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STATEMENT

EXHIBITING THE

MORAL AND MATERIAL PROGRESS AND CONDITION

OF

I N D I A

DURING THE YEAR 1907-8.

FORTY-FOURTH NUMBER.



(Presented pursuant to Act 21 & 22 Vict. c. 106, s. 53.)

India Office,
20 May 1909. }

ARTHUR GODLEY,
Under Secretary of State for India.

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Some changes in the contents of the Statement and some re-arrangement of the matter have been made in the present issue. Two new chapters have been constituted. In one the facts bearing on the condition of the people have been grouped; in the other a general view is presented of the scientific work carried on under Government. Statistics of minor importance have been eliminated throughout, and references are given under each head to corresponding tables in the Statistical Abstract for British India. A bibliography of Indian official reports has been added.

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CHAPTER I.
ADMINISTRATION AND LEGISLATION.

ADMINISTRATION.

ADMINIS-
TRATION.

LIST of the holders in 1907-8 of the more important appointments connected with the administration of India, those appointed during the year being shown in *italics*.

OFFICE.	Name.	Date of Appointment or Assumption of Charge of Office.	REMARKS.
Secretary of State - - -	The Right Hon. Viscount Morley of Blackburn, O.M.	12 December 1905	
Permanent Under Secretary of State	Sir Arthur Godley, G.C.B. -	30 September 1883	
Parliamentary Under Secretary of State.	C. E. H. Hobhouse, M.P. - -	1 February 1907	
	Sir J. L. Mackay, G.C.M.G., K.C.I.E.	27 April 1897	Re-appointed for five years, 27 April 1907. Retired 29 March 1908.
	Sir John Edge, K.C. - -	30 March 1898	
	Sir Philip P. Hutchins, K.C.S.I. -	1 August 1898	
	Sir William Lee-Warner, K.C.S.I.	12 November 1902	
	Sir H. S. Barnes, K.C.S.I., K.C.V.O.	9 May 1905	
	Lieut.-Col. Sir D. W. K. Barr, K.C.S.I.	16 August 1905	
Members of the Council of India -	Sir F. Schuster, Bart. - -	26 April 1906	
	T. Morison - - -	19 December 1906	
	General Sir C. C. Egerton, G.C.B., D.S.O.	5 February 1907	
	<i>Sir W. R. Lawrence</i> , Bart., G.C.I.E.	16 October 1907	
	<i>Sir J. D. La Touche</i> , K.C.S.I. -	1 November 1907	
	<i>Saiyid Husain Bilgrami</i> , C.S.I. -	11 November 1907	
	<i>Krishna Gobinda Gupta</i> - -	9 March 1908	
Governor-General - - -	The Right Hon. the Earl of Minto, P.C., G.M.S.I., G.C.M.G., G.M.I.E.	18 November 1905	
	General Viscount Kitchener of Khartoum, G.C.B., O.M., G.C.M.G. (extraordinary), Commander-in-Chief.	28 November 1902	Appointment extended for two years, 28 November 1907.
	H. Erle Richards - - -	18 April 1904	
Members of Council - - -	E. N. Baker, C.S.I. - -	10 January 1905	
	Major-General C. H. Scott, C.B. -	18 November 1905	
	Sir H. Adamson, C.S.I. - -	15 October 1906	
	J. F. Finlay, C.S.I. - -	1 January 1907	Resigned 28 February 1908.
	J. O. Miller, C.S.I. - -	6 March 1907	
	<i>W. L. Harvey</i> , C.I.E. - -	5 March 1908	
Lieutenant-Governor of Bengal -	Sir A. H. Leith Fraser, K.C.S.I. -	2 November 1903	
Lieutenant-Governor of Eastern Bengal and Assam.	Sir L. Hare, K.C.S.I., C.I.E. - -	20 August 1906	
Lieutenant-Governor of the United Provinces of Agra and Oudh.	Sir J. P. Hewett, K.C.S.I., C.I.E. -	1 January 1907	
Lieutenant-Governor of the Punjab -	Sir D. C. J. Ibbetson, K.C.S.I. -	6 March 1907	Resigned 23 January 1908 ; Died 21 February 1908. Officiating. Temporary.
	<i>Sir Thomas Gordon Walker</i> , K.C.I.E., C.S.I.	22 May 1907	
		23 January 1908	
Lieutenant-Governor of Burma -	Sir H. T. White, K.C.I.E. - -	9 May 1905	
Chief Commissioner of the Central Provinces.	R. H. Craddock, C.S.I. - -	25 March 1907	
Agent to the Governor-General in Rajputana and Chief Commissioner of Ajmer-Merwara.	E. G. Colvin, C.S.I. - -	1 October 1905	
Resident in Mysore and Chief Commissioner of Coorg.	S. M. Fraser, C.I.E. - -	22 November 1905	
Resident, Hyderabad - - -	C. S. Bayley, C.S.I. - -	1 March 1905	
Agent to the Governor-General in Central India.	Lieut.-Colonel H. Daly, C.S.I., C.I.E.	19 February 1905	
Resident in Kashmir - - -	Major Sir F. E. Younghusband, K.C.I.E.	27 June 1906	

ADMINIS-
TRATION.

OFFICE.	Name.	Date of Appointment or Assumption of Charge of Office.	REMARKS.
Resident and Agent to the Governor-General, Baroda.	Lieut.-Colonel M. J. Meade, C.I.E.	5 November 1901	
Agent to the Governor-General in Baluchistan and Chief Commissioner of British Baluchistan.	Major Sir A. H. McMahon, K.C.I.E., C.S.I.	1 January 1905	
Chief Commissioner of the N.W. Frontier Province.	Lieut.-Colonel Sir H. A. Deane, K.C.S.I.	9 November 1901	
Political Resident, Persian Gulf and H.B.M.'s Consul-General at Bushire.	Major P. Z. Cox, C.I.E.	1 January 1905	
Governor of Madras -	Hon. Sir A. Lawley, G.C.I.E., K.C.M.G.	28 March 1906	
Members of Council -	G. Stokes, C.S.I. - G. S. Forbes, C.S.I. -	9 November 1903 12 June 1906	
Governor of Bombay -	Lord Lamington, G.C.M.G., G.C.I.E. J. W. P. Muir-Mackenzie, C.S.I. - Sir George Sydenham Clarke, G.C.M.G., G.C.I.E.	12 December 1903 27 July 1907 18 October 1907	Resigned 27 July 1907. Temporary.
Members of Council	E. McG. H. Fulton, C.S.I. - J. W. P. Muir Mackenzie, C.S.I. - Sir S. W. Edgerley, K.C.V.O., C.I.E.	24 April 1902 6 August 1905 21 April 1907	Retired 21 April 1907.
Political Resident, Aden	Major-General E. de Brath, C.B., C.I.E.	14 November 1906	

Council of
India.

Under the provisions of the Council of India Act, 1907, two Indian gentlemen were, for the first time, appointed to be members of the Secretary of State's Council. Their names are given in the preceding table.

Decentral-
ization
Commission.

In September 1907 a Royal Commission was appointed to inquire into the financial and administrative relations existing between the Government of India, the various provincial governments, and the authorities subordinate to them, and to report whether, by means of decentralisation or otherwise, these relations can be simplified and improved. The Commission known as the "Royal Commission upon Decentralization in India" assembled in November 1907, and held public sittings for the purpose of taking evidence during the remainder of the year. (The Report of the Commission has now been published.)

LEGISLA-
TION.

LEGISLATION.

I. In England.

The Council of India Act, 1907 (7 Edward 7, cap. 35), provides that the number of members of the Council of the Secretary of State for India shall be not less than 10 nor more than 14. The tenure of appointment is reduced in the case of future appointments from 10 to 7 years, and the salary from £1,200 to £1,000 a year, and it is provided that persons appointed on account of Indian experience shall not have left India more than five, instead of ten, years preceding the date of that appointment.

II. In India.

Between the 1st April 1907 and the 31st March 1908 the following enactments received the assent of the Governor-General of India:—Seven Acts passed by the Council of the Governor-General for making laws and regulations, two by the Legislative Council of Madras, three by that of Bombay, three by that of Bengal, one by that of Eastern Bengal and Assam, two by that of the United Provinces of Agra and Oudh, one by that of the Punjab, eight by that of Burma. Seven regulations were passed by the Governor-General in Council on the recommendation of the local governments of the provinces affected by them, in accordance with the provisions of 33 Vict. c. 33.

The following are the measures referred to:—

ACTS OF THE GOVERNOR-GENERAL'S COUNCIL.

The Local Authorities Loan (Amendment) Act (No. 5 of 1907), extends the powers of local authorities to borrow money for carrying out works.

India.

LEGISLA-
TION.

The Prevention of Seditious Meetings Act (No. 6 of 1907), was framed to make better provision for the prevention of meetings likely to promote sedition or to cause a disturbance of public tranquillity. It extends to the whole of British India, but has operation only in such provinces as the Governor-General may from time to time notify in the "Gazette of India." Power is given to the local governments to notify proclaimed areas, in which the permission of the police authorities is required for the holding of such public meetings as are not exempted, either by the Act itself or by an order of the local government. The penalties prescribed for offences under the Act are imprisonment, which may extend to six months, or fine, or both.

The Legal Practitioners (Amendment) Act (No. 1 of 1908), removes a hardship felt by vakils and attorneys of a chartered High Court, who were previously required to pay annual fees in order to be permitted to practise in other courts. It also extends to pleaders of the Chief Court of the Punjab certain privileges hitherto confined to advocates generally and vakils of the High Courts.

The Indian Tariff (Amendment) Act (No. 2 of 1908), raises the customs duty on imported beer from 1 to 2 annas per imperial gallon.

The Indian Trusts (Amendment) Act (No. 3 of 1908), amends the law relating to private trusts and trustees by permitting the investment of trust money in the securities of port trusts, or city improvement trusts, in the large towns of India.

The Coroners (Amendment) Act (No. 4 of 1908), in order to remove practical difficulties, which had arisen both in Calcutta and Bombay, from the concurrent jurisdictions of the Presidency magistrate and the coroner, deprives the latter officer of the power to commit accused persons for trial, or to prison pending trial.

The Code of Civil Procedure (No. 5 of 1908), consolidates and amends the law relating to the procedure of the Courts of Civil Judicature. The new code is the result of a consideration extending over many years.

ACTS OF THE PROVINCIAL LEGISLATIVE COUNCILS.

The Madras City Police Amendment Act (No. 3 of 1907), places the Commissioner of Police, Madras, in subordination to the Inspector-General of Police for the Presidency.

The Madras City Municipal Act Amendment Act (No. 4 of 1907), was passed to enable the Government, with the concurrence of the corporation, to appoint a special engineer for the execution or supervision of engineering schemes of a special character, whenever it may be found expedient to do so.

The Bombay Tramways (Amendment) Act (No. 1 of 1907). Electric power has been substituted for horse power, and this Act deals with the width of cars and the speed at which they may be permitted to travel.

The Dekkhan Agriculturists' Relief (Amendment) Act (No. 2 of 1907), confers upon the Civil Courts wider power to inquire into monetary transactions to which agriculturists are parties, and empowers Collectors to set aside auction sales of land belonging to agriculturists whenever the prices realised appear to be inadequate.

The City of Bombay Police Charges Act (No. 3 of 1907), gives legal sanction to the various re-arrangements involved in the transfer to Government of the police charges of the city of Bombay, on the understanding that the corporation undertake certain liabilities of corresponding extent hitherto devolving on Government.

The Bengal Tenancy (Amendment) Act (No. 1 of 1907), was enacted with a view to removing the defects in the Bengal Tenancy Act, 1885, which had been brought to light by the working of that Act during the past 20 years. The principal clauses relate to summary procedure for the recovery of rents; the authority to be given to records-of-rights when such have been finally published; and the power of Government to reduce rents when they appear to be oppressive to the cultivators of the soil.

The Calcutta Port (Amendment) Act (No. 2 of 1907), deals with the raising of loans by the Calcutta Port Trust, and the issue of debentures by the Port Commissioners.

The Calcutta and Suburban Police (Amendment) Act (No. 3 of 1907), gives wider powers to the Commissioner of Police to close disorderly houses.

The Eastern Bengal and Assam Court of Wards (Amendment) Act (No. 3 of 1907), amends the Bengal Act of 1879 in certain particulars in order to enable the Court of Wards to manage the properties entrusted to its charge in a more efficient manner.

The United Provinces Municipalities (Amendment) Act (No. 1 of 1907), was passed to remedy certain defects which experience had disclosed in the practical working

Eastern
Bengal and
Assam.United
Provinces.

LEGISLA- of the Act I. of 1900. It deals with overcrowding, annuities for municipal servants, destruction of rabid animals, &c.

The United Provinces Vaccination Law Amendment Act (No. 2 of 1907), extends the scope of the Vaccination Act of 1880 to notified areas under the United Provinces Municipalities Act, 1900.

Punjab. *The Punjab Motor Vehicles Act (No. 2 of 1907)*, regulates the use of motor vehicles in the Punjab. It follows in all material respects the provisions of the Imperial Act, 1903 (3 Edw. 7, cap. 36).

Burma. *The Lower Burma Land and Revenue Law Amendment Act (No. 1 of 1907)*, regulates the extraction in Lower Burma of minor mineral products which cannot suitably be dealt with under the special Mining Rules issued by the Government of India.

The Rangoon Waterworks Act Amendment Act (No. 2 of 1907), gives power to the Rangoon Municipal Committee to minimise the inconvenience caused to occupiers in cases where it is necessary to cut off the water supply to private houses.

The Burma Towns Act (No. 3 of 1907), consolidates the law with respect to towns in Upper and Lower Burma. A few amendments of minor importance are also included.

The Rangoon Police Act Amendment Act (No. 4 of 1907), confers on police officers power to arrest any person committing an offence under the Rangoon Police Act of 1899 in view of the police officer if the name and address of the person cannot be immediately ascertained. It also deals with the issue of warrants for the search of common gaming-houses and with other minor matters.

The Burma Highways Act (No. 5 of 1907), gives power to prohibit or restrict the use of vehicles considered likely to cause excessive damage to the surface of public roads and places in Burma.

The Burma Village Act (No. 6 of 1907), consolidates the law contained in the village enactments of Upper and Lower Burma. Certain amendments in matters of detail have been introduced.

The Lower Burma Courts Act (1900) Amendment Act (No. 7 of 1907), provides for an appeal against the decisions of the Court of Small Causes, Rangoon, in any suit of a value exceeding Rs. 1,000.

The Burma Defile Traffic Act (No. 8 of 1907), was passed to regulate the traffic of rafts, steam launches, and other vessels in the upper defile of the Irrawaddy, between Myitkyina and Bhamo.

REGULATIONS.

Coorg. *The Coorg Municipal Regulation (No. 2 of 1907)*, extends, with unimportant modifications, the Central Provinces Municipalities Act, 1903, to Coorg.

The Coorg Land and Revenue (Amendment) Regulation (No. 4 of 1907), makes provision by which the partition of landed property can be effected, in certain cases, by order of the Civil Courts.

The Coorg Land and Revenue (Amendment) Regulation (No. 1 of 1908), gives effect to the exemption of prior encumbrances from sale for arrears of land improvement loans when such encumbrances are entered in the record of rights under the Coorg Land and Revenue Regulation of 1899.

Sonthal Parganas. *The Sonthal Parganas Rent (Amendment) Regulation (No. 3 of 1907)*, makes provision for the enhancement of rent, after proper inquiry, on the ground of proprietors' improvements.

Ajmere. *The Ajmere Land and Revenue (Amendment) Regulation (No. 5 of 1907)*, confers on Government the authority to transfer to private persons the rights and powers enjoyed by itself in respect of minerals in Ajmere-Merwara.

The Ajmere Courts (Amendment) Regulation (No. 7 of 1907), gives power to the Chief Commissioner of Ajmere to appoint an additional commissioner from time to time.

Upper Burma. *The Upper Burma Land and Revenue (Amendment) Regulation (No. 6 of 1907)*, prescribes for Upper Burma the same rules as are prescribed for Lower Burma by Lower Burma Act I. of 1907, mentioned above.

CHAPTER II.

FINANCE.

FINANCE.

FORM OF ACCOUNTS.
GROSS REVENUE AND EXPENDITURE.
NET REVENUE AND EXPENDITURE.
CASH BALANCES.
PROVINCIAL FINANCE.

HOME CHARGES.
CAPITAL OUTLAY ON PUBLIC WORKS.
DEBT.
CURRENCY AND EXCHANGE.
BANKS.

(For further details, see *Statistical Abstract for British India, Tables 44 to 89 and 97.*)

FORM OF ACCOUNTS.

The accounts of the Government of India show the transactions in India in rupees : Form of the totals of these transactions are then converted into pounds, at the rate of Rs. 15 = £1 : the sterling transactions in England are next stated : and the last two sets of figures are added together, so as to show in pounds the combined transactions in India and in England. The comparatively small sums which have to be brought to account owing to the facts that the remittances to defray the net expenditure in England are not effected at exactly sixteenpence to the rupee, and that the Government is under obligations to carry out certain transactions with railway companies at fixed rates differing from the rate of sixteenpence to the rupee, are included in a single line under the head of Exchange.

The figures in this chapter relating to the Revenue and Expenditure of 1906-7 and 1907-8 have been compiled (like the figures for those years included in Parliamentary Papers 170 of 1908 and 122 of 1909) so as to give effect to the recent decision to exclude from the Government accounts the transactions of District Boards and certain other local bodies.

GROSS REVENUE AND EXPENDITURE.

The Gross Revenue and Expenditure of British India in 1906-7 and 1907-8 were as follows :—

	1906-7.	1907-8.
	£	£
Revenue	73,144,554	71,003,275
Expenditure	71,555,179	70,697,229
Surplus	£1,589,375	£306,046

In these figures all receipts are included in the total of revenue and all outlay in the total of expenditure, with the one exception that the working expenses of the railways are treated not as expenditure but as a deduction from Revenue. The financial position of the Government can, however, be much better appreciated by reference to the following table of Net Revenue and Expenditure, in which the interest charges as well as the working expenses of the Railways, the interest charges and working expenses of Irrigation Works, the cost of the cultivation and manufacture of Opium, and the charges against other revenue-earning departments are treated as deductions from revenue, and the receipts of spending departments are treated as deductions from expenditure.

FINANCE.

Net
Revenue
and Ex-
penditure.

NET REVENUE.

	1906-7.		1907-8.		Increase (+) or Decrease (-).	
	£	£	£	£	£	£
Land Revenue, &c. :						
Land Revenue - - - -	19,066,832		17,982,592		-1,084,240	
Forest - - - - -	1,763,627		1,727,701		-35,926	
Tributes from Native States - -	400,756		389,366		-11,390	
		21,231,215		20,099,659		-1,131,556
Opium : Net Receipts - - -		3,743,773		3,571,948		-171,825
Taxation :						
Salt - - - - -	4,095,173		3,072,378		-1,022,795	
Stamps - - - - -	3,985,706		4,212,194		+226,488	
Excise - - - - -	5,835,462		6,163,111		+327,649	
Provincial Rates - - - - -	514,785		524,756		+9,971	
Customs - - - - -	4,232,499		4,895,771		+663,272	
Income Tax - - - - -	1,416,327		1,495,853		+79,526	
Registration - - - - -	378,891		414,068		+35,177	
		20,458,843		20,778,131		+319,288
Commercial Undertakings :						
Post Office - - - - -	148,213		51,279		-96,934	
Telegraph - - - - -	773,199		77,650		-695,549	
Railways - - - - -	2,307,673		1,563,002		-744,671	
Irrigation - - - - -	796,156		646,475		-149,681	
		3,078,843		2,183,106		-895,737
Mint - - - - -		252,600		279,017		+26,417
Exchange - - - - -		190,022		94,511		-95,511
Total Net Revenue - - £		48,955,296		47,006,372		-1,948,924

NET EXPENDITURE.

	1906-7.		1907-8.		Increase (+) or Decrease (-).	
	£	£	£	£	£	£
Debt Services (excluding amounts charged under Railway Revenue Account and Irrigation).		943,691		855,087		-88,604
Military Services :						
Army - - - - -	18,440,276		17,625,054		-815,222	
Marine - - - - -	515,210		397,338		-117,872	
Military Works and Special Defence Works.	1,214,874		1,225,962		+11,088	
		20,170,360		19,248,354		-922,006
Collection of Revenue - - -		5,556,014		5,729,823		+173,809
Civil Services :						
Civil Departments - - -	11,545,529		11,999,649		+454,120	
Miscellaneous Civil Charges - -	3,756,653		4,155,959		+399,306	
Civil Works (including Railways charged to Provincial or Local Revenues).	4,071,689		4,436,577		+364,888	
		19,373,871		20,592,185		+1,218,314
Famine Relief and Insurance - -		1,009,743		1,296,063		+286,320
Provincial Adjustments :						
1. Charge against Revenue of the year arising from increase of Provincial Balances.		312,242				
2. Diminution of the Charge against Revenue of the year, owing to Expenditure being met from Provincial Balances.				-1,021,186		-1,333,428
Total Net Expenditure charged against Revenue.		47,365,921		46,700,326		-665,595
Surplus - - - - -		1,589,375		306,046		-1,283,329

Thus there was in 1907-8, as compared with the previous year, a decrease of net revenue of £1,948,924 and a decrease in the net expenditure of £665,595. Detailed explanations of the figures of revenue and expenditure are annually laid before Parliament in the Financial Statement of the Government of India and in the

FINANCE.

Explanatory Memorandum by the Secretary of State. It will be sufficient here to refer only to the more important facts specially affecting the revenue and expenditure of 1907-8.

Land Revenue.—The outstanding feature of the year was the partial failure of the autumn monsoon and consequently of the harvests over the greater part of British India, but more especially the United Provinces. Liberal suspensions of Land Revenue were granted; and in consequence the receipts under this head were less than in any year since 1902-3.

Opium.—In consequence of negotiations with the Chinese Government the export of Bengal opium was reduced in 1907-8 to 48,900 chests as compared with 52,800 in 1906-7. The total receipts (including the pass duty on Malwa opium) were lower by £415,542 in 1907-8 than in 1906-7; but in consequence of the restriction in the area of cultivation, there was a reduction of £243,717 in the charges, and the decrease in the net opium revenue was thus £171,825.

Salt.—The reduction of the salt duty from 1½ to 1 rupee per maund of 82½ lbs., with effect from the 20th March 1907, led to a considerable fall in the revenue under this head. The loss of revenue would have been greater had it not been to some extent counterbalanced by an increased consumption of 1,270,000 maunds, or 104,503,000 lbs.

Railways.—The net earnings were adversely affected by the expenditure involved in the provision of improved transport facilities, by an increase in the price of coal, and by a rise in the rates of pay of the working staff.

Military Services.—The decrease in military charges was due to a reduction of the expenditure in connection with the programme of special measures for increasing the efficiency of the Army.

CASH BALANCES.

The following statement shows the amount of the cash balances, and the extent to which they were increased or reduced by the transactions of the year :—

Cash
balances.

