurasian school at Shillong, which is under the entire management of Government, had 10 names (boys and girls) on its rolls at the close of the year under review, with an average daily attendance of 8. The total direct expenditure was Rs. 3,643, and the average cost of educating each pupil was Rs. 364-4-9.

Education of Europeans and Eurasian

Education. 486. The number of Muhammadans under instruction in public and private institutions rose from 23,431 to 23,452, or 21·71 per cent. of the total number of children attending schools. Three hundred and ten Muhammadans, or 10·51 per cent., were successful at the various public examinations, as compared with 326, or 12·19 per cent. in 1900-1901.

Private institutions. 487. The number of private institutions, including *tols*, *maktabs*, and *madrasas* was 255 attended by 5,557 pupils, against 262 institutions attended by 5,492 pupils in the preceding year. Many of these schools have only a short existence. For the first examination of Sanskrit *tols*, 39 *tols* sent up 116 candidates, of whom 83 passed, and 11 were granted scholarships, 15 stipends being granted to the pandits. For the second examination, 17 *tols* sent up 24 candidates, of whom 20 passed, and 10 were granted scholarships. Seven stipends were granted to teachers at this examination.

SECTION 3.—LITERATURE AND THE PRESS.

[See table I, Part XII of the Judicial and Administrative Statistics of British India.]

Literary works. 488. The total number of publications registered in Assam during the year 1901 under Act XXV of 1867, as modified by Act X of 1890, was 22, against 28 in the preceding year. Of these, 7 were educational works, 15 were non-educational; 15 were first editions and 7 republications. Seven of these books were in Assamese, 7 in Khasia, 4 in Bengali, and 2 in English. There were only two publications in more than one language. The number of copies of the non-educational works rose from 15,612 in 1900 to 16,895 in 1901, and that of the educational works fell from 17,400 in 1900 to 8,300 in 1901. The publications registered during the year are classified below according to the subjects dealt with:

	Number of publications.
(1) Languages	6
(2) Science (Mathematical and Mechanical)	1
(3) Religion	9
(4) Miscellaneous	6
	—
Total	22
	—

The copyright of two works, one on religion and the other on miscellaneous subjects, was registered during the year.

Newspapers. 489. The *Weekly Chronicle*, *Paridarsak*, and *Srihatta Bandhu* continued to be published in Sylhet and the *Silchar* at Silchar. Of the four newspapers published within the Assam Valley division during the previous year, and noticed in the last year's report, two, the *Assam* at Gauhati and the *Eastern Herald* at Dibrugarh, ceased to appear. The two remaining weekly papers, *Times of Assam* and the *Assam Banti*, continued to be published, respectively, at Dibrugarh and Tezpur. The *Jonaki* and *Bijuli*, two monthly Assamese papers, were revived, the former being published at Gauhati and the latter at Tezpur. The two Khasia papers, *U Khasi Mynta* (The Khasi of To-day) and the *Ka Pateng Khristan* (The Christian Community), were published at Shillong, and the *Nongialam Catholic* was published by the Roman Catholic Mission at Laitkynsew.

SECTION 4.—LITERARY SOCIETIES.

Nil.

SECTION 5.—ARTS AND SCIENCES.

Nil.

CHAPTER VIII.

Archæology.

490. An interesting find of Ahom cannon was reported by the Deputy Commissioner of Sibsagar at a place called Pahugarh, about $3\frac{1}{2}$ miles from Sibsagar station. Three guns were discovered, the largest bearing an inscription to the effect that it was manufactured in the year 1615 of the *Sakabda* era, corresponding to 1693 A.D., by Gargaoniya Sandikai Barphukan, of Gauhati, in the reign of Gadadhar Singh. The gun is to be brought in to Sibsagar and placed near the kutcherry, where one ponderous specimen of old Assamese ordnance is already preserved. The temple at the Takresvari Hill near Goalpara has not yet been repaired by the Bijni estate. The temple of Kamesvar at Kamakhya in Kamrup was repaired during the year at a cost of Rs. 3,000, contributed by the Maharaja of Darbhanga. The temple of Madhab at Hajo and that of Basisthasram near Gauhati are said to be in need of immediate repair. In Darrang the usual jungle-clearing round the temple stones in Tezpur station and the temple on Bamuni Hill was carried out. The Dakshinpat Gosain has promised the Deputy Commissioner, Darrang, to contribute Rs. 1,000 for repairs of the Karaiguri temple, which stands on a *lakhiraj* grant held by the Gosain, and an estimate for the work is under preparation. The temples at Jaisagar and Gourisagar, and the Kerangghar at Sibsagar were repaired, as usual, at a cost of Rs. 250, and the Temple Committee at Sibsagar expended Rs. 100 in repairing and clearing the jungle from the domes and portico of the temples on the Sibsagar tank. A complete list of objects of archæological interest in Assam has been prepared for the assistance of the Archæological Surveyor.

CHAPTER IX.

Miscellaneous.

SECTION 1.—ECCLESIASTICAL JURISDICTION.

491. The Ecclesiastical Establishment paid entirely or in part by Government consists of one Chaplain on the Bengal Ecclesiastical Establishment, stationed at Shillong, with Gauhati and Dhubri as outstations, one clergyman of the Additional Clergy Society stationed at Dibrugarh, one of the Society for the Propagation of the Gospel, with headquarters at Tezpur, and two clergymen stationed, respectively, at Silchar and Jorhat, whose salaries are met by subscriptions from the tea planters. The four clergymen last mentioned receive grants-in-aid from Government, varying from Rs. 150 to Rs. 100 a month.

SECTION 2.—ECCLESIASTICAL.

492. Early in April 1901, the Reverend C. R. Thorold Winckley, M.A., retired from the Chaplaincy of Shillong and was succeeded by the Reverend H. T. Ottley, M.A. Unexpected difficulties arose in connection with the building of the new Parish Church of all Saints, Shillong, which at the close of the year was still unfinished. The church has, however, been since completed and was opened for service on the 26th of June 1902. The rebuilding of the Churches at Dhubri and Gauhati had not commenced, and the quarterly services in those places continued to be held in the circuit-house and the club, respectively. At Sylhet services were held in the temporary structure erected for the purpose after the great earthquake of 1897.

SECTION 3.—STATIONERY.

493. The cost of stationery supplied during the year 1901-1902 by the Superintendent of Stationery, Calcutta, to officers of the Assam Administration was Rs. 25,122, against Rs. 30,914 in the preceding year. The average value for the last five years was Rs. 32,367.

SECTION 4.—PRINTING.

494. The total cash receipts of the Assam Secretariat Press were Rs. 542, the expenditure amounted to Rs. 80,094 (including Rs. 853 for inter-departmental services rendered) and the total value of work done to Rs. 1,41,025, the corresponding figures for 1900-1901 being Rs. 529, Rs. 85,519, and Rs. 1,43,279, respectively. After making an allowance for wear and tear of materials and for the value of broken and condemned types, the profit and loss account of the Press showed a net gain of Rs. 46,436, against Rs. 42,430 in the preceding year.

SMILLONG 1.—Printed and published by E. HILL, Press Superintendent, Assam, at the Secretariat Printing Office : (Genl.) No. 238—250—28-2-1903.

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REPORT
ON THE
ADMINISTRATION
OF THE
PROVINCE OF ASSAM
FOR THE YEAR
1901-1902.