	On 1st April			Increase or Decrease.	
	1906.	1907.	1908.	In 1906-7.	In 1907-8.
	£	£	£	£	£
In India - - - - -	11,781,457	10,328,237	12,851,723	-1,453,220	+2,523,486
In England - - - - -	8,436,519	5,606,812	5,738,489	-2,829,707	+131,677
Total - - - - £	20,217,976	15,935,049	18,590,212	-4,282,927	+2,655,163

PROVINCIAL FINANCE.

Under the system of decentralisation of finance, begun by Lord Mayo in 1870 and subsequently developed by successive stages, the Government of India assigns to the Provincial Governments a fixed share of the revenue collected by them under certain heads. From the revenue so assigned the Provincial Governments are required to meet the whole of the expenditure within their respective provinces under certain heads, and a portion of the expenditure under other heads. The revenue retained by the Government of India for its own purposes and for meeting the expenditure incurred by the Secretary of State in England is described in the accounts as Imperial, and that which is assigned to the Provincial Governments is described as Provincial. The expenditure is similarly classified. The Provincial Settlements, by which the classification into Imperial and Provincial of the various items of revenue and expenditure and the ratio of division of the divided heads are governed, have been placed on a quasi-permanent basis with the object of giving to the Provincial Governments as large an interest as possible in the careful collection of revenue and in economy of expenditure. The principal heads of revenue which are wholly Imperial are Opium, Salt, Customs, Post-Office, Telegraph, Mint, Exchange, and State Railways; the principal divided heads being Land Revenue, Irrigation, Stamps, Excise, Assessed Taxes, and Forests. On the expenditure side of the accounts the charge for

Provincial
finance.

FINANCE. Military Services and the charges under certain minor heads (Territorial and Political Pensions, Ecclesiastical, &c.) are entirely Imperial; "Civil Works" is divided; most other important heads of expenditure are provincial.

The net revenue and expenditure of 1906-7 and 1907-8 were divided into Imperial and Provincial as follows:—

	1906-7.			1907-8.		
	Imperial.	Provincial.	Total.	Imperial.	Provincial.	Total.
Net Revenue	£ 31,177,176	£ 17,778,120	£ 48,955,296	£ 29,226,186	£ 17,780,186	£ 47,006,372
Net Expenditure	29,587,801	17,778,120	47,365,921	28,920,140	17,780,186	46,700,326

Contribution by each province towards expenditure of the central Government. The following table shows for each province separately the amount by which the total revenue collected therein (whether classified in the accounts as Imperial or Provincial) exceeds or falls short of the total expenditure incurred therein, and thus indicates the extent to which each province contributes towards the expenditure of the Government of India and the Secretary of State, or draws upon the general revenues:—

Provinces, &c.	1906-7.		1907-8.	
	Surplus.	Deficit.	Surplus.	Deficit.
Bengal	£ 6,910,248	£ —	£ 6,581,418	£ —
Eastern Bengal and Assam	1,242,614	—	1,279,727	—
United Provinces	2,935,337	—	1,934,968	—
Punjab	1,557,719	—	1,268,804	—
Burma	1,854,848	—	2,156,310	—
Central Provinces and Berar	510,495	—	293,338	—
Madras	4,711,018	—	4,853,138	—
Bombay	4,972,670	—	4,908,548	—
North-West Frontier Province	—	238,247	—	244,091
India, General	—	4,533,384	—	4,957,484
England	—	18,333,943	—	17,768,630
Net result	Surplus £1,589,375		Surplus £306,046	

HOME CHARGES.

Home charges. The net expenditure in England chargeable to revenue, as shown in the preceding table, may be classified under the following principal heads:—

	1906-7.	1907-8.
Interest and management of debt, and payment of interest and annuities on account of railways and irrigation works.	£ 9,615,711	£ 9,811,637
Payments in connection with Civil Departments in India	—	—
India Office (excluding pensions)	177,889	198,273
Army and marine effective charges	189,312	204,154
Stores of all kinds charged against revenue	769,149	850,343
Furlough allowances	2,484,023	1,431,134
Non-effective charges (pensions and gratuities)	744,014	872,087
	4,354,345	4,401,002
Total	£ 18,333,943	£ 17,768,630

CAPITAL OUTLAY ON PUBLIC WORKS.

The total capital outlay on railways and irrigation works, during the two years, was as follows:—

	1906-7.	1907-8.
Amount supplied by State borrowing or from the Cash Balances, without being charged against the Revenue of the year:—	£	£
State Railways	7,915,041	10,567,045
Irrigation Works	797,627	845,722
Amount met by Debenture Stock issued by the East Indian Railway Company.	—	1,897,112
Amount defrayed from Revenue:		
Provincial and local Railways	3,236	180
Preliminary Railway expenditure not originally charged to construction	14,517	—
Protective Railways	3,442	6,561
Protective Irrigation Works	356,460	417,240
Other Irrigation Works*	387,085	10,226
Total Direct Outlay by the State	9,477,408	13,744,086
Outlay by companies guaranteed or subsidised by Government	1,809,714	133,183
Outlay by Local Boards	62,648	34,163
Total Capital Outlay on Railways and Irrigation	£ 11,349,770	£ 13,645,066

* Excluding capital outlay on the minor works, against which interest is not charged in the accounts.

DEBT.

Amount of Debt.—The total debt of India on the 31st March 1907 was:—

	£
In England	147,518,634
In India, Rs. 1,30,45,50,655, equivalent at 1s. 4d. the rupee to	86,970,043
Total	£234,488,677

During the year 1907-8 a loan of 2½ crores of rupees (£1,666,667) was issued in India at an average price of 96·87 per cent. In England £3,500,000 India 3½ per cent. stock was issued in May 1907 at a fixed price of £98 10s. per cent. Of the proceeds, £701,700 was used for the discharge of debentures of the Bombay, Baroda, and Central India Railway Company and of the Madras Railway Company, and the remainder for capital expenditure on State railways and advances to railway companies. A further loan of £5,000,000 3½ per cent. stock was issued in January 1908 to provide in advance for a portion of the capital requirements of 1908-9. The price of issue was £99 per cent. In addition, £1,000,000 six months' sterling bills were issued in October 1907 at an average price of £97 18s. 4½d. per cent.

The total debt outstanding on 31st March 1908 was as follows:—

	£.
In England	157,481,074
In India, Rs. 1,32,82,94,955, equivalent at 1s. 4d. the rupee to	88,552,997
Total	£246,034,071

Classification of the Debt.—The total debt is classified in the accounts as (1) Public Works Debt and (2) Ordinary Debt. The amount entered as belonging to the former category is the equivalent of the total capital expenditure which has been incurred by the State on public works, together with the amount advanced to railway companies for capital expenditure; the "Ordinary Debt" consists of the remainder of the debt. In any year in which, owing to the use of surplus revenue or deposits for the construction of public works, the capital expenditure of the year exceeds the amount of debt incurred in the year, the effect of this system of classification is to cause a decrease to be shown in the amount of the Ordinary Debt.

In 1907-8 the amount of the Ordinary Debt showed an increase, which was due to the fact that, in addition to the loans raised early in the year, a second loan was raised in England towards the end of the year, as mentioned above, for capital expenditure in 1908-9.

FINANCE.

The classification of the debt outstanding on the 31st March 1908 was as follows :—

	£
Debt for railways - - - - -	177,702,283
Debt for irrigation works - - - - -	29,872,728
Total of public works debt - - - - -	207,575,011
Balance being ordinary debt - - - - -	38,459,060
Total debt on 31st March 1908, as above -	£246,034,071

CURRENCY AND EXCHANGE.

Currency and exchange.

Currency Legislation.—Up to 1893 the standard of value in India was silver, the rupee (180 grains of silver, eleven-twelfths fine) and the half rupee being full legal tender for the payment of debts, and the mints being open to the receipt from the public of silver for coinage without limit. From 1871 to 1893 the exchange value of the rupee (*i.e.*, the sterling rate at which bills of exchange payable in India were sold) fell almost continuously, the fall being due to the decline in the price of silver, by which the value of the rupee was necessarily governed. Apart from its effect on trade the continual fall in the rupee caused serious difficulties to the Government, because, its revenue being collected in rupees, it is compelled to provide for the greater part of its sterling payments by the sale in London for sterling of bills of exchange and telegraphic transfers payable in rupees in India, and the number of rupees required for defraying any given amount of sterling expenditure increased with each fall in the sterling rate at which bills were sold. In the period from 1871 to 1893 the rate fell from about 2*s.* the rupee (ten rupees to the £) to about 1*s.* 3*d.* the rupee (sixteen rupees to the £). In view of the embarrassment arising from this depreciation in the standard of value it was decided in 1893, in accordance with the recommendation of Lord Herschell's Committee, that silver should no longer be coined on presentation by the public, but the right was given to the public to demand from Government rupees in exchange for gold at the rate of 15 rupees for £1 without limit of amount. Silver thus ceased to be the standard of value in India (though it is still used as before as the chief material of currency); and the exchange value of the rupee ceased to coincide with the price of silver. In 1898 a committee was appointed, under the chairmanship of Lord Wolverhampton, then Sir Henry Fowler, to consider certain proposals made by the Government of India for the completion of the policy adopted in 1893. Sir Henry Fowler's Committee reported in 1899, and recommended that the decisions reached on the recommendations of Lord Herschell's Committee in 1893 should be maintained, and that the English sovereign should be declared legal tender in India at the rate of one sovereign to fifteen rupees (*i.e.*, 1*s.* 4*d.* to the rupee). These recommendations were accepted by the Government. For the last eight years the exchange value of the rupee has remained steady at about 1*s.* 4*d.*

Gold Standard Reserve.—In accordance with a recommendation made by Sir Henry Fowler's Committee it was decided that, with effect from the 1st April 1900, the net profit from the coinage of rupees should not be treated as revenue, but should be held as a special reserve, and sent to England for investment in sterling securities. The annual amount of this profit in each year from 1900–1 to 1907–8 is shown in the following table :—

	£
1900–1 - - - - -	3,031,294
1901–2 - - - - -	415,100
1902–3 - - - - -	264,028
1903–4 - - - - -	2,627,575
1904–5 - - - - -	1,790,380
1905–6 - - - - -	3,677,880
1906–7 - - - - -	4,014,426
1907–8 - - - - -	2,247,207 (Of which half only was credited to the gold standard reserve, <i>see below.</i>)

Up to 1906 practically the whole amount was remitted to England and applied to the purchase of British Government securities, the interest realised being added to the fund and invested, but in that year it was decided that a portion of the reserve should

in future be held in silver in India, and in 1907–8 it was further decided that, for the future, half the profits on coinage should be applied to capital expenditure on railways. The constitution of the reserve on the 31st March 1908 was as follows :—

	Nominal Amount.	Cost Price.
<i>Sterling Securities</i> —	£	£
2½ per cent. Consolidated Stock - - - - -	7,395,379	6,716,156
2¾ per cent. Stock, National War Loan - - - - -	1,464,175	1,438,235
Local Loans 3 per cent. - - - - -	500,000	487,764
Transvaal Government 3 per cent. Guaranteed Stock - - - - -	1,494,324	1,473,116
2¾ per cent. Irish Land Guaranteed Stock - - - - -	538,721	500,000
Exchequer Bonds - - - - -	1,000,000	996,250
Treasury Bills - - - - -	1,575,000	1,575,000
Total Sterling Securities - - - - -	£ 13,967,599	13,186,521

	£
Silver (six crores of rupees) - - - - -	4,000,000
Cash in England - - - - -	1,131,223
Due from Treasury balances in India - - - - -	310
Total - - - - -	£18,318,054

In 1908 it was found necessary to make use of the sterling portion of the reserve as explained in the next section.

Exchange and Remittance.—During the year 1906–7 and 1907–8 the sale by the Secretary of State of bills and telegraphic transfers on India was as follows :—

Exchange and remittance.

1906–7 £33,432,196 at an average rate of 1*s.* 4·084*d.* per rupee.
1907–8 £15,307,061 „ „ 1*s.* 4·029*d.* „ „

The regular demand for the bills and telegraphic transfers sold by the Secretary of State is due to the fact that they enable merchants and bankers to make the payments in India which are required in consequence of the normal excess of India's exports over her imports. In 1907–8 the excess of exports and the demand for the Secretary of State's bills and transfers were unusually small, being affected by several causes, amongst which may be mentioned the exceptionally large imports, the check to the growth of exports due to the partial failure of the autumn monsoon, the reduced price of jute (a very important article of export), and the stringency which prevailed during a part of the year in the London money market. The effect of these conditions made itself felt with unusual intensity towards the end of the financial year, when the normal commercial demand for remittances to India practically ceased for a time, and it became evident that special facilities for remittance in the opposite direction were for the time required in order to enable the balance of trade to be adjusted. In the special circumstances the Secretary of State authorised the Government of India to invite applications in India for sterling bills on London at a fixed rate of 1*s.* 3¾*d.* the rupee. Bills were sold from week to week during the period between 25th March and 11th September 1908, the total amount sold being £70,000 in 1907–8 and £7,988,000 in 1908–9. The bills were met in London by the Secretary of State from the proceeds of the realization of a portion of the securities held on behalf of the Gold Standard Reserve, the rupees received in India for the bills being at the same time paid to the portion of the reserve held in that country.

Coinage.—The silver coinage at the Indian Mints was :—

Coinage.

	1906–7 Number Coined.	1907–8 Number Coined.
Rupees - - - - -	253,703,283	173,269,893
Half-rupees - - - - -	3,436,113	4,641,294
Quarter-rupees - - - - -	10,671,938	11,464,000
Eighth-rupees - - - - -	22,144,650	21,600,000
British Dollars (for export to Hong Kong) - - - - -	—	1,945,726

FINANCE.

The figures in the above table include the re-coinage of old rupees of the nominal value of £1,616,291.

A portion of the heavy rupee coinage in 1906-7 was required in connection with the formation of the Silver branch of the Gold Standard Reserve, which it was decided to establish during the year. The building up of this Reserve was commenced in 1906-7. Shortly before the close of the year it reached 600 lakhs, which was intended to be its normal figure. But when, at the close of 1907-8, the Government of India commenced to sell bills on London as above described, the money received for these bills in India was paid into the Silver portion of the Gold Standard Reserve, which thus rose to £12,433,000 in November 1908. On 22nd February 1909 it stood at £10,000,000.

The value of the copper, bronze, and nickel coinage during the two years was as follows :—

	1906-7.	1907-8.
Copper	68,582	2,003
Bronze	124,420	255,945
Nickel	—	155,233

The gradual replacement of the copper coinage, consisting of pice, half pice, and pie pieces, by a coinage of bronze pieces of the same denominations, was begun in 1906-7. Since August 1906 no copper coins have been struck save cents and half-cents for Ceylon and the Straits Settlements.

On the 1st August 1907 the first issue of the new nickel 1-anna piece was made to the public. This coin, which has a waved edge to make it easily distinguishable from silver coins, has been most favourably received by the public.

Paper Currency.—Under the Indian Paper Currency Act, 1905 (III. of 1905), Paper Currency Notes of the following denominations, viz., Rs. 5, Rs. 10, Rs. 20, Rs. 50, Rs. 100, Rs. 500, Rs. 1,000, and Rs. 10,000 are issued to the public. Five rupee currency notes are legal tender throughout India and encashable at any office of issue. Notes of higher value than five rupees are legal tender and encashable only within the currency circle from which they are issued. There are eight currency circles having their headquarters at Calcutta, Cawnpore, Lahore, Bombay, Karachi, Madras, Calicut, and Rangoon respectively. The Act requires that a reserve shall be held against the notes equal to their full value; securities of the Government of India and of the British Government may be held as part of the reserve up to a limit of £8,000,000, of which the British Government securities may not exceed £1,333,000 (Rs. 2,00,00,000); the remainder of the reserve must be held in gold or silver coin or bullion. On the 31st March 1908 the value of notes in circulation was £31,257,000, being less by £44,000 than on the corresponding date in 1907. The constitution of the paper currency reserve was as follows :—

	£
Gold	6,417,841
Silver coin	16,849,721
Silver bullion	52,465
Securities of the Government of India	6,667,000
Securities of the British Government	1,333,000

BANKS.

Banks.

The Presidency Banks.—The three Presidency Banks of Bengal, Madras, and Bombay are bodies corporate, constituted under the Presidency Banks Act of 1876. This Act has been modified by a succession of other Acts, of which the most recent was passed in 1907. It regulates the constitution and management of the banks and prescribes the kind of business that they may undertake. The most important statutory restrictions are that they may not borrow out of India, nor draw, discount, buy, or sell bills of exchange, or other negotiable securities payable outside India or Ceylon, except that, when they receive interest, or the proceeds of the sale of securities, on behalf of their principals, they may draw bills of exchange or grant letters of credit, payable out of India, for the purpose of remitting such interest or proceeds at the risk of the principals. The effect of these restrictions is to prevent the Presidency Banks from dealing in foreign exchanges or otherwise employing their capital out of India.

FINANCE.

The Presidency Banks in accordance with the provisions of agreements into which the Government of India has entered with them, act as bankers for the Government of India, paying and receiving money on its behalf and managing the public debt; and receive in return a fixed annual payment, and a commission on the amount of the public debt which they manage. The Government also undertake to keep a minimum balance at each bank, or, failing this, to pay interest on the deficiency.

The following table shows the extent of the business of the Presidency Banks at the end of December 1908 :—

	Bank of Bengal.	Bank of Madras.	Bank of Bombay.	Total.
	£	£	£	£
Paid up capital	1,333,333	400,000	666,667	2,400,000
Reserve	1,083,333	266,667	673,333	2,023,333
Public deposits	983,270	349,598	632,325	1,965,193
Other deposits	10,696,060	2,802,920	5,552,347	19,051,327

Other Banks with Head Offices in India.—The banks with head offices in India registered under the Indian Companies Act, with the exception of small native money-lending and pawnbroking establishments, had, on 31st December 1906, an aggregate capital of £735,322.

Exchange Banks.—The business connected with the remittance of money to and from India is chiefly in the hands of certain large banks, with head offices situated outside India, generally known as the exchange banks. Among them may be mentioned the following :—Chartered Bank of India, Australia, and China, Delhi and London Bank, Hong Kong and Shanghai Banking Corporation, National Bank of India, Comptoir National d'Escompte de Paris, Mercantile Bank of India, Yokohama Specie Bank, Deutsch-Asiatische Bank, International Banking Corporation, Russo-Chinese Bank.

The cash balances and deposits held by these banks in India amounted, according to the latest available information, to £16,514,788.

CHAPTER III.

LAND REVENUE.

LAND
REVENUE.

LAND TENURES.	REVENUE ASSESSMENTS, &C.
LAND LEGISLATION.	COLLECTION OF THE REVENUE.
REVENUE SURVEYS, SETTLEMENTS, &C.	WARDS' AND OTHER ESTATES.

(For further details see Statistical Abstract of British India, Tables 45 to 49 and 120.)

The present chapter deals with Land Revenue (including revenue from Capitation Tax, Fisheries, &c.) and with subjects appertaining thereto. From time immemorial a share of the produce of the land has been the chief source of public revenue in India. Land revenue is still the mainstay of the Government, constituting nearly 40 per cent. of the total net revenue that accrues to the Indian Exchequer.

LAND TENURES.

Land
Tenures.

Owing to its far-reaching social and political effects the proper administration of the land revenue has always been one of the chief problems of the Indian Government, and during the early years of British rule the best methods of assessment were keenly debated. In 1793 Lord Cornwallis introduced into Bengal a permanent settlement, by which the demand of the State was fixed and made for ever unalterable. Other systems were gradually evolved, and at length over the greater part of India a system of periodical settlements was established, under which the State demand is revised at recurring periods of 10 to 30 years, the latter period prevailing in all the larger provinces except the Punjab and the Central Provinces, where settlements are usually made for 20 years, and in Upper and Lower Burma where the respective terms are 10 and 15 years. The policy of long term settlements is being extended. Under the system of periodical revisions of the land assessment the State secures a share in the increased rental value arising from the general progress of the community. Of late years measures have been taken to exempt improvements from assessment, and generally to make the enforcement of the rights of the State as little burdensome as is possible to the revenue-payer. Periodical revision also affords the opportunity of reducing the assessment in villages or tracts which have fallen off in prosperity, and of correcting inequalities arising from any cause. When the revenue is assessed by the State, permanently or temporarily, on an individual or community owning an estate, and occupying a position identical with, or analogous to, that of a landlord, the assessment is known as *zamindari*; where the revenue is imposed on individuals who are, or who represent, the actual occupants of holdings, the assessment is known as *ryotwari*. Under either system there may be rent-paying sub-tenants.

The permanently settled districts, in which all holdings are *zamindari*, cover most of Bengal and Eastern Bengal, and parts of Madras and the United Provinces. As regards temporarily settled districts, *zamindari* estates, held by proprietary groups or large individual proprietors, are chiefly found in the Punjab, the United Provinces, the Central Provinces, and Orissa (Bengal), while in Bombay and Sind, Burma, Assam, Berar and most of Madras the system of *ryotwari*, or peasant proprietors, prevails.

The appended table gives the acreage of the surveyed areas in which the various tenures prevailed during 1906-7 (in thousands of acres). The figures include waste and uncultivated areas as well as cultivated lands, and are merely indicative of the extent to which the two systems respectively prevail.

Province.	Ryotwari (Peasant Proprietors).	Zamindari (Individual Proprietors or Village Communities).		Total.
		Permanently settled.	Temporarily settled.	
Burma	114,653	—	—	114,653
Eastern Bengal and Assam	25,895	25,773	8,375	60,043
Bengal	—	59,242	14,850	74,092
United Provinces of Agra and Oudh	—	7,841	69,575	68,416
Punjab	—	—	62,220	62,220
North-West Frontier Province	—	—	8,357	8,357
Bombay (including Sind)	74,915	—	3,777	78,692
Central Provinces and Berar	12,955	—	40,665	53,620
Madras	60,167	30,518	—	90,685
Minor Administrations (Ajmere, Coorg, Manipur)	1,051	959	735	2,745
Total	289,636	124,333	199,554	613,523

It will thus be seen that about 47 per cent. of the total area is held by peasant proprietors, while 20 per cent. is held by permanently settled, and 33 per cent. by temporarily settled, *zamindari* proprietors.

LAND LEGISLATION.

Throughout the major part of the province the relations between landlord and tenant are governed by the Bengal Tenancy Act. On the whole, the Act continued to work satisfactorily, as tenants are becoming more fully aware of their rights, and can generally defend themselves against attempted encroachments by their landlords. Instances, however, still occur, though less frequently, in which zamindars manage to realise illegally enhanced rents. Thus in South Bhagalpur it was found that illegal enhancements had been made almost universally whenever an estate changed hands, often on the plea of landlords' improvements. Such proceedings will in future be prevented by the amending Act of 1907. The system of land tenure in the Chota Nagpur Division underwent revision in the light of the knowledge gained during recent settlement operations, and the Chota Nagpur Tenancy Act has been amended.

The Agra Tenancy Act of 1901 has tended to secure stability of tenures. It was hoped that the Act would diminish rent litigation and effectually stop the practice of *pro forma* ejectments, but as yet it has not had this effect. One aim of the Act was that landowners, when prevented from ejecting their tenants, should find it necessary to grant long leases. But though the results have not come up to expectations, there has been a satisfactory increase in the number of long leases, the area covered by them having more than doubled in four years, and being now 9 per cent. of the area held by tenants at will. The activity of the landlords in ejecting tenants is doubtless the outcome of the enhanced value of land.

The results of the working of the Bundelkhand Alienation of Land Act, 1903, during the year were generally encouraging. There appears to be no undue contraction of credit, and no fall in the value of land. The Act seems to be popular with the classes whom it was intended to benefit, and a certain amount of dislike for it exhibited by the money-lending classes is not unnatural or altogether unfortunate.

The Punjab Land Alienation Act of 1900 has been working well. The amount of land permanently transferred in 1906-7 was less than in any year since the Act was passed. The Act has very materially reduced transfers from the agricultural to the non-agricultural community, and has reduced the annual number of sales of land and the area sold, while the average price per acre has risen about 22 per cent. The agricultural tribes are slowly recovering land both by purchase and by redemption from mortgage. To this extent the Act has achieved its object, and it is undoubtedly popular among agriculturists, whose hereditary ownership has been safeguarded, though of course it is disliked by the non-agricultural classes. It has not lessened the value of the land, or seriously contracted the credit, of the agricultural tribes, while it has reduced the rate of interest to solvent landowners, encouraged thrift, and reduced litigation. It is too early to gauge the effect of the amendments made in the Act of 1900 by the amending Act of 1907. Their general object was to remove defects which had come to light in the working of the law, and to increase the difficulty of evading its provisions.

LAND
REVENUE.
North-West
Frontier
Province.

The Punjab Alienation of Land Act, 1900, as modified by the North-West Frontier Province Regulation No. I. of 1904, continued operative in three districts. The zamindars show a growing appreciation of the benefits conferred by the provisions of the Act. The slight contraction of credit has caused no trouble, and the feeling is gaining ground that it was credit which was causing the ruin of the peasantry.

Burma.

There is a tendency in Burma for land to pass from agriculturists to non-agriculturists, partly owing to the remarkable rise in the value of land. A Land Alienation Bill has been proposed, and a Burma Tenancy Bill has been drafted with the view of protecting the agricultural tenant against rack-renting and arbitrary eviction.

Central Pro-
vinces and
Berar.

The present Tenancy Act, though needing amendments in several particulars, is working well, and, during a period of severe stress, it has not disclosed any serious defects leading to discontent or hardship. In the more advanced tracts the tenant's position is becoming stronger, and not much use is made of the provisions of the Tenancy Act under which an ordinary tenant can acquire occupancy rights, as the ordinary tenure is found to be sufficiently safeguarded by law. The extension of the tenant's share in the total occupied area is one of several indications of the general well-being of the tenantry and of a growing realisation of their rights.

Eastern
Bengal and
Assam.

The provisions of the Tenancy Act are becoming better known, especially in districts where a survey and record of rights have been in preparation, but even now it is doubtful whether the majority of landlords or tenants fully realise its bearing on their relations.

Madras.

During the year an important measure for defining and regulating the position of tenants in the *zamindari* areas of the Presidency was under consideration in the Legislative Council, and eventually became law under the title of the Madras Estates Land Act Amendment Act.

Bombay.

There is evidence that the Deccan Agriculturists' Relief Act, by establishing sounder relations between the *sarkar* and his client, is having the desired effect of protecting the revenue-paying classes from the encroachment of non-agriculturists. The shrinkage of the ryot's credit, for which the Act is responsible, is considered to be an advantage, since it checks the absorption of the land by the money-lending classes. Grants of land on the non-transferable tenure have proceeded apace both among Muhammadans in Sind and among the less thrifty peoples of the Presidency proper. The tenure is reported from several directions to be gaining in popularity.

REVENUE SURVEYS AND SETTLEMENTS AND LAND RECORDS.

Revenue
Surveys and
Settlements
and Land
Records.

For the purpose of land revenue assessment revenue surveys are necessary. Cadastral maps showing the holdings are prepared, and corresponding field registers are made showing from whom the revenue assessment is to be realised, and also the amount of such assessment. The record also usually exhibits the existing rights in, and encumbrances on, the land. As the revenue records are carefully revised at short intervals a very extensive and complete system of registration by public entry is being built up, and transfers of land are easily attested. Settlements (or re-settlements) in new or in temporarily settled areas are always in progress.

Bengal.

Survey and settlement work in Bengal during the agricultural year to September 1907 extended over fourteen districts. The total area for which a record of rights has now been completed is 39,850 miles. There has been a noticeable decline in the cost of the operations. The settlement of fair rents in the district of Purnea resulted in a moderate enhancement of 8.6 per cent., allowed mainly on the ground of a rise in prices. An increase of 57 per cent. in the rent-roll, resulting from a settlement of rents in the Balarampur estate, Midnapore district, was mainly due to the reassessment of tenure-holders who had enjoyed, without alteration of rents, all the profits of extensive reclamations made since the previous settlement. The enhancement was eased off in most cases by progressive assessment. The settlement operations in Chota Nagpur have yielded much information regarding local agrarian conditions and the main causes of dispute between landlord and tenant, and new legislative proposals have been formed to deal with the subject. The revision of the records of the last settlement in the temporarily settled districts of Orissa was commenced in 1906, and is being continued on improved lines. Munsifs drawn from the civil courts are being temporarily employed in settlement work in order to make the value of the settlement record of rights, as evidence in civil actions, better known and appreciated among judicial officers. Extended use of settlement records is being made by the Courts and by district officials.

LAND
REVENUE.
United
Provinces.

In the United Provinces the revision of settlements in Agra province approached completion. Assessments were sanctioned for the Dehra Dun, Jhansi, and Cawnpore districts, the settlements in each case being for 30 years. Regular settlements were in progress in four other districts. On a comparison of old and new revenues resulting from new settlements, Moradabad and Hamirpur show increases of 13.82 and 3.68 per cent., while Cawnpore, Banda, and Jhansi show decreases of 14.52, 5.86, and 2.93 per cent. respectively.

The reorganised Land Records Department has made progress in all directions. Village maps have now attained a high level of accuracy. The rent-rolls of Basti and Gorakhpur districts, in which widespread concealment of rent has been reported in the past, have been corrected into greater accordance with the facts.

Settlement work in the Punjab made satisfactory progress. The Rawalpindi and Hafizabad settlements, which have occupied five years, were completed. The assessments declared during the year give an increased land revenue of about £16,600 in the Hafizabad district and £13,320 in the Rawalpindi district. Over 9,000 village records were prepared, and nearly 800,000 changes in permanent rights were attested. These records save landowners and cultivators from many bitter disputes and ruinous litigation. The agriculturist element in the *patwari* staff was strengthened.

Punjab.

Settlement operations in the Frontier Province were completed during 1906-7 after six years' work. Though the enhancements in Hazara district were considerable, the total assessment being raised from £20,380 to £34,110, only 90 appeals were received from 900 estates affected. In Bannu district the assessment was increased by 66 per cent. to £28,940. In the Department of Land Records the *patwari* establishment showed improvement in respect of educational qualifications and the strengthening of the agricultural element. No new survey work or boundary demarcation was undertaken.

North-West
Frontier
Province.

In Burma during 1907-8 the Survey of India completed surveys in four districts. In future all cadastral surveys are to be carried out by local agency. Special fishery surveys were undertaken in three districts. Parties were engaged on regular original settlement work in two districts and on revision work in six districts. The settlement system in Lower Burma has been assimilated to that in Upper Burma, the district block system, under which a series of crop measurements extending over several years is obtained, being adopted. It is proposed in certain cases to lengthen the present terms of settlement, which are 15 years in Lower Burma and 10 years in Upper Burma. New rates consequent on settlement were notified in six districts, the aggregate revenue demand being increased by 23,450*l.* or 13½ per cent.

Burma.

During the year settlement operations made satisfactory progress. There were *ryotwari* settlements in three districts and several revisions of settlements. It was decided to extend to 20 years the present settlement of 11 or 12 years in the Seoni district. In the Land Records Department measures were taken to raise the status of the *patwaris*. The condition of village maps has improved.

Central
Provinces
and Berar.

During the year the Department of Land Records was separated from that of Agriculture, and the control of petty settlements was transferred to the Director of Land Records. A survey and record-of-rights for the entire settled area of the province are being prepared, and afterwards the village maps and records will be kept up to date. They have been completed for 6,000 square miles in Eastern Bengal and 8,500 square miles in Assam, two-thirds of the former being permanently settled, and all the latter temporarily settled. Survey and settlement operations on a large scale were conducted in four districts during the year. With reference to Bakarganj, where the record-of-rights is nearly complete, it is said that "the maintenance of the record will be more instrumental in the pacification and better administration of the district than any other reform." The record-of-rights is increasingly utilised by executive and judicial officers.

Eastern
Bengal and
Assam.

Survey parties were at work in Madras during the year 1907-8 in the districts of Ganjam, Kurnool, Cuddapah, Chingleput, Coimbatore, and Tinnevely, but the department was again unable to work up to the estimate. Four settlement parties continued their operations in Salem, Chingleput, Kurnool, Cuddapah, Tinnevely, and Nellore, and a fifth began operations in Coimbatore. The total area surveyed was 2,059 square miles, and the area assessed 2,043 square miles. The Land Records Department was, as in previous years, mainly confined to measures preliminary to maintenance.

Madras.

LAND
REVENUE.
Bombay.

The survey and settlement work was of a routine character. The Land Records Staff made good progress with the preparation of the record-of-rights, but the local Government have expressed the view that the maintenance of the record leaves a great deal to be desired. Every season shows increasingly the value of the record.

REVENUE ASSESSMENTS AND INCIDENCE.

Revenue
Assessments
and Inci-
dence.

Land revenue is realised in the form of a fixed annual payment for cash, the rate of assessment being subject to no alteration during a prescribed term of years. Except in Bombay (where the assessment is not fixed in terms of produce), the land revenue is assessed so as to represent a share, not of the gross, but of the *net* produce (or net assets). In the zamindari, or landlord settlements, that widely prevail in Northern India, the cultivating tenant pays rent to a landlord. Of this rent the Government usually takes rather less than 50 per cent. as land revenue.

The incidence of land revenue on the fully assessed cultivated area is under 1s. 1d. per acre in the permanently settled area of Bengal, and represents, on an average, less than 25 per cent. of the rental. In the permanently settled tracts of Eastern Bengal, it falls to less than 11d. per acre, while in those of the United Provinces it rises to 1s. 4d. in Oudh and 1s. 10d. in Agra. In the temporarily settled tracts the incidence per acre is approximately 2s. 3d. in Upper Burma, 3s. 6d. in Lower Burma, 3s. 5d. in Sind, 3s. 1d. in Madras, 2s. 5d. in the United Provinces, 2s. 4d. in Eastern Bengal, 1s. 6d. in Assam, 1s. 11d. in Bombay, 1s. 8d. in Berar, 1s. 5d. in the Punjab, and 8d. to 9d. in the Central Provinces. A return recently presented to Parliament on land revenue assessments in the Punjab since 1855 (Cd. 3991) shows that while the rate of land revenue per cultivated acre measured in rupees has not varied much in the last 50 years, its incidence measured in gold has greatly decreased. During this period there has been a remarkable rise in the selling prices of land. Rates of revenue vary greatly with the productive power of the soil, advantages of climate and irrigation, and facilities for marketing produce. The land revenue rates for Sind and Madras given above, include charges for State irrigation; elsewhere the land revenue rates exclude these charges. In Madras and Bombay the revenue demand is not enhanced on account of increased productiveness due to private improvements, while in Northern India such improvements are not taken into account in assessing the revenue until a period varying from 20 to 45 years has elapsed. It may be added that the burden of the land revenue per head of the population of British India was 1s. 6d. in 1907-8.

It has been calculated that in the Central Provinces the share of the gross produce represented by the land revenue is less than 4 per cent. of the average annual value; in Berar, the Deccan, and the greater part of the Punjab, about 7 per cent.; and in Gujarat, 20 per cent. It is certain that the Government now takes a very much smaller share of the gross produce than was customary in the days before British rule, while the assessments are lower than those that prevail generally in the Native States.

The Government makes liberal reductions of assessments in cases of local deterioration, where such reductions cannot be claimed under the terms of settlement.

COLLECTION OF THE REVENUE.

Collection of
the Revenue.

The fluctuations of land revenue receipts (exclusive of those credited to irrigation) in past years may be seen from the following table :—

Year.	Land Revenue Receipts (excluding those due to Irrigation).	Variation (Average of Five Years, 1881-85=100).
	£	
1881-5 (five years' average)	14,748,000	100·0
1886-90 " " (annexation of Upper Burma)	15,445,000	104·7
1891-5 " " "	16,522,000	112·0
1896-1900 " " (includes two famines)	17,217,000	116·7
1900-5 " " "	18,483,000	125·3
1905-6 (single year)	18,862,000	127·9
1906-7 " " "	19,832,000	134·5
1907-8 " (widespread shortage of crops)	18,756,000	127·2

LAND
REVENUE.

The general increase in land revenue is attributable to a variety of causes—to the inclusion of new territory (as Upper Burma); to the bringing of new land under cultivation as in Lower Burma, the Central Provinces and the Punjab; and to the progress of settlements and re-settlements, which, owing to the generally enhanced values of land, usually result in additions to the land revenue. Irrigation canals have enabled the cultivable area to be greatly extended. In the five years to 1906-7 the cultivated area in the Punjab increased by no less than 1½ million acres, and the area under canal irrigation increased from 1½ to 6¼ million acres. As a result the provincial assessment was increased by about £147,000. The receipts for 1907-8 were seriously affected by the failure of the monsoon, and consequently of the autumn harvest, in several provinces, particularly the United Provinces, where large suspensions and remissions were made. Bombay, the Central Provinces, and the Punjab suffered from the same cause. Expenditure increased owing to survey and settlement charges in Eastern Bengal and to extra allowances granted to subordinate officials as compensation for the dearness of grain.

The land revenue receipts in 1906-7 and 1907-8 were made up as follows :—

	1906-7.	1907-8.
Ordinary land revenue	£18,866,829	£17,781,132
Assessment of alienated lands, less quit-rents*	628,946	630,551
Capitation tax, or house tax levied in lieu thereof†	663,861	608,249
Recovery of survey and settlement charges‡	6,146	99,767
Sale of waste lands and redemption of land revenue	78,199	59,957
Fisheries and other receipts	594,653	616,717
	£20,838,634	£19,796,373
Deduct portion of land revenue due to irrigation	1,006,981	1,040,533
Gross land revenue	£19,831,653	£18,755,840

The charges in 1907-8 included £1,561,695 for district administration, £420,494 for survey and settlement charges, £863,287 for land records, and £680,975 for collection of the revenue. The total charges were £3,527,591, and the net revenue £15,228,249, as compared with £3,353,922 and £15,477,731 in 1906-7.

The total advances made by Government to cultivators during 1907-8 amounted to £2,019,609, and the total amount of advances outstanding at the close of the year was £3,337,517. The advances were chiefly for the relief of agriculturists, but partly for the improvement of land and for loans to co-operative credit societies. No less than £829,912 was advanced for relief in the United Provinces alone.

The progress of the land revenue will now be reviewed province by province. The figures are taken from the land revenue reports relating to the agricultural year, while those given above are from the corrected Accounts of the Government of India, and relate to the financial year.

The land revenue of Bengal remains fairly constant, as most of the province is under permanent settlement. The revenue demand for 1907-8, excluding arrears, amounted to £1,916,340, including £1,525,174 from 113,159 permanently settled estates, £202,789 from 10,302 temporarily settled estates, and £188,377 from 1,830 estates under the direct management of Government. Owing to bad harvests and high prices, the percentages of collections on demands were the lowest, and the outstanding balances the highest, for five years.

The total revenue collections were 96·4 per cent. of the amount due (including arrears), and the total balance outstanding was £69,642. Money orders are increasingly used for the remittance of land revenue and cesses. The number of estates which became liable to sale for non-payment of Government revenue was 8,843, but only 673, or 7·6 per cent., were actually sold. Under the Public Demands Recovery Act,

* Mostly from Bombay. † Mostly from Burma. ‡ From Bengal and Eastern Bengal and Assam.

STATEMENT EXHIBITING THE MORAL AND MATERIAL

20

LAND
REVENUE.

139,014 certificates were filed for recovery of arrears of revenue, cesses, &c., compared with 140,510 in 1906-7; payment was generally secured on issue of notices or on attachment of property, but actual sale was necessary in 4,383 cases, and warrants were issued in 1,170 cases, 30 defaulters being imprisoned. Advances under the Loans Acts amounted to £120,489, the larger part under the Agriculturists' Loans Act.

United
Provinces.

In the United Provinces, after a period of depression, the year ending 30th September 1907 was moderately prosperous. Floods in Gorakhpur and other districts were the only serious calamity. There were more extended sowings of most of the better crops. Unhappily the favourable year closed with a bad monsoon, and prices, which had been falling, rose rapidly to famine rates. There was an increase in the area of cultivated holdings (330,000 acres), a slight rise in the revenue demand, and an improvement in collections.

The land revenue demand (including arrears) in 1906-7 was £4,309,744 as compared with £4,276,848 in 1905-6. Remissions were made on account of disasters by hail, drought, and floods. The percentage of collection was, as in 1905-6, practically 100 per cent., and the arrears at the end of the year were only £2,298. The year was remarkable for the large number of districts in which the current demand was cleared in full. The land revenue rose somewhat, the progressive enhancements imposed in completed settlements, largely in Oudh, being only partially counteracted by substantial decreases in the new settlements of Cawnpore and Banda. The net increase in the land revenue brought on the roll during the year was £4,580. The other sources of revenue dealt with in the land revenue report, but not strictly classed as land revenue, are the occupiers' rate (receipts, £568,436) and the owners' rate (receipts, £12,900), which constitute payments for irrigation, besides cesses, &c. The nature of the Government demand was materially altered during the year. The *patwari* rate was abolished, the owners' rate for canal irrigation diminished in consequence of re-settlements, while the collections on account of the occupiers' rate fell with a shrinkage in the area irrigated. There was a decrease in advances under the Land Improvement Loans Act and the Agriculturists' Loans Act, the total amounting to £101,400. The rules for *takavi* loans have been simplified and a system of equated payments for long loans has been introduced. A consistent and progressive *takavi* policy has been laid down, the Government desiring to extend improvements and provide funds for all reasonable demands. As regards coercive processes, the figures for the severer forms were somewhat lower than in the preceding year. There were 149 attachments of immoveable property, 144 sales of moveable property, and 698 cases in which defaulters were detained in custody.

Punjab.

The year was on the whole satisfactory. The area sown was 9 per cent. above normal, but the out-turn of the principal staples was rather disappointing. The fixed land revenue demand for the year to 30th September 1907 amounted to £1,369,000, of which 97 per cent. was collected. About 19 per cent. of the land revenue is now collected under the "fluctuating" system in which the demand varies with the crop. It is applied for the most part to canal-irrigated and riverain tracts. The system is under investigation as regards canal-irrigated areas. In other tracts it is reported to be popular and working well. The "fluctuating" revenue amounted to £294,500 in 1906-7. Coercive processes for collection of revenue show an increase as regards the issue of writs and warrants, but there was no increase in cases of imprisonment or in sales of property of defaulters, which numbered five and 1,968 respectively. The agricultural advances amounted to £26,910.

North-West
Frontier
Province.

In 1906-7 the cropped area was larger than in 1905-6, and the harvests were good. The demand was increased by £8,900, owing to new assessments. Collections on the whole were prompt, as the assessments are by no means burdensome, and in ordinary years the people find no difficulty in meeting their liabilities. There are no outstanding arrears. Under these favourable conditions 99 per cent. of the total demand of £114,450 on account of fixed land revenue was realised. Fluctuating and miscellaneous land revenue, between them, contributed £27,450, compared with £23,300 in 1905-6. Coercive processes were more numerous, the number of writs and warrants of demand rising from 2,201 to 2,535, but the increase is partly due to the issue of separate writs instead of, as formerly, the issue of one writ against a number of persons. Of the total 80 per cent. were issued in Peshawar. The agricultural advances made during the year amounted to £6,700.

LAND
REVENUE.
Burma.

The year to 30th June 1908 was favourable on the whole in Lower Burma, where cultivation extended, and the rice crop was above the average, but in Upper Burma, owing to insufficient rainfall, the crops in many districts were a total failure. The totals of revenue (exclusive of arrears demand) under the various heads for the last two years are shown in the margin. The current land revenue demand amounted to £1,665,511, of which about 99 per cent. was collected, a better result than has been attained for many years. The total increase in the demand for the last ten years has been about £833,000. There was a decline in remissions, partly

due to the new system of non-assessment on block areas where failure of crops has been general. The number assessed for capitation tax was 1,275,481, an increase of early 40,000. There was a rise of 6,414 to a total of 756,035 in the number of households assessed to the household tax, or *thathameda*. In the Shwebo district and revenue was partially substituted for *thathameda*. There was a further decline in receipts from the river and other fisheries owing to bad seasons. The heading "other sources" includes receipts from petroleum royalties, ruby mines, water rate, &c. As regards coercive processes for the recovery of revenue, the number of defaulters committed to jail fell from 65 to 25. Capitation tax and *thathameda* are harder to collect without process than land revenue, and land revenue is harder to collect when the cultivation is new or intermittent. Processes are mostly issued, not on account of contumacy, but because the assesses are not readily found. Contumacy, however, is widely attributed to Indian and other immigrants. Owing to scarcity in Upper Burma suspensions of revenue were necessary, and the amount of agricultural advances rose to £64,930.

The year to 30th September 1907 was on the whole satisfactory. The land revenue demand (excluding cesses) was £565,375, almost the whole of which was collected. Coercive processes were not numerous; the number of defaulters arrested fell to 102, of whom only one was imprisoned; attachments and sales of property numbered 375 and 8 respectively, and no estates were sold. Agricultural advances made during the year amounted to £22,370. For some years there has been a steady expansion in the occupied area in the Central Provinces, and in 1906-7 the *ryotwari* estate increased by 21,000 acres. In Nimar a great deal of land has been excised from State forests in recent years for *ryotwari* settlement.

In Berar during the year to 31st July 1907 the harvests were generally more favourable than in 1905-6, and the high prices of cotton were beneficial to the cultivators. The land revenue demand, including cesses, amounted to £590,700, a small increase over that of 1905-6; almost the whole of this amount was collected during the year. Very little resort to serious coercive processes was found necessary, and in no case was imprisonment resorted to. In Berar the agricultural advances continue to be comparatively small.

In the Central Provinces nearly one-sixth of the Government waste lands available for cultivation were allotted during the year, while in Berar nearly the whole of the available area of waste has been taken up.

The year 1906-7 was not unfavourable agriculturally, for though floods damaged the crops and the outturn of rice and jute crops was poor, cultivators, especially in the jute districts, benefited from high prices. The revenue increased by 1.14 per cent., mainly owing to extension of cultivation in Assam. The total land revenue demand, including arrears, was £1,302,297, of which 94 per cent. was collected. Of the total revenue 52 per cent. was contributed by 116,690 permanently settled estates covering 39,915 square miles, 36 per cent. by 891,824 temporarily settled estates covering 6,200 square miles, and 12 per cent. by 1,559 estates covering 3,298 square miles under direct Government management. Some remissions were made on account of flood damages. As regards coercive measures, there was a considerable decrease in sales. The amount of agricultural loans granted increased owing to the short outturn of crops, and the sum outstanding at the close of the year was £62,890.

The south-west monsoon in 1907 was generally deficient and ill-distributed, while the north-east monsoon was favourable. The total crop area exceeded the normal by 2,119,000 acres, or nearly 6 per cent., all the chief food and industrial crops showing an increase. But the outturn was in no case above normal. The total current demand in 1907-8 for land revenue, including charges for irrigation and miscellaneous

Madras.

Central
Provinces
and Berar.

Eastern
Bengal and
Assam.

LAND
REVENUE.

receipts, was £4,185,000, of which 98 per cent. was collected. Of the above demand, £332,200 represents revenue from permanently settled estates, and £51,000 quit-rents from villages held under special tenures, these sums being fairly constant; the remainder comes mainly from peasant proprietors. Owing to expansion of cultivation there was some increase in *ryotwari* holdings, which covered $24\frac{1}{2}$ million acres. Remissions amounted to £211,000, of which £94,000 was due to the state of the season. As the result of orders which were passed in 1904 to restrict the issue of demand notices to cases of real necessity, there was a further decline in the number of preliminary processes for the recovery of revenue. Demand, distraint and attachment notices, sale notices, and actual sales were considerably fewer; the number of demand notices, which was 6,212,162 in 1903-4 had fallen to 1,926,330 in 1907-8, while the number of sales fell from 9,479 in the former year to 3,230 in the latter. Advances amounting to £50,100 under the Loans Act were chiefly for the sinking or repairing of wells and the purchase of cattle.

Bombay and
Sind.

The harvests in Bombay and Sind were satisfactory during the year to 31st July 1907. In Sind an exceptionally good irrigation season led to an extension of cultivation and an increase in the revenue. The total land revenue demand, including arrears but excluding remissions and sums written off as irrecoverable, amounted to £3,698,360. Collections amounted to £3,031,470, while £469,800 was under suspension. The suspended revenue was far greater in Ahmednagar than in any other district. The number of coercive processes in Bombay was rather large, though the cases in which the severer forms of compulsion were employed was comparatively small. In Sind there was a notable decrease in the number of distraints and forfeitures. The agricultural advances made in Bombay and Sind amounted to £103,000.

WARDS' AND OTHER ESTATES.

Wards'
Estates.

Courts of Wards have been established in most of the larger provinces. Primarily intended for the protection of the Government revenue, they are also beneficial to the interests of the owners, and recent changes in the law have been largely made in the owners' interests. Before 1899, the Courts had power to assume the management of estates of minors, of persons physically or mentally incompetent to manage their own property, or of persons declared by the local Government, at their own request, to be disqualified for its management. Since that year, various amending Acts have been passed in the several provinces, the general effect of which is to increase the powers of the Court of Wards with regard to the management of the properties under its charge and the discharge of encumbrances, and to prevent disqualified proprietors from creating new charges without the knowledge of the Court. The duty of the Courts is to manage the estates under their charge in the interests of both proprietors and tenants, to support the family of the proprietor, and to educate young wards; to pay off debts due by the estates, and to spend the surplus income on the improvement of the property in the best attainable way.

At the end of the last agricultural year for which figures were available there were 757 estates under management in the seven provinces that have Courts of Wards, 55 having been released during the year. The gross income of the estates was about £2,656,000. In the United Provinces three large estates were released, heavy debts having been paid off, rent rolls increased, and improvements (well-boring, &c.) effected. In the case of one estate in Agra the rent-roll increased by 55 per cent. in 16 years, and debts amounting to nearly five times the initial rent-roll were discharged.

Other
Estates.

Of the estates under Government management in Bengal 117 were encumbered estates in Chota Nagpur. In the United Provinces the number of Government estates increased from 526 to 667, most of them being properties bought in under the Bundelkhand Encumbered Estates Act. In Bombay proper there were 491 estates under the management of the Talukdari Settlement Officer and 396 encumbered estates under a special manager in Sind.

CHAPTER IV.

REVENUE FROM TAXATION AND OPIUM.

SALT.	CUSTOMS.
EXCISE.	INCOME TAX.
PROVINCIAL RATES.	REGISTRATION.
STAMPS.	OPIUM.

(For further details see *Statistical Abstract for British India*, Tables 43, 45 to 47, 50 to 58, and 61 to 66.)

Of the eight heads of revenue dealt with in this chapter, seven comprise the tax revenue of India, and furnish about 42 per cent. of the total net revenue of the Indian Government. To this the chief contribution is made by excise, the yield of which has increased in recent years, mainly on account of higher rates of duty and stricter supervision. Next come customs and stamps, both of which have benefited by the great progress in trade and industry. The salt revenue has diminished, owing to reductions, amounting to 60 per cent., in the rate of duty since March 1903. Receipts from income tax and registration, though small, are increasing.

SALT.

SALT.

The salt revenue is raised by a duty on all salt imported into, or manufactured in, India. The rate of duty has in past times ranged from 3 annas (in Burma) to $3\frac{3}{4}$ rupees (in Bengal) per maund of 82 $\frac{1}{2}$ lbs. In 1882 a general duty of Rs. 2 per maund was introduced (except in Burma) and raised in 1888 to Rs. 2 $\frac{1}{2}$. In 1903 the rate of Rs. 2 was reverted to, and in March 1905 the tax was further reduced to Re. 1 $\frac{1}{2}$ per maund. A further reduction to one rupee (or 1s. 4d.) per maund was effected from the 20th March 1907. The records of retail prices show that in almost all districts of India the consumer has received the full benefit of the reductions of duty. In Burma the rate has been introduced by which the greater part of the imported salt, and a system has been introduced by which the greater part of the salt which is locally produced pays a duty of 8 annas per maund. The Indian salt duty is now more uniform, and lower on the average, than at any former time. The successive reductions of duty have led to a large increase in the consumption of salt throughout India, as will appear from the table in the margin, the increase in the five years since the reductions began being 20 per cent. Although, however, consumption has grown, the sacrifice of annual revenue (nearly £3,000,000) cannot be made good by enhanced consumption within any period worth considering. In 1907-8 the expansion of consumption was checked by famine in some parts of India.

Year.	Issues of Salt in 100,000's of Maunds.	Duty per Maund.	Gross yield of Duty.
Average, 1898-9 to 1902-3	360	Rs. 2 $\frac{1}{2}$	000 £ 6,002
1903-4	376	2	5,250
1904-5	391	1 $\frac{1}{2}$	5,355
1905-6	407	1 $\frac{1}{2}$	4,376
1906-7	431	1	4,363
1907-8	443	1	3,339

The principal sources of salt supply are the sea coast, where salt is manufactured by the evaporation of sea water; the salt lakes and pits of Rajputana; the salt mines of the Punjab and North-West Frontier Province; and importations from abroad, which supply most of Bengal, Eastern Bengal and Assam, and Burma. The duty is levied on salt at the place of manufacture, or at the port of importation, before it passes into consumption. Some of the salt sources belong to, or are worked under the direct control of, the various Local Governments; others are owned or leased by private individuals. The salt supply of India is not, therefore, a Government monopoly, and the importation of salt is unrestricted. Manufacture is not allowed where the circumstances are such as to render proper collection of the duty impracticable, as, for instance, on the coast of Bengal.

The gross yield of the salt duty during recent years is shown in the table above. The yield in 1907-8 was £3,338,988, of which nearly 28 per cent. was derived from imported salt. The charges amounted to £363,484, exclusive of £251,400 paid under treaties in the form of compensation, principally to Native chiefs who have assigned their salt sources to the Government of India.

The salt sources under the control of the Northern India Salt Department comprise: Northern (1) the Rajputana sources, including the Sambhar Lake and the brine springs at India.

SALT.

Pachbadra and Didwana in the Jodhpur State; and (2) the Punjab sources, including the Mayo, Warcha and Kalabagh mines, the Kohat mines, the Mandi mines, and the brine springs at Sultanpur. The most important sources are the Sambhar Lake and the Mayo mine. Since 1870, when the lake was leased by the Government of India, over 135 million maunds of salt have been taken from it, and the financial results show a total credit balance of £277,000. Owing to fears that the Sambhar salt was becoming exhausted, a long trench was excavated through the bed of the lake in 1906. The trench proved an undoubted success, and in order to secure an adequate supply of salt it is to be extended, while combined storage and evaporating reservoirs are to be constructed. The Sambhar salt is sold at a uniform price of 4 annas per maund, with a charge of 3 pies for clearance; the sales in 1907-8 amounted to 5,140,100 maunds. The price of Didwana salt is 9 pies; and of Pachbadra salt 1½ annas, with a charge of 3 pies for clearance. The sales from the Mayo and other Punjab mines amounted to 3,079,150 maunds. The Mayo salt is sold for 9 pies per maund, or, at the Khewrah depôt, for one anna. Kohat salt, on the average, costs about 9 pies. The total quantity issued by the Northern India Salt Department for consumption was 10,022,086 maunds, as compared with 8,945,023 maunds in 1906-7. The following table shows the states and provinces mainly supplied by the Department, with their salt consumption and the average retail price of salt:—

Province or State.	Total Consumption.	Average Retail Price.		Average Consumption per Head.*	
	1907-8.	1906-7.	1907-8.	1906-7.	1907-8.
	Maunds.	Per maund. Rs. A. P.	Per maund. Rs. A. P.	Lbs.	Lbs.
North-West Frontier Province - - -	163,130	2 1 7	1 10 1	6·00	6·31
Punjab - - - - -	2,743,286	2 2 1	1 11 3	8·42	9·12
Kashmir and Jammu State - - -	368,830	—	—	11·16	11·33
United Provinces - - - - -	5,526,293	2 10 11	2 3 1	8·43	9·38
Behar (Bengal) - - - - -	3,148,552	2 9 9	2 3 5	10·94	10·69
Central Provinces and Berar - - -	2,461,318	2 14 9	2 7 5	13·89	13·85
Rajputana - - - - -	1,201,935	2 6 3	2 1 4	7·62	9·70
Central India - - - - -	1,235,847	2 9 0	2 0 10	10·41	11·79

* No allowance has been made for increase in population since the census of 1901.

The Department issued 45,003 licences for the manufacture of saltpetre and other saline substances in 1907-8. The refineries produced 556,221 maunds of refined saltpetre.

The number of persons arrested for offences against the salt law was 662, of whom 423 were released. Of 209 persons convicted 39 were imprisoned.

Bengal.

The salt consumed in Bengal is imported from abroad or from other parts of India. In the maritime tracts of the province the manufacture of salt is prohibited, owing to the difficulty of preventing illicit manufacture. The quantity of salt imported by sea during the year 1907-8 was 13,302,508 maunds, of which one-third came from the United Kingdom. There was an increase in foreign imports of 14 per cent., as compared with 1906-7. 1,194,529 maunds of Madras salt were imported into Orissa by rail. The average wholesale price of salt, including duty, at the chief marts of Bengal was about Rs. 2½ per maund, having decreased by about 7 annas as compared with 1906-7. The net amount of salt consumed in the province rose from 7,894,200 maunds in 1906-7 to 8,281,920 maunds in 1908. The number of persons convicted of offences against the salt law was 49.

The trade in salt has received a decided impetus by being set free from the restrictions of the *rawana*, or pass, system. Competition has been encouraged, and there has been in some districts a notable increase in the number of retail shops. A marked decrease in the number of offences against the salt laws is ascribed to the cheapening of licit salt. The reduction of the duty has made it hardly worth while to incur the risk of punishment for manufacturing illicit salt at present prices.

Eastern Bengal and Assam.

This province, like Bengal, depends on imported salt. The total consumption of salt in Eastern Bengal and Assam was 3,092,960 maunds, being an average consumption per head of about 8 lbs. The average wholesale selling price per maund was Rs. 2.4.11, against Rs. 2.11.5 in 1906-7. Although the price has fallen in very

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few districts by the full amount of the reduction of the duty, the consumer has greatly benefited. As in Bengal, the *rawana* system was abolished with effect from the 1st April 1906.

Madras.

Originally there was a Government monopoly of salt manufacture in the Madras Presidency, but in 1882 an attempt was made to substitute private manufacture and abolish all Government factories. This, however, did not answer, and in 1888 a certain number of Government factories were established as a check on the prices and quality of the privately manufactured (or "excise") salt. The system thus instituted still exists. Of the 65 factories worked during 1907-8, 43 were under private and 22 under Government management. The quantity of salt manufactured was 9,616,725 maunds, of which 6,310,863 maunds was "excise" salt. This represents a decrease on the amount (11,234,984 maunds) produced in 1906-7, which was the highest on record. The imports from Bombay, mostly to West Coast ports, rose from 1,230,044 maunds to 1,302,789 maunds. Excluding the salt used for fish-curing, or sold to the French Government, the total issue of salt for consumption was 11,673,586 maunds in 1907-8, as against 11,164,377 maunds in 1906-7. The average consumption per head of the population was 19·3 lbs. in the whole Presidency, including Coorg and Mysore, and other Native States (except Travancore and Cochin), as compared with 18·7 lbs. in 1906-7.

The average wholesale price of "excise" salt rose from 3 annas 2 pies to 3 annas 6 pies per maund. Government salt is usually sold at a fixed rate of 3 annas per maund. The retail prices varied from Rs. 1.6.11 to Rs. 2.14.8 per maund, against Rs. 1.13.6 to Rs. 3.5.4 in 1906-7. There was a large decline in offences against the salt laws, ascribed to heavy rain, which prevented formations of salt in saliferous areas, and to the reduction of duty.

During 1907-8 there were 136 bonded yards open for curing fish under special regulations, whereby cheap salt is sold to fish-curers. The quantity of fish brought to be cured was 57,525 tons, the season being favourable for fishing, and 869,627 maunds of cured fish left the yards fit for consumption.

The salt supply of Bombay comes from the Pritchard salt brine works, owned by the Government (Baragra salt), from sea-salt works on the coast, and from

Bombay.

	Total Issues.	For Local Consumption.
	Maunds.	Maunds.
Baragra salt -	2,742,640	549,646
Sea salt -	9,290,339	2,364,480
Imported salt -	387,811	291,975
Total -	12,420,790	3,206,101

abroad, chiefly from Goa. Of the 433 sea-salt works one, at Dharasna, is worked by the Government; the remainder are owned by, or leased to, private individuals. Owing to increased demands for salt, new works are being established. The bulk of the Baragra salt is exported to the United Provinces, the Central Provinces, and Central India; while the Madras Presidency and its States, Hyderabad, Mysore, Calcutta, and the Central Provinces, take large amounts of sea salt. The conditions of the year were favourable. The marginal table shows the issues of salt from each source in 1907-8. The total issues of salt were 1,300,411 maunds greater than in 1906-7, the portion for local consumption being 235,542 maunds greater.

The issues of duty-paid salt in the Presidency, excluding Sind, were at the rate of 12·58 lbs. per head of the population, as against 11·65 lbs. in 1906-7. The market price in Bombay city fell from Rs. 2.13.3 in 1906-7 to Rs. 2.5.10 in 1907-8. The records of prices for the past five years show that the two reductions of duty have been felt by the consumer to the fullest possible extent. Owing to the lower duty far more salt is being used for agricultural and industrial purposes and as food for cattle. There was a diminution in offences against the salt laws, ascribed to the lower price of salt.

Thirty-one fish-curing yards were open at the end of the year. The quantity of fish brought to be cured in bond fell from 200,207 to 183,406 maunds, and the quantity of cheap salt issued to fish-curers from 63,430 to 55,641 maunds.

Sind.

The Sind salt supply is derived chiefly from the sea-salt works at Maurypur, and in smaller quantities from salt deposits at Saran and Dilyar on the edge of the desert, and from importation. The amount passed into consumption during the year was 399,200 maunds. The consumption per head again rose from 9·23 lbs. to 10·23 lbs., the highest rate on record. The increase shows that the consumer is receiving the full benefit alike of the reduction of duty and of the abolition of licences, which has enabled many petty dealers to stock salt, while their competition has lowered prices. The average market price was about Rs. 1.15.5. Two fish-curing yards were worked during the year.

SALT.
Burma.

A duty of one rupee per maund is levied on salt imported into Burma. Salt locally manufactured formerly paid an excise duty levied by a composition rate on vessels used for boiling brine; a system of levying duty at the rate of 8 annas per maund on actual output has now been introduced into all districts where any large quantity is produced. An inquiry into the Burma salt industry was held during the year.

Duty was paid in 1907-8 on 1,485,574 maunds of imported salt, on which Burma mainly depends, and on 686,430 out of 719,068 maunds manufactured locally in districts under the system of direct taxation. The estimated output of other districts was 98,291 maunds. The estimated consumption was 2,270,295 maunds. Imports came chiefly from the United Kingdom and Germany. The statistics relating to local production of salt are untrustworthy, but the returns show that it tends to increase. The average prices of both foreign and local salt vary greatly in different districts. There was an increase to 268,700 maunds in imports of salted fish, on which a duty of 6 annas per maund is levied.

Excise.

Excise.

General.

The excise revenue is derived from the manufacture and sale of intoxicating liquors, hemp drugs, and opium. There is no excise duty on tobacco or betel. Opium, which is a common household drug, is usually taken in the form of pills or is dissolved in water and drunk. Opium smoking is not extensively practised. The excise revenue from opium is chiefly composed of duty and vend fees, and the rate of duty varies with local conditions, being highest where smuggling is most difficult. The right of retail vend is usually sold by auction. With regard to hemp drugs, cultivation is restricted and controlled; a duty is paid before issue, and retail sale is under licences, which are usually sold by auction.

The considerable growth of the excise revenue in recent years is due mainly to higher rates of duty and stricter excise control, and does not indicate a corresponding increase in consumption, although some increase has occurred through the expansion of population and the greater prosperity of certain classes. There has been a large and continuous reduction in the number of country spirit shops in the principal provinces. The Government consider that shops should not be so few that each has a monopoly over a wide area, lest prices should be unduly raised and illicit practices encouraged. Measures are being taken both to redistribute and to reduce the number of existing shops, as well as to improve the quality of the liquors sold.

In 1905, the Government of India convened a Committee to inquire into excise administration in respect of intoxicating liquors, and to propose reforms. In a Resolution, dated September 1905, they restated the general principles on which their excise policy is based, and declared, in appointing the Committee, that they had no desire to interfere with those who use alcohol in moderation, and deemed it necessary to make due provision for the needs of such persons; but their settled policy was to minimise temptation for those who do not drink, and to discourage excess amongst those who do. Fiscal considerations in connection with the liquor traffic were important, because the most effective way of forwarding this policy was to make the tax upon liquor as high as possible without stimulating illicit sale and production, and without driving people to substitute deleterious drugs for alcohol, or a more for a less baneful form of liquor. Further, the number of liquor shops should be restricted, and their location carefully considered with a view to minimising temptations to drink.

The Committee's report, dated 4th July 1906, was published as a Parliamentary Paper [Cd. 3327]. The orders passed thereon by the Government of India were also published as House of Commons Papers (142 and 209 of 1907 and Cd. 3816). As a result of the Committee's recommendations, an extensive programme of reform has been adopted, which will be gradually carried into effect. Some of the principal features of the Indian excise systems are outlined below, with reference to the Government of India's recent orders:—

- (1) The "out-still" group of systems, including all those prior in order of development to the imposition of a still-head duty, embraces various farming concessions over large or small areas, and privileges of manufacture and sale, under a control varying in its effectiveness, but in no case very complete. In out-still areas statistics of consumption are unobtainable; and the objections to a system which affords no adequate check on consumption by the imposition of a quantitative duty are clear. The systems of this group were already in process of abolition, and on the

Excise.

recommendation of the Committee a further reduction has been ordered, so that they will eventually remain in operation only in one large block of malarious and inaccessible country between Chota Nagpur and the Godavari river, and in certain small and isolated areas, where it is impossible, under present conditions, to exercise the control which the successful working of a distillery system demands. In these cases a lump tax on liquor is obviously better than none at all.

- (2) The distillery systems, the common principle of which is the levy of a stillhead duty, have also numerous forms, which vary from the *sadar* distillery systems, involving the collection of a number of distillers in a Government enclosure, to the contract supply system of Madras. Central distilleries, which are often mere collections of petty stills, will be gradually abolished in Bengal, Eastern Bengal and Assam, the Central Provinces, Sind, and certain parts of Bombay, which are now supplied by them. In the United Provinces, where the system will be maintained, the number of separate distillers will be reduced to a select few by an insistence on the introduction and maintenance of a proper plant. The Government of India have accepted the Committee's finding that, in existing circumstances, the most suitable system for most districts is the contract supply system of Madras. The essence of this system is that the contracts for the various districts should be given on the lowest terms, as regards *ex-duty* price of liquor, consistent with the conditions:—

(a) That the contractors should be men who have the means to carry out their contracts in a satisfactory manner.

(b) That there should be an avoidance of such allocation of the various district contracts as would place the greater part of the country spirit production of a province in the hands of a single distiller or combination of distillers.

It is claimed for this system that it steadies prices and thus renders it easier to obtain the full rate of effective taxation, in respect both of duty and of the surtax raised on retail vend under the auction system. Contracts will be granted for terms of three years. District monopoly, which has hitherto been the typical Bombay system, has been found to lead to increased consumption, and is being replaced by the contract system as circumstances permit. The Punjab system is one of competition for supply, but the competition is restricted by the situation of the distilleries, by the limitation of their number and still-power, and by other terms of their licences or distribution arrangements. It is not proposed to make any change in the Punjab at present.

- (3) The Committee's view has been accepted, that it will be feasible, in most provinces, to increase the existing local rates of still-head duty without giving rise to grave danger of illicit practices. The *minimum* rate will be 15 annas per proof gallon and the *maximum* rate Rs. 7, which is the present tariff rate on imported spirit. Within these limits rates will be varied according to local circumstances, and in general by steps of 10 annas per proof gallon.
- (4) In the case of country liquor the generally prevailing method of disposal of the right of retail vend is that of sale by auction. This has been the accepted policy of the Government of India for some years, on the ground that it keeps the liquor trade entirely under control, and secures the highest revenue on the lowest possible consumption. The leading principle of the auction system is that as large a proportion as possible of the total revenue on country spirits should be derived from the fixed duty. But in some parts of the same duty area there may be a relatively larger consuming population than in others, and in these areas the right of retail vend will possess a monopoly value unless the still-head duty is reinforced by supplementary taxation varying from place to place. The disposal of vend licences by auction serves as a simple but sure guide to the local demand, and indicates whether the still-head duty is adequate or otherwise. The Government of India have laid down the principles: (a) that the privileges of manufacture and vend must be completely separate; (b) that large vend monopolies, where they exist, must be gradually broken up, a system of shops under separate management being the ultimate object in view. The Committee's recommendation, that a fixed fee system should

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be generally introduced, with security to vendors of privileges "during good behaviour," has been rejected by the Government of India, chiefly on the ground that such a system inevitably leads to the growth of vested interests in the liquor trade, from which India has so far been free. In order to allow greater security of tenure, where this may seem desirable, local governments will be free to replace the yearly auction system by one for a term not exceeding three years, if they think fit.

- (5) Among other general principles which have been laid down, mention may be made of those affecting the sale of foreign liquor, the taxation and sale of toddy or *tari*, the hours of sale, the categories of persons by whom or to whom liquor may not be sold, the arrangement and general conduct of shop premises, the limits of retail sale and private possession, and the regulation of liquor consumption amongst backward tribes.

The normal excise system, which will eventually prevail over the greater part of British India, is, therefore, based on the grant by contract of the right of wholesale supply and the sale by auction of the right of retail vend. By these means the dangers of unrestricted competition for the supply of liquor and the attendant difficulty of proper supervision are avoided, while the largest possible part of the monopoly profits arising from these restrictions is secured to Government.

The following table shows the excise revenue for 1907-8 and 1906-7 under the different heads, as given in the Finance and Revenue Accounts:—

Year.	Licence and Distillery Fees and Duties.					Duty on Indian Consumption of		Fines, Confiscations, Miscellaneous.	Total Revenue.	Charges.	Net Revenue.
	Foreign Liquors, &c.	Country Spirits.	Toddy.	Opium and its Preparations.	Other Drugs.	Opium.	Ganja.				
1907-8	£ 335,771	£ 3,315,496	£ 974,155	£ 223,417	£ 364,431	£ 757,403	£ 225,443	£ 18,094	£ 6,214,210	£ 295,628	£ 5,918,582
1906-7	£ 297,396	£ 3,153,908	£ 904,022	£ 218,268	£ 374,520	£ 712,786	£ 213,212	£ 24,107	£ 5,898,219	£ 274,609	£ 5,623,610

The duty on beer was increased from one to two annas per gallon in January 1908.

A net sum of £666,720 was yielded by customs duties* on exciseable liquors imported into India during the year 1907-8; and the total net drink and drugs revenue amounted to rather more than sixpence per head of the population affected. The net revenue from liquors and drugs (*i.e.*, total excise revenue less charges, *plus* Customs duties on exciseable liquors) for 1883-4, 1893-4, and the last five years is given in the margin.

The number of retail shops and the excise receipts, as compared with the population, are shown in the following table, province by province:—

PROVINCE.	Number of Persons per Retail Shop licensed in 1907-8 for the Sale of				Net Excise Receipts per 10,000 of Population to nearest Rupee.		Population of Excise Area by Census of 1901.
	Country Spirits.	Toddy and Rice-Beer or other Indian Fermented Drinks.	Opium and its Prepara- tions.	Narcotic or Intoxicating Drugs, other than Opium.	In 1906-7.	In 1907-8.	
Bengal - - - -	16,690	2,155	37,880	17,866	3,164	3,206	50,722,000
United Provinces - - -	8,686	13,125	40,297	12,780	1,891	1,310	47,671,000
Punjab - - - -	21,126	497,753	20,803	28,824	1,920	2,013	20,408,000
North-West Frontier Province -	35,340	—	24,656	23,048	1,024	1,188	2,120,000
Burma - - - -	*	7,688	72,917	—	7,270	7,499	9,187,000
Central Provinces and Berar -	2,373	12,061	10,854	10,804	6,816	5,937	11,366,000
Eastern Bengal and Assam -	39,295	5,205	28,772	23,632	2,055	2,164	30,296,000
Madras - - - -	3,330	1,981	34,219	58,327	5,095	5,736	38,228,000
Bombay - - - -	6,100	1,582	18,848	26,603	8,024	8,962	15,323,000
Sind - - - -	10,959	802,728	12,208	6,217	4,729	5,346	3,211,000

* For distillery spirits, 195,478; for outstill spirits, 167,045.

* A duty is levied on all imported spirits, wines and beer, and credited to the head of Customs. The import duty is Rs. 7 per gallon on proof spirit; Rs. 10 per gallon, irrespective of strength, on liqueurs; Rs. 11 per gallon, irrespective of strength, on perfumed spirits; Rs. 2½ per gallon on sparkling wines and Re. 1 per gallon on other wines; and (since January 1908) 2 annas per gallon on beer. Imported opium is subject to a duty of Rs. 24 per seer, while other narcotic drugs pay the general import duty of 5 per cent. *ad valorem*.

EXCISE.
Bengal.

In Bengal the total excise revenue for 1907-8, compared with that of the previous year, as given in the departmental returns, was as shown in the margin. The

Gross Receipts from	1906-7.	1907-8.
Country spirits -	£ 579,425	£ 626,738
Foreign liquors and rum -	30,451	30,126
Fermented local liquors, toddy, and rice-beer -	116,359	120,096
Opium -	156,779	174,614
Hemp drugs -	187,472	185,361
Miscellaneous -	1,499	1,603
Total -	£ 1,071,985	£ 1,138,538

increase in 1907-8 was mainly under country spirits, opium, and toddy. The excise revenue per head, allowing for increase of population, is rather over five pence. The year was marked by an extension of the area under the contract distillery system, and the out-still area has now been reduced to 60,101 square miles. The reduction will be continued. The chief difficulty in further reducing it is that the people of Behar and Chota Nagpur drink a very weak liquor which cannot be conveyed for long distances, and there is a danger that by the introduction of the distillery system they may be led to drink a stronger liquor. The whole of the local excise administration was examined during the year. Among various reforms adopted, in consequence of the report of the Excise Committee, may be mentioned:—(1) Triennial instead of annual settlement of *pachwai* shops paying an annual licence fee of over Rs. 200; (2) extension of distillery areas in Behar; (3) fixing of maximum prices and issue strengths in the central distillery areas in certain districts of the Patna division, the Sonthal Parganas, Bhagalpur, and Ranchi; (4) revision of rates of duty in 12 districts, including Calcutta; (5) levy of different rates of duty in urban and rural areas in districts of the Patna division (except Shahabad); (6) constitution of a distillery area in Ranchi district; (7) restriction of the limits of retail sale of country liquor; (8) abolition of passes for transport of imported liquor; (9) revision of rates of fees of imported liquor in railway refreshment rooms. The prohibition of the sale of intoxicants of all kinds to children under 14 years of age was introduced during 1906-7. Steps are being taken to amend the Bengal Excise law.

Relatively high rates of consumption are mainly confined to three distinct tracts—one comprising Calcutta and its neighbourhood; the second, the Darjeeling district; and the third, the greater part of the Patna division, two districts of the Bhagalpur division, and three districts of Chota Nagpur. Calcutta again contributed more than one-fourth of the total revenue from country spirit, but there was a decrease in convictions for drunkenness. To check consumption the spirit duty has been raised from Rs. 5 to Rs. 5.10.0 per gallon, the number of shops reduced, and the limit of retail sale and possession reduced from 12 to 6 bottles. The duty was also raised by 8 annas in the urban areas of the distillery tracts of Patna, Gaya, Muzaffarpur, Saran, and Champaran.

The sale and consumption of opium increased. Several important cases of smuggling were detected. No shops are licensed for selling opium prepared for smoking, but the habit, which is confined for the most part to low-class Muhammadans, and which has become prevalent in Calcutta and Orissa, is to be specially reported upon. The importation and sale of cocaine have been limited to qualified and duly licensed persons; 245 licences were issued during the year. Restrictions have also been imposed on morphia and novocain.

There was an increase in the number of persons convicted in Bengal for excise offences, especially for illicit distillation of country liquor.

In the United Provinces the gross excise revenue for the last two years was as shown in the margin. The excise revenue per head is about three pence. There

was some decrease in the consumption of country spirits, ascribed to the failure of the harvest and the consequent high prices of food grains, to the abnormally high price of the raw material of distillation, and to enhanced duties. The out-still area was further contracted, and owing to arrangements with Rampur for establishing the distillery system in that State, it can now be got rid of in adjoining districts. The fall in receipts from hemp drugs was mainly under

Gross Receipts from	1906-7.	1907-8.
Country spirits and fermented liquors -	£ 395,213	£ 385,755
Foreign liquors and rum -	29,833	29,250
Opium -	56,504	56,537
Other drugs -	131,911	123,736
Miscellaneous -	643	358
Total -	£ 614,104	£ 595,636

the head of licence fees. The consumption of the expensive drug *charas* fell with the hard times, and the cheaper *bhang* was more largely used.

There was an increase in prosecutions, which were chiefly on account of illicit distillation and illicit trading in opium and cocaine. Novocain has been brought under the Excise Act.

Excise.

Extensive measures are being taken to carry out the recommendations of the Excise Committee. From 1st April 1909 the contract supply system will be introduced into one-third of the province. The right of retail vend in contract areas is being entirely separated from the manufacture of liquor. Stricter control of distilleries working on European lines has been introduced. Fresh licence forms for the sale of liquors and drugs have been devised. Rules have been framed for consulting local opinion as to the number and location of liquor shops in the larger municipalities. Proposals for a large reduction in the number of licences granted is under consideration.

Punjab.

The gross excise revenue in the Punjab for the last two years was as shown in the marginal table. In recent years there has been an increase in receipts,

Gross Receipts from	1906-7.	1907-8.
	£	£
Spirits made in India -	162,328	171,662
Imported liquors and beer -	19,991	20,780
Opium -	48,659	51,587
Other drugs and miscellaneous -	35,733	36,987
Total -	£266,711	£281,016

due to an increase in consumption. This has occurred in spite of a large reduction in the number of retail licences, and is ascribed partly to the belief in spirit as a prophylactic against plague, but chiefly to the growing prosperity of the province and the extraordinary rise in wages. High consumption is confined to a track consisting mainly of the Sikh districts of Lahore, Amritsar, Ferozepore, Jullundur, and Ludhiana, and the cities and cantonments of Simla, Ambala, and Rawalpindi. The province is remarkably free from drunkenness.

In consequence of the recommendations of the Excise Committee the whole excise system is under consideration. During 1907-8 the number of retail licences for country spirit was reduced by 21 per cent., and the monopolies for vend were broken up. With the object of diminishing illicit distillation in the rural areas of the four central Sikh districts, the experimental grant on low fixed fees of vend licences, to sell at lower rates country spirit 25 per cent. below proof, was continued, but the price per bottle was raised. This rise has reduced consumption in two districts, but the general result has been to increase sales, and it is still uncertain how far this is due to the substitution of licit for illicit consumption. The experiment is to be continued till 31st March 1910, but with increases in the still-head duty, fixed vend-fees, and sale price per bottle.

The year was marked by a decrease of 363 in the number of licensed opium shops and by enhanced sale prices of opium. The sale of opium has been separated from that of hemp drugs. Bengal or "excise" opium is to be substituted for other kinds hitherto consumed in the province, poppy cultivation (except in certain small areas) being abolished and the importation of Malwa opium stopped. Licences for the retail sale of hemp drugs were largely diminished, and the import duty on *charas* was enhanced.

North-West Frontier Province.

The excise receipts in the North-West Frontier Province amounted in 1907-8 to £17,313, as against £14,896 in 1906-7, the increase being mainly owing to exceptional imports of opium from Afghanistan. The tax on spirits was again enhanced. In this province, where illicit distillation is practically unknown, and drinking is confined to large towns, efficient excise control is not difficult. Action has been taken on recommendations of the Excise Committee by breaking up vend monopolies and reducing the number of liquor shops. Others are under consideration.

Burma.

In Burma the gross excise revenue during the last two years was as shown in the marginal table. Important questions of excise policy and administration were under consideration, but final orders had not been passed in many cases at the close of the year. The contract distillery system was extended and is to be still further extended. Shops for the sale of foreign and country liquors have been separated. A new Excise Bill for Burma has been drafted. An increase in the excise establishment has been proposed in order to cope with illicit

distillation. Various improvements are contemplated in the methods of working of distilleries. The control over retail sales of opium has been strengthened. The most satisfactory feature of the year was the continued decrease in the consumption of Government opium. The decrease in the three years to 1907-8 amounted to 19 per cent. It is believed that there has been no accompanying increase in the consumption of smuggled opium, though opium continues to be smuggled in large quantities

Excise.

from other provinces. The higher revenue from opium was due to the enhancement of the rates at which opium is issued to the vendors from the Treasury. The practice of hawking shop opium, which used to be one of the chief defects of the existing system, has been effectually checked, largely, no doubt, owing to the restriction of issues to the probable needs of consumers and their estimated means. District officers are generally of opinion that opium consumption is not increasing, but the use of other drugs (including cocaine) and of liquors shows a tendency to grow.

In the Central Provinces and Berar the excise receipts for 1907-8, as compared with those for 1906-7, were as shown in the margin. Owing to orders that all advance collections should be credited to the year to which they relate, the advance collections on account of 1907-8 were largely reduced, and comparison with past years is therefore vitiated. If the figures proper to each year be taken, the total receipts for 1907-8 show a slight increase.

Gross Receipts from	1906-7.	1907-8.
	£	£
Country spirits and toddy -	428,333	365,652
Opium -	123,288	118,956
Hemp drugs -	29,901	28,512
Miscellaneous, including foreign liquors -	4,353	4,792
Total -	£585,875	£517,912

Adverse agricultural conditions towards the end of the year affected the receipts, and temperance movements aided in diminishing consumption. For the first time since the introduction of the supply system the vend fees for country liquor ceased to increase. This was not due to bad times or to higher duties. A steady advance is being made in the policy of transferring gradually, and by well-considered revisions in the duty rates, the incidence of taxation from indirect to direct duty, other measures being meanwhile adopted which may prevent the retail market from becoming the monopoly of a few rich men. It is this object that justifies the temporary reversion to vend monopolies. The revision of spirit duties effected in 1907-8 and the introduction of differential rates for urban and rural areas are working satisfactorily, and it is hoped to revert to sale of shops separately at no distant date.

The contract distillery system has been introduced into the whole of Berar and into most of the districts of the Central Provinces. Although an advanced distillery system may not immediately conduce to temperance, it supplies a purer article, while under it control is more stringent and efficient. The reclamation of most of the very large area under out-still systems is proposed, but the conversion must be effected gradually, as sudden changes of system may drive the people to malpractices or to a greater indulgence in drugs. The duty on *charas* has been raised. The general trend of excise policy in the province has been to make liquor and intoxicating drugs both more expensive and less easy to procure. Illicit distillation is found to be more prevalent than had been supposed. Consumption is highest in the town and cantonment of Jubbulpore, and in the districts of Bhandara, Chanda, Ellichpur, and Betul, the last three of which are largely inhabited by aboriginal tribes. Consumption markedly increased in the rural areas of the Jubbulpore Division in 1907-8. A new Excise Bill has been drafted.

The excise revenue of Eastern Bengal and Assam for the last two years has been as shown in the margin. There was a larger consumption of opium and *ganja*, due partly to the recovery of the people from distress, and partly to lower retail rates. The statistics of the Hill Districts have now been included in the returns given. It is hoped to secure a reduction in the number of stills and to impose a still tax in these districts. During 1907-8 the excise revenue of the province increased by 6½ per cent. in spite of a reduction of nearly 10 per cent. in the number of excise shops. A further reduction of shops is under consideration.

Gross Receipts from	1906-7.	1907-8.
	£	£
Country spirits -	125,185	136,796
Imported liquors and rum -	8,008	8,035
Opium -	175,714	189,121
Hemp drugs -	111,081	114,355
Miscellaneous, including toddy, &c. -	4,810	4,943
Total -	£424,828	£453,250

During the year under report the contract distillery system was extended, and has since been extended further. As the system extends manufacture will be separated from vend and retail strengths fixed. Every effort is made to break up vend monopolies where they exist. The duty on spirits was raised.

Nearly 83 per cent. of the opium consumption was due to the Assam Valley districts. The total consumption was 2,030 maunds, or about 7 per cent. more than in 1906-7. The growth of consumption in recent years is due to increase

Excise. in population and to greater prosperity, resulting from high prices of lac, railway construction, and other causes. The less civilised indigenous hill tribes are much addicted to the habit. The question of the best means for checking the habit is under consideration, and it is proposed to enhance the treasury price. *Ganja* is chiefly consumed in the Eastern Bengal districts. It is the luxury of the poor, and the increase in consumption is mainly ascribed to the recovery of the people from the depression of the previous year. It was found on inquiry that the consumption of *ganja* and the opium habit are not spreading among tea garden coolies in Assam.

Madras. The gross excise revenue of Madras during the last two years was as shown in the margin. The contract distillery supply system, which is in force over the greater part of Madras, has now been taken as the best model for imitation in most other provinces. The distilleries are all private concerns working on European methods. In some small tracts non-distillery systems are in force, but these areas are being restricted. Over nearly the whole of the Presidency a tree tax is imposed on all palm trees tapped for fermented toddy, while shops for the retail sale of toddy are separately sold by auction. The increased

receipts from country spirits and toddy were due partly to increased consumption and partly to enhancement of duty and increased rentals. The duty on country spirits was raised in nine districts, and the tree tax was increased in five districts. Under foreign liquor the increase was due to larger consumption of locally-made foreign spirits and to a rise in the rents of beershops, resulting from the reckless bidding of brewers. A good season, the existence of railway works, and a larger number of marriages among the lower classes, are assigned as the causes of increased consumption of liquors.

The use of opium is almost restricted to the districts in the north-east of the Presidency, chiefly the Godavari district, where the rate of consumption is relatively high, and to the Madras Town Circle. The quantity consumed, excluding that issued to Native States, was 974 maunds, compared with 953 maunds in 1906-7.

Bombay. The excise revenue from Bombay (including Sind and Aden) during 1906-7 and 1907-8 was as shown in the margin. The chief cause of the expansion in receipts was

Gross Receipts from	1906-7.	1907-8.
	£	£
Country spirits	727,029	817,801
Toddy	114,816	122,195
Foreign and Indo-European liquors	23,738	13,957
Opium	64,859	70,968
Other intoxicating drugs	52,253	60,554
Miscellaneous items	4,842	5,290
Total Excise Revenue	£987,537	£1,090,765

the large number of marriages on the approach of a Sinhvast year, other factors being increased rates of duty and the improved position of the working classes. The expansion was especially marked in country spirits, the sales of which in Bombay proper were 18 per cent. above the average of the preceding five years. The revenue from toddy, opium, and other intoxicating drugs was also larger.

Among changes recommended by the Excise Committee and carried into effect were the reorganisation of the excise department; an increase in still-head duties, the tree tax, and the duties on beer and *charas*; and a reduction in the number of licensed shops for the sale of country spirit.

PROVINCIAL
RATES.

PROVINCIAL RATES.

Since 1904-5 many cesses levied under the head of Provincial Rates have been abolished. In 1907-8 a further measure of reform in the direction of decentralisation was adopted by the exclusion from the imperial accounts of the transactions of District Boards and of certain other local funds, which are raised locally, mainly for local purposes, and chiefly managed by local bodies. The minor funds have been absorbed or excluded. Where the revenues are under the orders of Government, the accounts have been absorbed in the Imperial or Provincial accounts. Where the income and expenditure are clearly under local control, the fund has been excluded, except in the case of funds specially created for local purposes and administered by Government officers in an *ex officio* capacity. In consequence of these changes the revenue from Provincial Rates was reduced in 1907-8 to £525,800, made up chiefly

of the public works cess levied in Bengal and the districts of Eastern Bengal, and of the appropriation by the United Provinces from local rates for the payment of rural police in the Agra province.

PROVINCIAL
RATES.

STAMPS.

STAMPS.

The stamp revenue is derived from two great classes of stamps. Judicial or court-fee stamps are provided for by the Court Fees Act (Act VII. of 1870), which imposes fees on plaints, petitions, and other documents, with specified exceptions, filed before civil, criminal, or revenue courts; non-judicial stamps by the Stamp Act (Act II. of 1899), which imposes duties on commercial transactions recorded in writing, such as conveyances, bonds, cheques, bills of exchange, receipts, and the like. The revenue from the former class increases with the growth of litigation, and that from the latter class with the development of trade and industry. The following table gives the gross stamp receipts, province by province, for the year 1907-8:—

	India (General).	Bengal.	Eastern Bengal and Assam.	United Provinces.	Punjab.	North-West Frontier Province.	Burma.	Central Provinces and Berar.	Madras.	Bombay.	TOTAL.
	£	£	£	£	£	£	£	£	£	£	£
Sale of court fee stamps	16,319	702,301	465,111	490,310	182,919	19,288	164,860	112,023	429,356	223,364	2,813,783
Sale of commercial and other stamps	8,599	307,624	175,593	155,990	95,973	11,673	99,342	70,918	260,564	192,716	1,378,192
Fines and miscellaneous	4,377	22,291	1,488	3,448	7,264	171	4,751	893	9,526	12,995	67,208
Total, 1907-8	29,295	1,032,219	642,192	649,748	286,156	31,132	268,953	183,834	699,446	429,075	4,259,183
" 1906-7	25,331	980,447	604,581	614,754	269,892	28,111	265,111	164,032	660,192	417,457	4,029,908

CUSTOMS.

CUSTOMS.

Special import duties are levied on malt liquors, wines, spirits, arms and ammunition, salt and salted fish, and opium. The duty on ale, beer, porter, cider, and other fermented liquors was increased from 1d. to 2d. per gallon with effect from 3rd January 1908. (For duties on alcoholic liquors see footnote on page 28.) Petroleum pays one anna per gallon, and articles of iron and steel one per cent. *ad valorem*. General import duties, which had been abolished in 1882, and were re-imposed in 1894, are levied, at the rate of 5 per cent. *ad valorem*. For as many articles as practicable tariff valuations are fixed, and these are revised from time to time, a general revision being made in December of each year. The chief articles on the free list are railway materials, machinery which is worked by power other than manual or animal labour, grain and pulse, living animals, coal, jute, raw cotton, than wool, books, gold and unset precious stones. On the revival of general duties in 1894 cotton goods were at first exempted, but in December 1894 a 5 per cent. duty *ad valorem* was imposed on imported cotton goods and yarns, while a countervailing excise duty of equal amount was imposed on all yarns of counts above 20 spun at power mills in British India. In February 1896 the cotton duties were revised; all cotton yarns and thread, whether imported or manufactured in India, were freed from duty, while a uniform duty of 3½ per cent. *ad valorem* was imposed on all woven cotton goods imported from abroad or manufactured in India at power mills, the products of the village handlooms being exempted. A duty is levied on exported rice and rice-flour at the rate of 3 annas per maund of 82½ lbs. of unhusked rice (about 4d. per cwt.). An Act empowering the Government of India to put a countervailing duty on any imported goods which have received a bounty, direct or indirect, from the country of export, was passed in 1899. This was put in force with regard to bounty-fed sugar under the Indian Acts of 1899 and 1902. But since the Brussels Convention took effect, sugar produced in any of the countries adhering to the Convention has been subject only to the ordinary tariff rate. Sugar entering India from the Argentine Republic, Chile, and Denmark remains subject to countervailing duties, but the amount of such sugar is negligible.

The appended table shows the amount of the net customs receipts in 1894-5 and 1895-6, when the changes above-mentioned took effect, and also those for the four most recent years.

CUSTOMS.

	1894-5.	1895-6.	1904-5.	1905-6.	1906-7.	1907-8.
Sea Customs, import duty :	£	£	£	£	£	£
Arms, ammunition, &c. - -	10,126	11,403	10,925	10,796	10,996	13,811
Liquors - - - - -	406,355	440,669	552,141	646,286	561,401	666,721
Petroleum - - - - -	213,118	270,782	303,465	241,125	246,120	294,548
Cotton manufactures - -	256,631	776,483	803,324	877,330	850,479	998,582
Silver bullion and coin -	230,557	231,859	267,691	194,685	260,637	341,658
Other metals - - - - -	135,078	168,641	227,170	202,911	226,776	299,580
Sugar - - - - -	630,450	686,725	218,061	266,216	284,936	295,431
Other articles - - - - -			815,028	845,346	870,143	1,040,381
Export duty on rice - - -	594,017	609,581	858,958	751,115	681,816	664,772
Miscellaneous - - - - -	6,694	1,770	22,698	21,169	24,871	23,612
TOTAL Sea Customs - - -	2,483,026	3,197,913	4,079,461	4,056,757	4,018,175	4,639,096
Land Customs - - - - -	15,884	13,397	24,630	20,059	20,351	28,113
Excise duty on cotton manufactures	6,897	40,632	155,577	178,071	190,947	223,730
Miscellaneous - - - - -	10,773	18,672	19,044	17,523	17,290	19,087
TOTAL NET CUSTOMS REVENUE	2,516,580	3,270,614	4,278,712	4,272,410	4,246,763	4,910,026

The receipts from import duties in 1907-8 show an increase, chiefly owing to the much larger imports of cotton and other manufactures, liquors (which had fallen off in 1906-7 owing to enhanced duties), silver and other metals, petroleum, &c., but the yield of the export duty on rice again fell. The growing receipts from the excise duty on cotton goods made in power mills are a satisfactory indication of the prosperity of that industry. Excluding revenue from salt, which is not credited to customs, about two-thirds of the revenue from imports is derived from five heads—cotton manufactures, liquors, silver, sugar, and petroleum.

INCOME
TAX.
General.

INCOME TAX.

The Income Tax Act (II. of 1886), applicable to the whole of India, took the place of local Acts under which various licences were required for the exercise of trades or industries. Its principal provisions are that all incomes from salaries and pensions or from interest on securities, if amounting to Rs. 2,000 per annum, shall pay 5 pies in the rupee (equal to 6½d. in the £); that incomes less than Rs. 2,000 shall pay 4 pies (5d. in the £); that companies shall pay 5 pies in the rupee on their net profits; and that incomes under Rs. 2,000 derived from other sources shall pay according to a graded scale from Rs. 20 on an income of Rs. 1,000 to Rs. 42 on Rs. 1,999, and 5 pies in the rupee on incomes of Rs. 2,000 and upwards. All incomes of less than Rs. 1,000 (£66⅔) a year were exempted by an amending Act (XI. of 1903), which substituted that taxable minimum for the former limit of Rs. 500. The tax is not levied on incomes from land or agriculture. Military salaries of less than Rs. 500 a month (£400 a year) are exempt.

The gross revenue from income tax in 1907-8 was £1,504,113, as compared with £1,423,787 in 1906-7. The proportion of revenue derived from the different classes of incomes varies but little, and is roughly 28 per cent. from salaries and pensions, 13 per cent. from profits of companies, 5 per cent. from interest on securities, and 54 per cent. from other sources. The number of persons assessed to income tax is only a small fraction of the population, the total in 1906-7 being 255,762. The net receipts from each administration are shown in the margin. A large proportion of the revenue is collected in Calcutta and Bombay. Income tax receipts have increased, with the increase in profits and salaries resulting from commercial and industrial activity, as well as owing to improved administration.

Gross Receipts,
1907-8.

India (General) - - - -	£ 141,324
Bengal - - - - -	350,528
Eastern Bengal and Assam -	75,488
United Provinces - - - -	144,761
Punjab - - - - -	95,026
North-West Frontier Province	8,671
Burma - - - - -	118,040
Central Provinces and Berar -	41,132
Madras - - - - -	201,339
Bombay - - - - -	327,804
	<u>£1,504,113</u>

REGISTRATION.

REGISTRATION.
General.

The Registration Act (III. of 1877) was in force during 1907 throughout British India, excepting Upper Burma (for which Regulation II. of 1897 still provides a less complete procedure), and certain other tracts. For registration purposes, documents are divided into (a) those the registration of which is compulsory, or necessary to the validity of the deed, and (b) those which are registrable or not at the option of the holder, though liable, if unregistered, to be superseded by registered documents, subject to the equitable doctrine of notice. In the former class are deeds of gift of immoveable property, or other documents (excluding wills), which affect rights in such property of a value more than Rs. 100, and, with certain exceptions, annual or longer leases. Optionally registrable documents include those relating to immoveable property not comprised in the above-mentioned classes, deeds affecting moveable property, wills, and other documents. As regards transfers of immoveable property, however, the situation is affected in most provinces by the Transfer of Property Act (IV. of 1882), as amended by Acts of 1885 and 1904. Before 1904 it was in force throughout British India, excepting Burma (outside Rangoon), the Punjab, and Sind, and other scheduled districts. Under its provisions all transfers by sale or mortgage of immoveable property had to be registered, except that transfers of tangible immoveable property of value below Rs. 100 might alternatively be effected by delivery of the property, and the registration of mortgage deeds, in which the value affected did not exceed that sum, was not compulsory. The amendment of 1904 removed the exception relating to small mortgage deeds. Practically all deeds transferring immoveable property have now, therefore, to be registered. Offices exist in every district for the registration of documents, and for keeping copies thereof. *Ad valorem* fees are charged for registration, and a small fixed fee for searching the records. Mortgages form the largest class of instruments registered. Documents relating to the sale, mortgage or lease of immoveable property, compulsorily registrable, comprise about 87 per cent. of all registrations. The number of optional registrations has steadily declined, partly owing to the operation of the amending Act of 1904. The total registration receipts in 1907-8 were £415,311 as compared with £369,000 in 1906-7; and the cost of the registration offices was £213,664, leaving a surplus of £201,647, against £164,000 in 1906-7.

In 1907 there was a further general increase in registration transactions as a result of the amending Act of 1904. An expansion in the work of registration, especially of mortgages and sales, may be due on the one hand to plague (which affects wills and deeds of gift), high prices, bad harvests, and declining credit, or on the other to the development of new lands, the growth of towns, the expansion of trade, and the general effects of economic progress. The following particulars are taken from the provincial reports for the calendar year 1907.

There was again an increase in the number of deeds registered. This is ascribed chiefly to the dearness of food-grains and to settlement operations. In the last three years compulsory registrations affecting immoveable property have increased by 41 per cent., while optional registrations have fallen by 90 per cent. The considerable increase in the former is ascribed partly to the operation of the Act of 1904, partly to local conditions, such as the reclamation of waste lands and the demand for land among jute cultivators, and in some districts to scarcity and high prices. A decline in registration in Chota Nagpur is ascribed to recent legal restrictions imposed on the cultivator's power of alienation.

Almost all classes of registration business have rapidly increased. Mortgages have increased by 31 per cent. and sales by 17 per cent. in the three years to 1907. The increase in the compulsory class is attributed in part to the operation of the Act of 1904, but among other influences were scarcity, high prices, speculation in jute, land settlements, the growing practice of selling occupancy holdings, and a wider appreciation of the benefits of registration.

There was a growth in the number of documents registered in the United Provinces, ascribed partly to the further operation of the Act of 1904, and partly to famine during the later months.

In the Punjab, where the new Act is not in force, the number of registrations of immoveable property declined in 1907. The effect of the Land Alienation Act has been to diminish largely the registrations relating to land. On the other hand, urban transactions have increased. A decrease in optional registrations is ascribed to the greater confidence of holders of small properties in the land records in which mutations of such property are entered.

REGISTRATION.
North West Frontier Province.
Burma.

The number of registrations is comparatively small, but increases as people become acquainted with the law. About one-half are in the Peshawar district, where an increased number was partly due to competition for land caused by the projected construction of the Upper Swat Canal.

The number of compulsory registrations in Lower Burma showed a decided falling-off, which is ascribed to restrictions imposed by Government on the transfer of land to non-agriculturists. Registrations of instruments of sale exceeded in number those of mortgages, whereas previously the latter have usually outnumbered the former by 40 per cent. The chief reason assigned for the change is the sale of mortgaged lands by Chetties, who are said to be restricting advances on landed property and realising outstanding advances. In Upper Burma compulsory registrations increased and the value of the property affected showed an extraordinary rise owing to abnormal transactions in the transfer of oil-winning concessions. The Indian Registration Act has not been applied to Upper Burma, but revised rules under section 8 of the Upper Burma Registration Regulations, 1897, were brought into force.

Central Provinces and Berar.

The number of registrations in the Central Provinces and Berar again increased. A decrease in sales was accompanied by an increase in mortgages, which were especially numerous in the flourishing cotton districts. The greater the value of the land the more will the landholder borrow on it, partly for agricultural improvements but largely for unproductive purposes, such as marriages and litigation. As usual, most of the mortgages are in favour of non-agriculturists. Optional registrations steadily decline, partly owing to the Act of 1904. In Berar it is an indication of the lightness of the land revenue that the consideration paid in cases of sale averaged 52 times the assessment.

Madras.

In Madras the number of registrations of all classes of documents increased, and rose to the unprecedentedly high figure of 1,212,296. The increase is attributed to the growing appreciation of the advantages of registration, and to the operation of the Act of 1904. Registrations affecting immoveable property formed 96·8 per cent. of the total.

Bombay.

The number of registrations in Bombay showed an increase of 5 per cent. over the number in 1906, ascribed mainly to the extension to the Presidency proper of the Act of 1904. Optional registrations tend to decline. There was a considerable increase in sale deeds and a corresponding decrease in mortgages, owing to the impression prevalent among money-lenders that lending money on mortgages is rendered unsafe by the Deccan Agriculturists' Relief Act. Measures adopted during the year for popularising and simplifying registration were the outcome of a definite policy aiming at the co-ordination of the Land Record and the Registration Record as a means to a complete register of title based on possession.

OPIMUM.

General.

The opium revenue is raised partly by a monopoly of the production of the drug in Bengal and the United Provinces, and partly by the levy of a duty on all opium exported from Native States. Poppy cultivation in British territory, excepting a small amount of cultivation for local use in the Punjab and Ajmer-Merwara, and on the frontier of Upper Burma, is permitted only in parts of Bengal and of the United Provinces, where the crop is grown under the control of Government, which determines the total area to be cultivated each year. The cultivator of opium (known as Bengal opium) in these monopoly districts must receive a licence and is granted advances to enable him to prepare the land for the crop. He is required to deliver the whole of his outturn of crude opium at the fixed price of Rs. 6 per seer to Government agents, by whom it is despatched to the Government factories at Patna and Ghazipur. The relatively small supply of prepared opium required for consumption in India, "excise opium," is made over to the Excise Department, and Rs. 8½ per seer is credited to opium revenue for the amount thus consumed. The chests of "provision" opium, for export, are sold by auction at monthly sales in Calcutta; and, in order to prevent speculation and to steady prices, the quantity to be offered at each sale during each year is notified in the previous year. The chests become the property of the purchasers immediately after sale, but must be shipped under passes granted by the Board of Revenue and subject to conditions which prevent the opium from being consumed in India. The price obtained at the Calcutta sales, less the cost of production, is the revenue from Bengal "provision" opium. Opium (known as Malwa opium) is grown in Baroda and in some of the Native States of Rajputana and

OPIMUM.

Central India, chiefly Indore, Gwalior, Bhopal, and Mewar. The Government of India interfere in no way with its production or local consumption; but Malwa opium may not pass into British territory, whether for export by sea or for consumption, without a pass, which is granted only on payment of a heavy duty. The duty on Malwa opium intended for export was fixed at Rs. 600 per chest, with effect from May 1904, and remained at that figure during the year under report. The pass duty on Malwa opium destined for consumption in British territory is an excise receipt, and is, as a rule, Rs. 700 per chest.

Towards the end of 1906 edicts were issued by the Chinese Government ordering that within ten years the growth and the consumption of opium in China should be suppressed. Proposals were made that the Government of India should co-operate in this object by gradually restricting the amount of opium exported from India to China. By an arrangement made at the beginning of 1908 the quantity of opium (including Malwa opium) exported from India was limited to 61,900 chests in 1908, 56,800 chests in 1909, and 51,700 chests in 1910. Papers giving further particulars, and including a report on the progress of the opium reforms in China, have been issued (Cd. 3881). The proceedings of the International Opium Commission, which sat at Shanghai in the early months of 1909, do not fall within the period covered by this Statement.

The yield of the opium revenue during recent years has been :—

	1897-8.	1902-3.	1903-4.	1904-5.	1905-6.	1906-7.	1907-8.
Opium Receipts :*	£	£	£	£	£	£	£
Sales of Bengal opium	2,660,697	3,662,600	4,678,371	5,079,541	4,703,574	4,895,505	4,401,988
Duty on Malwa opium	647,092	661,033	871,383	749,125	569,400	553,788	620,480
Cost of Excise opium, and miscellaneous	145,392	171,805	186,291	192,833	195,806	211,235	222,518
Total	3,453,181	4,495,438	5,736,045	6,021,499	5,468,780	5,660,528	5,244,986
Opium expenditure (chiefly in Bengal)	1,592,711	1,618,483	2,225,744	1,967,085	1,892,441	1,913,292	1,669,441
Net Opium Revenue	£ 1,860,470	£ 2,876,955	£ 3,510,301	£ 4,054,414	£ 3,576,339	£ 3,747,236	£ 3,575,545

* This does not include the licence fees and duty on opium consumed in India, amounting in 1907-8 to £980,820, included under Excise.

The net area cultivated with the poppy in the Ganges Valley in recent years, Bengal.

Year.	Acres.	Chests.	Average Price in Rs.
1903-4	642,831	48,000	1,462
1904-5	587,140	48,000	1,587
1905-6	613,995	49,200	1,436
1906-7	564,585	52,800	1,391
1907-8	488,550	48,900	1,351

excluding areas on which the crop failed, is shown in the margin, together with the number of chests sold for export and the average price realised during the last five years. At the Government factories, Patna and Ghazipur, 51,608 chests of opium were manufactured during 1907-8, of which 9,550 chests were issued to the Excise Department. The receipts were smaller than in 1906-7, owing to the reduced outturn and the lower prices realised.

The exports of Malwa opium to China in recent years are stated in the margin. The rise in 1907-8, after a continuous decline for three years, appears to have

been due to the lower prices prevailing after an unusually good crop. The average prices for opium in the Bombay market during the year under report, including export duty, were Rs. 1,271 per chest for one-year old, and Rs. 1,357 per chest for two-year old opium, against Rs. 1,362 and Rs. 1,473 respectively in 1906-7. The amount of Malwa opium imported and lodged in the Bombay warehouse during 1907-8 was 17,550 chests, as against 14,733 chests in 1906-7; 1,016 chests were sold for consumption in the Presidency, including Native States, and 465 chests were supplied to the Madras Presidency.

CHAPTER V.

AGRICULTURE.

SEASON AND CROP REPORTS.

AGRICULTURAL PRODUCE.

Co-OPERATIVE CREDIT SOCIETIES.

The present chapter gives an account of the conditions prevailing in each province during the agricultural year 1907-8, together with some information regarding the outturn of agricultural produce and the progress of co-operative credit societies.

SEASON AND CROP REPORTS.

Bengal.

A serious deficiency of rain affected adversely the outturn of both *bhadoi* (autumn) and *aghani* (winter) crops throughout the province, and *rabi* (spring) sowings were curtailed, though the winter rains improved the prospects in Bihar. The outturn of the *bhadoi* crops (exclusive of special crops, such as jute, cotton, and indigo) was only 72 per cent. of the normal, while the *aghani* paddy crop was only 53 per cent. The *rabi* crops of wheat, oilseeds, barley, gram, and rice were only 68 per cent. of normal. As all the three harvests were poor, the food stocks of the province were low. For two years exports of food grains have shown a marked diminution. Jute exports have also declined. The condition of cattle was generally good. Schemes for agricultural improvements are to be undertaken in certain districts containing water-logged lands or lands subject to inundation by sea-water. The area cropped in 1907-8 was about 41½ million acres, as in 1906-7. The proportion of the cropped area and current fallow to the total area of the province is 56 per cent. The three rice crops of the year covered 24½ million acres, falling short by 1,116,000 acres of the normal. There was a large increase in the area under jute. It is sometimes asserted that the rapid extension of jute cultivation is at the expense of the rice crops; but experiment shows that even if the area under jute should largely increase, the supply of rice need not be endangered, as the ryot can take a crop of jute off the land and also grow his paddy as before. About 85 per cent. of the normal cropped area is under food crops.

United Provinces.

The rains were at first generally favourable, but the monsoon gradually withdrew during August from all but a few districts. In September the rainfall was small and partial, while October and November were perfectly dry. After drought in most districts from August to January, which made the ground too dry for sowing, good and general rain was received, followed by further drought. The *kharif* crop area was slightly above normal, a decline in rice and jute being compensated by increases in bajra and small millets and in sugar cane, but the outturn was bad. The results of drought appeared in the reduction of the *rabi* area and the twice-cropped area to about 68 per cent. of the normal. The reduction would have been much greater but for the measures taken to provide capital for the cultivators. The areas under wheat, rape, gram, and peas fell off heavily, while linseed almost disappeared as an unmixed crop. Taking both area and yield the outturn of food crops in the *kharif* was 31 per cent., and in the *rabi* 60 per cent. of the normal, indicating a loss of food grains probably of about seven million tons as compared with a fairly satisfactory year. The area irrigated, 11½ million acres, was the highest on record. The number of temporary wells, 1,445,000, was also unprecedented. The cattle suffered from scarcity of fodder resulting from the drought, but the area of acute scarcity was not large. Rinderpest again prevailed.

Punjab.

The monsoon of 1907 was somewhat late in reaching the Punjab and was at first feeble, but in August ample rain fell up to the 24th, when the current withdrew abruptly and completely. The four succeeding months were practically rainless. Although the monsoon was belated it was in time to permit of almost a normal area being cultivated, but its cessation three weeks before the usual time was disastrous, and most of the dry crop was a total failure. Large areas were affected by the lowness of the rivers. The untimely withdrawal of the monsoon left the soil dry, and there was an immense contraction in unirrigated autumn sowings, and some reduction also on irrigated lands. The winter rains were delayed till 10th January, when excellent rain fell. Large areas of wheat, barley, and *masr* were sown, but early in February adverse conditions again set in, and no rain came until April 1st when a week's wet weather benefited the standing crops. The area of crops failed was

AGRICULTURE.

8,148,500 acres, or 33 per cent. of the total sowings, the proportion on unirrigated areas alone being 48 per cent. The *kharif* was a 12 anna crop and the *rabi* an 11 anna crop. Owing to the drought, fodder was scarce and dear, but the year was a healthy one for cattle. The total area sown in the year was about 24½ million acres, or about 10 per cent. below the normal; the proportion of the autumn to the spring harvest was as 46 to 54. Rice, jowar, and bajra suffered severely in the dry autumn. Larger areas were placed under sugar-cane and cotton, which was free from boll-worm. Wheat suffered severely from drought, and the *rabi* area was 2¼ million acres less than in 1906-7. Gram and oil seeds also fell away largely. The total area of crops sown on irrigated land was again about 10¼ million acres, and the figures would have been much larger but for the serious shortage of water in all canals and tanks. About 6 million acres of the area were served by Government canals. The resources of the province as regards wells were fully utilised, the area irrigated by 252,250 masonry wells and 42,400 non-masonry wells being about 4 million acres. The extension of old canals and the construction of new canals have resulted in a great increase of the area irrigated during recent years.

The canal irrigation colonies, started by Government, have continued to develop. An area of 2¾ million acres, nearly all of which is culturable and irrigable, has been allotted. A commission, appointed in October 1907, to inquire into various matters of administration, reported in April 1908. On the Chenab Canal the area allotted to cultivators has grown steadily from 230,800 acres in 1892 to 1,827,077 acres on 30th September 1907, only 97,409 acres remaining for allotment. On 1st April 1907 the Chenab colony ceased to be a separate administrative unit, and the post of Colonisation Officer was abolished. The control of the colony villages has been transferred to the deputy commissioners of the districts in which they lie. The area of crops sown was 1,888,000 acres, but a considerable part failed. The population of the colony is about 858,000. There are complaints of scarcity of labour. Allotment in the Jhang colony was nearly completed. In the flourishing Chumian Colony only 3,430 acres out of 89,971 acres remained to be allotted. In the Jhelum colony the area allotted by the end of the year was 340,466 acres, leaving 97,285 acres to be allotted. Special conditions are imposed in the grants in this colony with regard to horse-breeding operations, which have been a marked success. The colony has made progress in spite of plague, untimely rain, crop disease, scarcity of labour, and imperfect communications. The enforcement of the condition of residence has worked satisfactorily.

Punjab Canal Colonies.

Weather favoured the sowings for the autumn crop of 1907, but subsequent drought caused a poor outturn in several districts. The drought, which continued till January, also hindered sowings for the spring crop. Both harvests were below the normal in outturn. The total area sown was nearly 2,658,000 acres, or 8 per cent. below that of 1906-7, while the area harvested was 2,066,300 acres. Wheat, the most important crop, occupied 37 per cent. of the sown area, but the area fell by 175,151 acres. Fodder was generally sufficient, but the cattle suffered from rinderpest and other contagious diseases.

North-West Frontier Province.

Agricultural prospects were good up to the end of August, but owing to the premature cessation of the monsoon of 1907 the autumn crop was very poor. *Rabi* sowings began in depressing circumstances, and there was a shrinkage of 28 per cent. in the area. The outturns of the spring crops, however, were much better than had been expected, though linseed suffered. The autumn rice crop was only 56 per cent. of normal, while jute was 50 per cent. in Berar and 62 per cent. elsewhere. Cotton ranged from 33 to 72 per cent. of normal, and wheat yielded 68 per cent.

Central Provinces and Berar.

The ill-distributed rainfall caused serious floods, which were followed by exceptionally dry weather that affected the rice and jute crops. The outturn of food crops was below the average, while the quality of the jute fibre was impaired. Tea and sugar-cane did well.

Eastern Bengal and Assam.

In Lower Burma the rainfall was on the whole sufficient and timely, and the rice crop, owing to the extended area, was above normal; but on account of breaks in the rains and untimely falls during harvest, the crop gave a smaller yield than was anticipated. In Upper Burma the rains were poor and untimely. The season throughout the dry zone, except in Magwe, was the worst since 1896. The area on which crops failed to mature was 1,631,000 acres, mostly in Upper Burma. The area of crops rose to 12¾ million acres, on account of an increase in the area of rice, which covered about 9½ million acres. The outturn of rice in Lower Burma

Burma.

AGRICUL- was above normal, and exports were larger. Increased areas were devoted to cotton and ground-nuts. The new irrigation systems of Mandalay and Shwabo proved very valuable. It is said that buffaloes are being steadily replaced by bullocks in most districts. The bad season caused a reduction of stock in Upper Burma, partly by leading to exports.

Madras. The south-west monsoon in Madras was generally deficient and not well distributed. The north-east monsoon was better distributed, and in some districts the rainfall was above normal. The total crop area was 38 million acres, which was above normal. The rice crop was much above normal, and covered over 10½ million acres; other food grains were grown on 19½ million acres. The cultivation of cotton, which covered over 2 million acres, was greater than in 1906-7. The area under ground-nuts is steadily increasing on account of the commercial importance of the crop. The outturn of crops was in no case above normal. There was an increase in the mortality of cattle from disease.

Bombay. Owing to the irregular and ill-distributed rainfall the cultivated area declined and the harvest was only moderate or poor. Sind suffered from a poor inundation, and there was a great shrinkage in the area cropped. The area under food crops was much below normal. There was an improvement of 8 per cent. under oil-seeds, in spite of a decline in Sind. The cotton area declined 4 per cent. The area under crops in the whole Presidency was 27¾ millions of acres, of which nearly 4 millions were in Sind. About 48 per cent. of the crop area consisted of millets; while cotton occupied 14 per cent. The area irrigated in the Presidency included 2¾ million acres in Sind irrigated by Government canals, while the area irrigated (chiefly by wells) in the Presidency proper rose to 825,000 acres.

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(For further details see Statistical Abstract for British India, Tables 117 to 121.)

The following table shows the area under the principal crops, in British India, and their territorial distribution, for 1906-7, the most recent year for which complete figures are available. The "crop area" is in all cases greater than the area of cultivated land, owing to double cropping. The figures represent thousands of acres (omitting 000).

Administrations.	Rice.	Wheat.	Millets (Jawar, Bajra and Ragi).	Gram (Pulse).	Other Food- Grains and Pulses.	Total Food- Grains and Pulses.	Oilseeds.	Sugar.	Cotton.	Jute and other Fibres.	Total area cropped.	Net area cropped, (after deducting area cropped more than once).
Bengal	24,538	1,403	1,087	1,045	7,619	35,692	2,206	474	75	965	42,365	35,398
Eastern Bengal and Assam.	16,132	156	12	71	1,389	17,760	1,885	197	8	2,716	25,543	19,997
United Provinces	7,727	7,105	5,209	5,620	13,256	38,917	863	1,375	1,463	141	45,547	36,666
Punjab	727	9,657	4,083	4,511	4,470	23,448	1,585	279	1,261	59	*29,886	25,960
North West Frontier Province.	30	1,129	252	162	808	2,351	226	29	61	1	2,835	2,441
Burma	9,307	32	943	68	529	10,879	964	44	178	—	12,902	12,575
Central Provinces and Berar.	4,288	3,714	4,551	1,071	4,978	18,602	2,153	22	4,684	88	26,390	24,713
Madras	8,043	14	9,631	139	6,679	24,506	1,991	151	1,834	78	31,178	27,556
Bombay and Sind	2,669	1,908	13,476	588	3,890	22,531	1,775	53	4,171	168	29,244	28,223
Minor Areas	80	20	139	19	144	402	18	—	36	—	527	497
Total	73,541	25,138	39,383	13,294	43,762	195,118	13,966	2,624	13,771	4,216	246,417	214,026

* This total represents the area sown, but details of each crop are conventional harvested areas of normal productiveness, the sum of which falls short of this total.

Among "other food grains and pulses" may be mentioned barley, 7,700,000 acres, of which 4,454,000 are in the United Provinces, 1,335,000 in the Punjab, and 1,411,000 in Bengal, and maize, 6,172,000 acres, of which 2,165,000 acres are in the United Provinces, 1,196,000 in the Punjab, and 1,802,000 in Bengal. Out of 505,000 acres under tea, 424,000 are in Eastern Bengal and Assam, while out of 1,009,000 acres under tobacco, 356,000 are in Eastern Bengal and Assam, 157,000 in Bengal, and 157,000 in Madras.

Particulars for 1907-8 regarding some of the more important staples of Indian agriculture are given below. In many cases they do not correspond exactly with the figures given above for the year 1907-8, the differences being chiefly due to the inclusion here of returns for Native States.

Nearly one-third of the cropped area in India is under rice. The provinces for which statistics are given in the margin ordinarily include 78 per cent. of the Indian rice crop. The figures are in thousands (omitting 000). Other provinces, notably the United Provinces and the Central Provinces, produce a large quantity of rice.

Province.	Area in Acres.			Yield in Tons of Cleaned Rice.		
	Average of five years to 1905-6.	1906-7.	1907-8.	Average of five years to 1905-6.	1906-7.	1907-8.
Bengal	24,374	24,516	24,473	10,873	9,777	7,008
Eastern Bengal and Assam.	16,391	15,724	15,056	Not available.	5,992	6,507
Madras	7,126	6,944	6,926	2,718	2,522	2,472
Burma	6,699	6,974	7,292	2,967	3,096	3,237
Total	54,590	54,158	53,747	—	21,387	19,224

Exports of rice in 1907-8 represented 65 per cent. of the total value of food grains exported from India. The salient features of the trade were a strong internal demand, high prices, large shipments from Burma to India proper, and a slight restriction of exports to foreign countries. There was a shortage of crops in Bengal (which produces about one-third of the total of Indian rice), due partly to a bad season, and partly to a contraction of acreage caused by a substitution of jute for rice. The foreign exports of rice, which are subject to an export duty of three annas per maund (about 6s. 10d. per ton), amounted in 1907-8 to 1,913,000 tons, valued at £13,558,000, as against an average for the preceding five years of 2,237,000 tons valued at £12,634,000. The value was about 10 per cent. higher than in 1906-7. About 75 per cent. of the total is shipped from Burma. The coastwise shipments of rice from Burma to India proper amounted to the extremely high figure of 979,000 tons, most of it being sent to Bengal and Eastern Bengal and Assam. The price of white rice in Burma has been steadily rising in recent years, an advance of 12 per cent. during the year following on an advance of 19 per cent. in 1906-7.

Wheat occupies about 10 per cent. of the whole cultivated area. It is grown mostly

Province.	Average of five years to 1905-6.		1906-7.		1907-8.	
	Area.	Yield.	Area.	Yield.	Area.	Yield.
Punjab	7,654	2,721	9,100	3,267	8,269	2,495
Central Provinces and Berar	3,143	759	3,714	904	2,757	500
United Provinces	7,069	2,586	7,044	2,164	4,407	1,675
Bombay and Sind	2,339	523	2,335	525	1,937	424
Central India	1,734	416	2,448	615	1,680	323
Bengal	1,263	447	1,403	389	1,003	299
North-West Frontier Province	904	249	1,146	305	978	213
Hyderabad	883	65	1,039	109	933	67
Rajputana	835	184	842	182	604	118
Elsewhere	189	21	142	32	94	22
Total	26,013	7,971	29,213	8,492	22,662	6,136

yield of wheat, the figures being in thousands (omitting 000). The year was unfavourable in all the wheat-growing provinces, principally on account of insufficient rainfall. Damage was also caused by cold high winds, and by frost in some parts. Both area and yield were therefore below normal. The marginal table shows for five years the average annual retail prices of wheat (in rupees per maund).

The exports of wheat and wheat-flour are subject to great fluctuations, as the marginal figures show. The export demand for wheat has led to an extension of cultivation. This is very beneficial to India, partly because the crop is a profitable one, and partly because in bad years the rise in prices renders the grain available for home consumption. In a famine year, like 1900-1, the export falls to a trifling quantity. The quality of grain shipped has recently improved through a reduction in the proportion of dirt, seeds, &c. intermixed with the grain. The wheat exported in one financial year is drawn mainly from the crop of the previous year.

	Wheat.	Flour.
	Tons.	Tons.
1900-1	2,500	24,800
1-2	366,100	26,500
2-3	514,600	35,900
3-4	1,295,600	40,500
4-5	2,150,000	51,600
5-6	937,500	45,000
6-7	801,400	40,900
7-8	880,500	37,200

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PRODUCE.
Rice.

Wheat.

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PRODUCE.
Tea.

The marginal table gives an estimate of the cultivation and the production of tea in British India and Travancore during the three calendar years to 1907; for Southern

Province.	Area in thousands of Acres.			Production in thousands of Lbs.		
	1905.	1906.	1907.	1905.	1906.	1907.
Eastern Bengal and Assam.	421	424	429	192,694	207,071	214,259
Bengal - - -	53	53	53	12,782	16,085	13,503
Madras - - -	13	13	14	1,763	3,094	3,471
United Provinces - -	8	8	8	2,475	2,290	2,295
Punjab - - -	9	9	9	1,432	1,238	1,238
Travancore and Cochin	27	27	28	10,148	11,186	12,749
Burma - - -	1	1	2	418	439	505
Total - - -	532	535	543	221,712	241,403	248,020

India and Travancore the figures are not reliable. The yield increases faster than the area under cultivation; since 1885 the area has increased by 91 per cent., and the production by 246 per cent. The production of green tea was reported to be 3,546,500 lbs. in 1907, as against 4,140,800 lbs. in 1906. The tea gardens of India employed during 1907 482,700 persons permanently and 78,600 temporarily. The capital invested by joint stock companies in tea production is returned at £15,715,000, and, in addition, a large but unknown quantity of private capital is invested. The prices of the principal grades of tea advanced considerably in 1907, and the trade enjoyed another prosperous year. Consignments of tea to London on optional bills of lading tend to be more and more replaced by direct shipments. Hence in the figures of exports to various countries, shown in the margin, there is some decline in the figures

Countries.	1906.	1907.	1908.
	Lbs.	Lbs.	Lbs.
To United Kingdom -	176.6	173.9	173.2
„ Canada - - -	15.6	5.2	6.9
„ Australia - - -	9.6	10.6	8.3
„ Ceylon - - -	3.3	9.3	5.0
„ China, Hong Kong -	1.6	1.0	1.0
„ China, Treaty Ports -	3.2	6.6	5.8
„ Russia - - -	12.6	15.4	18.1
„ Germany - - -	1.2	0.9	1.3
„ Persia - - -	0.7	1.8	0.9
„ Turkey in Asia - -	3.2	3.7	3.3
„ United States - -	2.2	2.2	2.1
„ Other Countries by Sea	4.0	2.8	3.7
Total - - -	233.8	233.4	229.6

for the United Kingdom. A marked feature of the Indian tea trade in recent years has been the large increase in sales to Russia, which took, in 1908, 18 million lbs. direct, 3 million lbs. *via* the United Kingdom, and a large but unknown quantity *via* China. The direct exports of Indian tea by sea during the last three years are returned as shown in the margin (in millions of lbs. omitting 000,000).

The growing appreciation of the superior richness and strength of Indian tea is shown by the increased imports into this country. In 1875 the United Kingdom drew 86 per cent. of its supplies from China, and 13 per cent. from India, while in 1908 only 7 per cent. came from China and 53 per cent. from India. If the quantities retained for home consumption be taken, the proportion of India in 1908 was 58 per cent., and of China only 3 per cent.

Countries.	1905-6.	1906-7.	1907-8.
	Tons.	Tons.	Tons.
Java - - -	96,463	206,762	357,750
Mauritius - - -	115,370	139,861	151,830
Austria-Hungary -	117,036	80,859	34,759
Germany - - -	35,636	100,070	3,943
Other Countries -	49,051	27,650	10,706
Total - - -	413,556	555,202	558,988

of cheap sugar imported from abroad.

The imports of sugar, including confectionery and molasses, during recent years are given in the margin, the figures representing for the most part refined sugar. The imports from Austria-Hungary and Germany are of beet sugar, and those from

Mauritius and Java, of cane sugar. The large increase in the imports from Java is remarkable.

The countervailing duties imposed in 1899 and subsequent years have not been levied since 1903 on the produce of countries which adhered to the Brussels Sugar Convention and abolished sugar bounties, *i.e.*, nearly all the large sugar-producing countries.

The area under, and the yield of, the main oil-seed crops for all India are given approximately in the margin. The figures are in thousands (omitting 000).

Seed.	Average of five years to 1905-6.		1906-7.		1907-8.	
	Area.	Yield.	Area.	Yield.	Area.	Yield.
	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.
Rape and mustard	5,699	1,000	6,393	1,053	5,145	682
Linseed - - -	3,626	421	3,743	425	2,082	163
Sesamum - - -	4,891	453	4,640	541	4,694	272
Groundnut - - -	469	*213	622	274	669	259

* Incomplete figure.

Seed.	1905-6.	1906-7.	1907-8.
Linseed - - -	5,789	4,379	6,198
Rape - - -	1,994	3,729	5,343
Cotton - - -	3,891	4,388	4,250
Sesamum - - -	1,685	2,741	1,553
Groundnuts - - -	1,374	1,725	1,524
Castor - - -	1,299	1,505	1,994
Poppy - - -	797	803	1,257
Other sorts - - -	747	466	1,066
Total - - -	17,576	19,736	23,185
Value - £	7,073,000	8,681,000	11,210,000

the season was very unfavourable, owing chiefly to drought. Exports of seeds, which represent about 22 per cent. of the entire exports of Indian raw produce, have been as shown in the margin for the last three years (in 000 cwts.). The value exported in 1907-8 was a record. It should be observed that the results of the bad crop of 1907-8 will not appear in the export returns till 1908-9. The large trade in cotton seed is of recent development, the business having been small until 1901-2. The principal markets for Indian oil seeds are France, Germany, the United Kingdom, and Belgium.

One of the most important crops for the grower, the Indian manufacturer, and the exporter, is cotton.

Province.	1905-6.		1906-7.		1907-8.	
	Area (Acres).	Yield in Bales (of 400 lbs. each).	Area (Acres).	Yield in Bales (of 400 lbs. each).	Area (Acres).	Yield in Bales (of 400 lbs. each).
Madras (ryotwari areas only)	1,597	145	1,548	157	1,849	184
Bombay, with Native States, Sind, and Baroda.	6,948	1,282	7,633	1,917	6,792	1,081
United Provinces - -	1,372	394	1,489	639	1,461	268
Punjab and North-West Frontier Province.	2,079	205	1,474	370	1,523	366
Central Provinces and Berar	4,849	818	4,678	881	4,455	595
Hyderabad - - -	2,537	303	3,480	449	3,100	310
Burma - - -	183	35	187	36	189	28
Central India - - -	979	130	1,132	222	990	54
Rajputana - - -	291	61	428	201	438	102
Bengal - - -	71	16	75	16	74	14
Eastern Bengal and Assam -	61	17	76	17	78	24
Mysore - - -	76	5	89	10	84	7
Ajmere-Merwara - - -	29	5	40	19	41	11
Total - - -	21,072	3,416	22,329	4,934	21,074	3,044

and with the Indian consumption of cotton, which for the three years given above were 4,685,750 bales, 5,361,650 bales, and 4,479,450 bales respectively.

The exports of raw cotton from India in recent years which, in 1907-8, represented 34 per cent. of the whole value of Indian raw materials exported, have been as shown in the margin (figures in thousands, omitting 000). The exports of 1907-8 were mainly furnished from the crop of 1906-7, when the season was very favourable. Prices were somewhat higher than in the preceding year. The bulk of Indian cotton is exported to Japan and Western Europe. Very little goes to England, as Lancashire requires a finer class of cotton than India can supply.

AGRICUL-
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PRODUCE.

Oil seeds.

Cotton.

AGRICUL-
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PRODUCE.

Jute.

India has a virtual monopoly of the production of jute, which is chiefly grown in Northern and Central Bengal and the eastern districts of Eastern Bengal. High prices have encouraged an extension of jute cultivation in other parts. In July 1906 a pamphlet by Mr. R. S. Finlow on the extension of jute cultivation in India was published by the Agricultural Department. The season of 1908 was very unfavourable for jute, owing principally to drought. The figures for acreage and outturn in the Bengal provinces				
Year.	Acreage.	Outturn in Bales (of 400 lbs. each).		
1905 - - -	3,128,300	8,140,900		
1906 - - -	3,482,900	9,206,400		
1907 - - -	3,942,200	9,736,200		
1908 - - -	2,841,200	6,310,800		

in recent years have been estimated as shown in the margin. These figures do not include statistics for Nepal, Madras, and Upper India, the outturn of which, in 1907, was reported to be 90,900 bales.

The year 1907-8 showed a falling-off, as compared with 1906-7, which was one of extraordinary activity and unprecedented profits. For the five years ending with 1904, the price per bale ranged between Rs. 39 and Rs. 28½ per bale. Subsequently the prices were as shown in the margin. The ryot in the jute-growing districts has benefited enormously from the high prices.

The total Indian consumption in 1907-8 was estimated at 15 million cwts., or about 44 per cent. of the production. Owing to its cheapness as a fibre jute is in wide demand. In 1907-8 exports of raw jute representing 24 per cent. of the total value of raw produce exported, and in addition there was a large export of jute manufactures, as the marginal table shows (figures in thousands omitting 000). Of the raw jute exports in 1907-8, about 38½ per cent. went to the United Kingdom, 21 per cent. to Germany, 14 per cent. to the United States, and 12½ per cent. to France.

Year.	Raw Jute.		Jute Manufactures.	Total Exports.
	Quantity.	Value.	Value.	Value.
	Cwts.	£	£	£
1903-4	13,721	7,812	6,313	14,125
1904-5	12,875	7,977	6,626	14,603
1905-6	14,480	11,417	8,299	19,716
1906-7	15,970	17,892	10,477	28,369
1907-8	14,192	11,982	12,198	24,180

Since 1905 complaints have been made of the adulteration and watering of jute, and the question has engaged the attention of the local governments concerned.

CO-OPERA-
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SOCIETIES.

CO-OPERATIVE CREDIT SOCIETIES.

(For further details see Statistical Abstract for British India, Table 179.)

The latest reports on societies formed under the Co-operative Credit Societies Act of 1904 refer to the year 1907-8. These societies have been started by Government as an experiment, in order that the poorer classes, and more particularly the cultivators, may be enabled to borrow money at reasonable rates, and may at the same time learn self-help and self-dependence. The registrars are Government officials, and Government aid is given in various ways.

The societies are divided into central, rural, and urban societies. A Central Society, or "Co-operative Union," is an institution the members of which are representatives of a number of small affiliated societies standing to it in the same relation as individual members stand to their village society. A Co-operative Union is empowered to raise loans or accept deposits, as may be advisable in the interest of the affiliated societies, the profits being credited to a reserve fund upon which each society has a claim in the case of bad debts caused not by mismanagement but by misfortune or calamity. A union of this kind may be in a position to deal with capitalists or with joint stock banks, and to raise money on more favourable terms than is possible for the smaller societies. There are two Central Societies existing in the United Provinces and four in the Central Provinces. In addition, a Central Bank, less strictly co-operative, has been founded in Madras with the object of financing village societies. District Banks, which are of the nature of joint stock lending societies, exist as a regular part of the system in the United Provinces only, where they number 16, and are classed as urban societies. Of these three deal with their own shareholders and with independent societies, while 13 deal with affiliated societies. Of the other societies, a large majority are rural, but the urban societies have the larger average membership. Not quite all the societies are engaged in

CO-OPERA-
TIVE CREDIT
SOCIETIES.

the business of co-operative credit. Grain banks have been started in Bengal, the Punjab, and elsewhere, but their success is at present doubtful; a few co-operative weaving or tailoring societies have been formed, of which two societies in Madras, two in Bombay, and the Benares silk weavers' productive association may be mentioned; and several successful co-operative stores have been formed. The general rule of rural credit societies is to work with unlimited liability and without share capital; the majority of urban societies, on the other hand, have limited liability. The Indian Act does not permit rural societies to pay dividends. The principle of unlimited liability, when it is understood, has no terror for the ryot; he has been long accustomed to it in his family relationships, while the principle of limited liability is relatively unfamiliar. But the former system must naturally be accompanied by the power to exclude all in whom the majority have no confidence. In Bengal great success has been achieved with small and humble rural societies, and a scheme has been sanctioned for combining such societies in local co-operative unions for purposes of finance and control, a scheme that is expected to do much to secure the confidence of local capitalists. Except in the Central Provinces, where all loans have been issued for productive purposes, loans are granted without restriction on their employment. In Bengal, Madras, and Eastern Bengal and Assam most of the loans are for repayment of old debts bearing exorbitant rates of interest, but an increasing number are for productive purposes, such as cultivation and purchase of cattle. In one province the caste system is said to have hindered the progress of the movement, but in other provinces questions of caste have not acted detrimentally. In Eastern Bengal and Assam some Muhammadans have objected to take part in transactions in which money is lent at interest.

There is a considerable variety in the rates of interest charged in different provinces, but the rates are in nearly all cases considerably lower than those charged by local moneylenders (as the marginal table shows). There is a remarkable difference between the rates obtaining in the Northern and Southern districts of Bombay. Too much reliance must not be placed on the figures given, but they will serve for the purpose of a rough comparison. The rates attributed to village moneylenders are those normally charged on agricultural loans to ordinary cultivators on good security; in individual cases very much

Province.	Village Moneylenders.	Co-operative Credit Societies.	
	Rates per Cent. per Annum charged on good security.	Rate per Cent. charged on Loans to Members.	Average Rate per Cent. paid on Members' Deposits.
Madras - - -	12 to 15 9 on large loans.	6½ to 9½	7
Bombay - - -	15 to 55	9½	6½
Central Provinces and Berar - - -	18 to 25	9½ to 12	7
Bengal - - -	12 to 75	12½ to 18½	6½
Eastern Bengal and Assam - - -	24 to 75	6 to 18½	6½
Punjab - - -	18 to 24	9 to 12½	5
United Provinces: Oudh and Meerut - -	12 to 18	12½	6½
United Provinces: other Divisions - - -	37½		
Burma - - -	36 to 60	15	8

higher rates are charged. In many cases the moneylenders have not unnaturally disliked the movement. In Eastern Bengal and Assam they have unsuccessfully tried to crush it. In Madras there has been no noticeable opposition from them, although they have been compelled to reduce their rates of interest. In some cases they have given active help. In the United Provinces they have shown very little hostility. In the Punjab it is hoped to enlist the aid of the private moneylender in financing societies, for though the rate of interest is relatively low, the investment is safe. The ideal solution would be that the capital and hereditary knowledge of the money-lending class should be eventually combined in joint stock institutions, or that they should be collected into central banks with the function of advancing money to village societies. A system by which the moneylender dealt with village societies instead of with individuals might ultimately prove much to his advantage, and it is by no means impossible that such a solution may be in some degree realised. At present the societies derive their resources from members' deposits, Government loans, loans from other co-operative societies, and loans from non-members.

The table in the margin of the next page shows the main statistics of the societies for the year to 30th June 1908 and for the preceding year. During 1907-8 the movement made rapid and satisfactory progress in spite of scarcity and distress in many provinces. In this progress every important province shared. The apparent decrease in central banks was due to a change in classification in the United Provinces. Membership and capital both largely increased. The great advance which has been made becomes evident when it is remembered that in March 1905 there

FORESTS. number of bamboos taken from the forests was over ten millions. Practically the whole of the protected forests are open to grazing. From a commercial standpoint the year's working was satisfactory, the surplus revenue being £30,426. The number of recorded offences against the Forest Laws was below the average. Considerable damage was done in the Tista Division by wild elephants, and tigers are reported to have killed 120 workmen in the Sunderbans forests.

United Provinces. In the United Provinces the areas of reserved and protected forests at the end of 1907-8 were 3,934 and 9,100 square miles respectively, in addition to 157 square miles of leased forests and 42 square miles of unclassed forests. All the reserved area is settled and surveyed. The working plan of the Tehri Garhwal deodar forests, 78 square miles, was sanctioned. The year was a disastrous one. Drought was unfavourable to natural reproduction and seriously injured not only plantations, but established forests. The staff was largely engaged in famine relief work. Fires were more destructive than in any previous year. The fact that the forests were thrown open for grazing and for the collection of edible products during the famine was a source of danger, and incendiarism appears to have been unusually common. Hay was exported to districts where fodder was scarce, and the large resources of the forests for providing fodder were demonstrated. The yield of the forests was 6 million cubic feet of timber, 11½ million cubic feet of fuel, and 15½ million bamboos, besides minor produce. The removal of forest produce is almost entirely carried on by outside agency. The resin and turpentine industry in the Naini Tal division continued to give good results. The surplus revenue for the year was £78,000. Breaches of the forest rules mostly consisted of illicit grazing and injury by fire.

Punjab. The reserved forest area at the end of 1907-8 comprised 1,921 square miles, including 114 square miles under military or other control. The protected forests aggregated 5,241 square miles, while there are 1,722 square miles of "unclassed" forest and 369 square miles of leased forests. The area was altered during the year by the retrocession of the Chamba forests, 156 square miles, and the surrender of 36 square miles for colonisation and other purposes. Owing to inadequate staff little progress was made with working plans, which are still required for 4,764 square miles. The year was very unfavourable as regards forest fires on account of the abnormal dryness of the season, and the area damaged was more than double the average for the quinquennium. The policy of exploiting the forests through non-departmental agency has been extended, as its expediency is undoubted. The out-turn of timber increased by 33 per cent. to 6½ million cubic feet, while the fuel out-turn was nearly 24 million cubic feet. The price of all kinds of timber tends to rise. The net profits of the year, £25,000, were less by £2,200 than in 1906-7. About 80 per cent. of the forest area was open to cattle for grazing. The difficulty of protecting forests from damage by excessive grazing has become greater as flocks of sheep and goats have largely increased, and it is not easy to strike a fair balance between the immediate interests of the people on the one hand and those of forest conservancy on the other. The number of forest offences increased, chiefly under the head of illicit felling.

North-West Frontier Province. In 1907-8 the area of the reserves under the direct control of the Department was 263 square miles, besides 120 square miles of civil protected forests. Working plans have now been framed for all forests. There was some decrease in the out-turn, the quantities being 664,000 cubic feet of timber and 306,000 cubic feet of fuel. The net revenue for the year, £9,465, was the highest on record. There was an increase in the number of unauthorised fellings, and the amount of destruction by fire was much greater than in 1906-7, owing partly to drought, and partly to incendiarism by villagers desiring to improve the grass crop. More attention is to be given to natural, and less to artificial, reproduction.

Burma. The reserved forest area in Burma was increased during 1907-8 by 1,349 square miles to 22,858 square miles; the unclassed forests, much of which will ultimately be brought under cultivation, covered 107,597 square miles. Further examination was made with a view to selecting particular areas the reservation of which will protect the head-waters of streams. The question of preserving forests and re-forestation in arid areas for climatic reasons has occupied the attention of Government for some years. Good progress was made with settlement work and 3,350 square miles were taken in hand. The Survey of India surveyed 730 square miles. Working plans for 1,421 square miles were sanctioned. The area of reserved forests not under working plans at the end of the year was 15,032 square miles. The area in which fire protection was attempted covered 7,526 square miles, and, in spite of the dry season, the results were

FORESTS. satisfactory. Rubber, teak, and other plantations were maintained, and experiments were made with *padauk* seed. The number of teak trees girdled was 101,521 and the quantity of teak extracted was nearly 11½ million cubic feet, equivalent to 225,662 cubic tons. Of other timbers, 16½ million cubic feet were extracted, besides 14½ million cubic feet of fuel. The area under teak worked by the Department is being curtailed in favour of the system of extraction by firms under purchase contracts, which is expected to yield more satisfactory financial results. The increased extraction of unreserved woods is largely ascribed to a revival of trade in Mandalay. The surplus revenue amounted to £351,615. There was a decrease in the number of forest offences, which are mostly of a petty kind. The improvement in the status and qualifications of the subordinate staff will, it is hoped, materially improve the relations between the Department and the people.

The total area of forests at the end of 1907-08 was 22,002 square miles. The addition of 362 square miles, chiefly in South Chanda, brought up the area of permanent reserves to 20,223 square miles. Further working plans were sanctioned or in progress; new plans are still required for 4,676 square miles, or 27 per cent. of the whole area. A new class of "village forests," comprising 34 square miles, was formed from reserves hitherto set apart as pasture grounds in Berar, in order to facilitate their enjoyment by the local population. The forests were of great value in relieving the distress produced by the crop failure in the autumn. In all tracts seriously affected by scarcity liberal concessions were made for the free removal of grass, dry fuel, and minor edible produce, and for opening forests to free grazing. In many cases the concessions were abused, and there was an increase in petty forest offences. The abnormally early cessation of the rains and the overrunning of the forests by large numbers of people privileged to collect forest produce made local conditions unfavourable for the protection of forests against fire, though the cost of protection was heavier, partly on account of the more thorough "systematic protection" recently introduced, partly on account of the larger number of special fire watchers required in a dry year. The area under fire protection is now 62 per cent. of the total area of permanent reserves. The amount of timber removed from the forests during the year, chiefly by private persons, was nearly 4½ million cubic feet, that of fuel nearly 20 million cubic feet. The utilisation of lac and systematic endeavours to propagate it in the forests were continued. The surplus revenue was £34,000, or 54 per cent. less than in 1906-7, the decrease being mainly due to the free concessions granted and works undertaken for the relief of distress. As usual, a large part (48 per cent.) of the revenue was yielded by grazing and fodder-grass, while 32 per cent. was derived from timber and fuel, and 20 per cent. from minor produce.

The forest area at the end of 1907-8 included 6,550 square miles of reserved forests, or 6·6 per cent. of the total area of the province, 22,675 square miles of unclassed forests, and 10 square miles of other reserved or protected forests. The unclassed forests consist largely of grass or treeless waste in Assam, and part of their area is more or less regularly under cultivation. Working plans have been prepared for 1,103 square miles. Special fire protective measures extended over 1,509 square miles, but on account of the unusual dryness of the year there were numerous fires and 74 square miles were burnt. There was an increase in the number of forest offences, which consist chiefly of unauthorised fellings. The plantations of rubber (*ficus elastica*) at Charduar did not yield satisfactory results. Efforts are being made to introduce rubber cultivation in the Lushai Hills and elsewhere. Attention is being given to the propagation of lac, which is likely to become an important product of the province. The gross yield of the forests is given as 5½ million cubic feet of timber and 10½ million cubic feet of fuel. The surplus revenue amounted to £37,820. A re-organisation of the forest staff has been sanctioned.

The total area of forests in Madras was 19,607 square miles, of which 18,549 square miles were classed as reserved forests. On the completion of the remaining settlement work (308 square miles), the total of settled and systematically protected forest will amount to nearly one-seventh of the area of the Presidency proper. As regards management, detailed working plans were sanctioned or in preparation for 2,309 square miles; the area for which working plans have still to be prepared is estimated to be 7,843 square miles. Protection from fire was undertaken over 7,554 square miles, and was successful in 92 per cent. of that area. There were 24,453 forest offences, but 15,257 were compounded and £9,000 realised as compensation. Natural reproduction was generally good, though hindered in parts by over-grazing. The regular plantations consist chiefly of teak in Malabar, and of casuarina in many

FORESTS.

districts. The plantation of rubber, mahogany, camphor, and other valuable trees is being extended. The area of reserves open to cattle for grazing was about 94 per cent. of the total, and grazing licences were issued for nearly 4,000,000 cattle. The yield of the forests was about $3\frac{1}{2}$ million cubic feet of timber and $22\frac{1}{2}$ million cubic feet of fuel, besides $44\frac{1}{2}$ millions of bamboos, and minor produce. The outturn was greater than in 1906-7, and the surplus revenue amounted to about £69,000. A revised forest code has been approved.

Bombay.

The area of the reserved forests was 13,068 square miles at the end of 1907-8, while that of the protected forests was 1,024 square miles. The area for which working plans have been sanctioned is 6,018 square miles, or about 45 per cent. of the total area. Special works for the reproduction of rubber were undertaken in the three Thana Divisions. Forest offences consisted mainly of unauthorised fellings. There were failures on about $7\frac{1}{2}$ per cent. of the area under fire protection. The yield of timber was $5\frac{1}{4}$ million cubic feet, of fuel $30\frac{1}{2}$ million cubic feet, and of bamboos, 7 million cubic feet. The surplus revenue amounted to £118,360.

Coorg.

The area of reserved forests in Coorg at the end of 1907-8, was 520 square miles. Measures were taken for the artificial production of sandal and teak. The campaign was pursued against the "spike" disease in sandal trees, which provide half the gross forest revenue. Protection against fire was less successful owing to incendiarism by the Kurubars. The out-turn of the forests included 285,000 cubic feet of timber. The surplus revenue was £12,200, the highest on record.

CHAPTER VII.

MINERAL PRODUCTION AND MINING.

(For further Details see Statistical Abstract for British India, Table 217.)

MINERAL PRODUCTION.

In proportion to its area India is not very productive of minerals, but during recent years much has been done to develop the mineral resources that exist. The minerals that have been chiefly worked are those which can be consumed by direct process on the spot, or which, owing to their abundance and cheapness, are suitable for export in the raw state. General.

The output of minerals in India (including Native States) has shown a marked increase in the last five years, the estimated value of that for 1907 being £7,072,000, as against £4,550,000 for 1902, an increase of 55 per cent. By far the most important minerals are coal and gold, the production of which in 1907 was valued at £2,610,000 and £2,134,000 respectively, followed by petroleum, £610,000, and manganese ore, £590,000. Coal for the first time heads the list. This estimate relates to all production for which returns were available, but as it is based in many cases on local consumption value, or on value at the sea-ports, it cannot serve for comparison with the output of other countries, but only for the comparison of one year with another in India itself.

Coal is the most valuable mineral product worked. It is by far the largest supporter of labour, and from 90 to 95 per cent. of the material raised is consumed in developing domestic industries. The production has risen in 20 years from $1\frac{1}{2}$ to $11\frac{1}{4}$ million tons. In 1907, although the output was 1,364,000 tons greater than in 1906, the demand exceeded the supply, and had to be partly met by imported coal. Prices were the highest so far recorded. Coal.

The marginal table shows the large increase in output since 1902 and also brings out the territorial distribution of the mines. The areas not enumerated include the Central Provinces, the Punjab, Baluchistan, and Bikanir, in which production has hitherto been fluctuating and not very progressive. In the Central Provinces, however, the output of the Pench Valley Collieries, opened in 1905, rose to 74,663 tons in 1907. Bengal produced 90 per cent. of the coal won in India in 1907, the Jherria coal-field providing 5,179,000 tons, the Raniganj 3,982,000 tons, and the Giridih 750,000 tons.

The exports of Indian coal, which have tended to increase in recent years, showed a sharp decline from 1,003,000 tons in 1906 to 658,000 in 1907, owing to increased home consumption. Ceylon and the Straits Settlements are the two principal markets. About 94 per cent. of the Indian production was consumed at home, 30 per cent. of the output (3,474,000 tons) being absorbed by the railways, whose coal consumption is now Indian to the extent of nearly 98 per cent. It is roughly estimated that 1,550,000 tons are used for bunker coal for ocean-going and inland steamers, and 1,450,000 tons for jute and cotton mills.

The average estimated wholesale price of coal at the pit's mouth rose from 3s. 4d. in 1905 to 3s. 11d. in 1906 and to 4s. 8d. per ton in 1907, but it is believed that these values are rather under-stated. The coal now being worked is near the surface, and labour is cheap; as a consequence Indian coal has a lower value at the pit's mouth than that of any other country. The amount of capital invested in coal mines cannot be given, but most of the Bengal output comes from mines owned by joint-stock companies. The dividends declared by the different companies show that the trade was exceedingly profitable during the year.

The average number of persons daily employed in coal mines during 1907 was nearly 112,500, two-thirds of whom were men. The number of employees has increased, and, as the result of improved mining methods, their output per head has grown from 88.6 tons in 1904 to 99.1 tons in 1907, but even this is a somewhat low degree

Province or State.	Coal produced in		
	1902.	1906.	1907.
	000 Tons.	000 Tons.	000 Tons.
Bengal - - - -	6,259	8,618	9,993
Hyderabad (Singareni) -	455	468	414
Eastern Bengal and Assam -	221	286	296
Central India - - -	172	170	179
Other provinces or states -	317	241	265
Total - - - -	7,424	9,783	11,147

MINERAL
PRODUCTION
AND MINING.

Gold.

of efficiency if tested by European standards. The labourers include chiefly landless day labourers, though some are agriculturists. In some old established centres a mining caste is being evolved, and allotments of land are made to miners.

The production of gold amounted to 556,488 ounces, valued at £2,133,691, in 1907, compared with 581,545 ounces, valued at £2,230,284, in 1906. Since 1905 there has been a decline in the production from the Mysore gold-fields, whence almost the whole of the Indian output comes. The Hutti mine in Hyderabad produced 13,383 ounces in 1907.

Petroleum.

Since the introduction of European drills into the Burma oil-fields the production of petroleum has rapidly risen. There was an increase in the production of crude petroleum in 1907 to the record figure of 152 million gallons, as compared with 140 million gallons in 1906. About 3,100,000 gallons of oil are extracted in Eastern Bengal and Assam: and the rest of the product, excepting a trifling amount from the Punjab, comes from Burma, the principal oil-fields being at Yenangyaung, the oldest field, in Magwe district, and at Singu, in Myingyan district. The former of these yielded 97 million gallons and the latter 43½ million gallons. There was an increase in the imports of kerosene into India, in spite of the larger home production of mineral oil. Oil refineries have been erected and the various constituents of the crude oil are put on the market in the form of petrol, illuminating oil, lubricating oil, coke, and paraffin wax. A pipe-line for conveying crude petroleum from the oil-fields to Rangoon has been constructed. The production and export of paraffin wax have steadily and largely increased.

Manganese.

The mining of manganese ore commenced in 1892, in the Vizianagram State, in the north of the Madras Presidency, but the greater portion of the output is now obtained from an extensive series of deposits in the Central Provinces and Central India. As will be seen from the marginal table, the production in 1907 reached the extraordinary figure of 898,330 tons, as against a previous record of 495,730 tons in 1906. The ores worked are for the most part exceedingly rich, as the high cost of transport renders the working of the lower-grade ores unprofitable, and India now probably turns out a larger quantity of high-grade ore than any other country. In 1906

	1906.	1907.
	Tons.	Tons.
Madras - - -	117,380	151,890
Central Provinces - - -	320,759	686,572
Central India - - -	50,074	35,743
Bombay - - -	7,517	22,125
Bengal - - -	-	2,000
Total - - -	495,730	898,330

and 1907 production was stimulated by the high prices prevailing in the steel market, but a decline in prices began towards the end of 1907 and checked production.

There is at present no smelting plant in the chief producing centres, and the ore is shipped in bulk exactly as mined, to be smelted in the United Kingdom, Germany, or the United States. Of the record total in 1907, 581,035 tons were exported.

The average number of persons employed daily at manganese mines in 1907 was 18,751.

Salt.

The production of salt in India (excluding Aden) in 1907 was 1,193,168 tons. About 62 per cent. is evaporated from sea-water, chiefly in Bombay and Madras. About 27 per cent. is derived from sub-soil water and lakes and only 11 per cent. is obtained by mining and quarrying. Rock-salt production amounts to 123,000 tons, most of which comes from the Punjab Salt Range.

Saltpetre.

The value of the saltpetre industry is gauged most uniformly by the figures for exports, which increased to 357,589 cwt. in 1907, valued at £274,679. The local importance of the saltpetre industry appears from the returns for labour, which show that about 50,000 workers are employed in Behar, where most of the saltpetre is obtained.

Mica.

India has for many years been the leading producer of mica, turning out more than half the world's supply. The returns of the mica output, which are now in fair agreement with the more accurate figures obtainable for exports, show a decline from a total of 54,300 cwt. in 1906, valued at £259,500, to a total of 39,100 cwt., valued at £226,400, in 1907. The figures, however, are much above those for 1905, and the value per cwt. is higher, showing that a better average quality has been exported. Small mica, which formerly was thrown away, is now saved, the result being that a greater output is produced by a smaller number of workers. The mines are situated in Bengal, Madras, and Rajputana.

Rubies.

The ruby industry in Burma has been productive during recent years. The yield of rubies, including small quantities of sapphire and spinel, amounted to 334,535 carats in 1907, compared with 326,855 carats in 1906. The output is derived almost entirely from the Mogok mines of the Burma Ruby Mines Company. Rubies are also obtained by native miners working under licence from the Company.

MINERAL
PRODUCTION
AND MINING.
Other
Minerals.

Of minerals not above referred to may be mentioned jadeite, which was produced to the value of £49,643. The output of iron ore was only 67,667 tons, valued at £13,380. But in 1907 the Tata Iron and Steel Company was formed with a large capital to exploit iron ore lands in Orissa and the Central Provinces and large developments in the production of iron ore are anticipated. There is a small output of tin, graphite, and chromite.

MINING CONCESSIONS.

Mining
Concessions.

Since Rules were issued in 1899 to govern the grant of exploring and prospecting licences and of mining leases, the number of concessions in lands in which the mineral rights have been retained by Government (exclusive of Native States) has rapidly increased, mainly owing to the enhanced interest in manganese in Bombay and the Central Provinces. The concessions granted in Government lands amounted in 1899 to 60 only, but in 1907 the number had risen to 600. In some areas, including nearly all the coal-bearing land in Bengal, mineral rights have been conceded permanently with the surface ownership.

By the Rules exploring licences for one year can be obtained, but they give no exclusive or preferential rights, and there is no prohibition against free exploration in unoccupied and unreserved land. Prospecting licences are granted over restricted areas for a period of one year, renewable with the consent of the Local Government for a second and third term. Such licences carry an indefeasible claim for a subsequent mining lease for any mineral other than precious stones over the same or a restricted area.

In practically all Native States the mineral rights belong to the respective rulers, and concessions are granted for mining and prospecting under rules that involve a certain amount of supervision by the Government of India.

INSPECTION OF MINES.

Inspection
of Mines.

The Indian Mines Act, 1901, applies to the whole of British India, and regulates all mineral workings which are either true mines worked underground, or open pits, quarries, or excavations more than 20 feet deep and any part of which extends beneath the superjacent ground.

The number of mines of all kinds coming under the Act in 1907 was 1,057, of which 414 were coal mines, including 372 in Bengal, 472 mica mines, including 336 in Bengal, and 99 manganese mines. They gave employment to an average daily number of 151,983 persons (an increase of 18 per cent. in the year), of whom 96,769 were men, 49,116 women, and 6,098 children under twelve years old; 98,824 persons were employed below ground. The labour material is very unformed, possesses little skill, and requires constant supervision.

There were 105 fatal accidents, causing 122 deaths, during the year 1907, an increase of 16 over the deaths in 1906. The increase is due to the expansion and activity of the industry and to the increasingly difficult and dangerous conditions of mining work. Of the fatal accidents, 89 occurred in coal mines. The comparative fewness of accidents in coal mines (0·8 per 1,000 workers) is due to the fact that the workings are generally free from gas, very shallow, and not elaborate. Dangers must increase as the works become deeper.

MINING EDUCATION, &c.

Mining Edu-
cation, &c.

The only Mining Board at work under the Mines Act of 1901 during the year under report was that for Lower Bengal, which is by far the most important mining centre in India. The Mining and Geological Institute of India, which was inaugurated at the end of 1905, made good progress during the year. The number of students taking the Mining Course at Sibpur College during the session 1907-8 was 13. The demand for passed students exceeds the supply. The new practical mining laboratory, designed specially with a view to coal mining, is under way. Four courses of lectures were delivered in the Bengal coal-fields in 1907-8, and 358 students were registered.

CHAPTER VIII.

MANUFACTURES.

INDUSTRIAL DEVELOPMENT.
LARGE INDUSTRIES.
FACTORY LEGISLATION.

FACTORY INSPECTION.
PATENTS AND DESIGNS.

(For further details see *Statistical Abstract for British India, Tables 213 to 216.*)

INDUSTRIAL
DEVELOP-
MENT.

INDUSTRIAL DEVELOPMENT.

In recent years there has been much discussion in India regarding the advantages of encouraging manufactures for the purpose of securing greater diversity of occupation in a country that so largely depends on agriculture. The movement for promoting home industries, known as the *swadeshi* movement, has, in its legitimate forms, received official support. There are standing orders that stores required by Government shall, as far as practicable, be purchased in India. In March 1909 it was ordered that purchasing officers shall in all cases give preference to articles manufactured in India from Indian materials (or from imported materials), provided that the quality is sufficiently good and the price not unfavourable. (See also pages 69 and 70.) In some provinces the local governments have instituted special inquiries to ascertain the prevailing industrial conditions, with a view to promoting those industries that appear, when properly organised, to give promise of success. A "Review of the Industrial Position and Prospects in Bengal in 1908" has been prepared by Mr. J. G. Cuming, I.C.S., and a "Survey of the Industries and Resources of Eastern Bengal and Assam" by Mr. G. N. Gupta, I.C.S. Similar inquiries have been instituted in Madras, Bombay, the United Provinces, and the Central Provinces and Berar. Industrial conferences and exhibitions have been held, and a knowledge of Indian manufactures has become more widely diffused. The Third Indian Industrial Conference was held at Surat in December 1907. An official industrial conference, held at Naini Tal in the autumn of 1907, formulated a comprehensive scheme for technical education and the encouragement of industries in the United Provinces. An unofficial industrial conference subsequently held at Lucknow approved this scheme. Demonstrations are being given in the province of an improved process of sugar manufacture devised by Saiyid Muhammad Hadi, Khan Bahadur. Special inquiries are being made as to the utilisation of cotton-seed and other raw materials; and the co-operation of the railway administrations in developing local industries has been solicited. Endeavours are being made in all provinces to improve the important and widespread domestic cotton industry by introducing better types of hand-loom and superior methods, in order that their products may compete more successfully with goods manufactured by power looms in India or imported. During 1907-8 an all-India hand-weaving competition took place in Madras, and a conference was afterwards held to discuss hand-weaving problems. Belgaum (Bombay Presidency) is making special efforts on behalf of the hand-loom industry, with excellent effects on the trade, which has also undergone a revival in Bijapur and parts of the Deccan. In Bengal improved methods are taught at the Serampur Weaving School. In the United Provinces schools have been established at three weaving centres under Government auspices to popularise the use of improved looms and simple warping processes. In Madras progress has been made with experiments in the process of chrome-tanning, and the operations for the first time yielded a profit. A Director of Industrial and Technical Inquiries has been appointed in Madras.

LARGE
INDUSTRIES.

LARGE INDUSTRIES.

In this chapter attention must be confined to the larger industries, concerning which alone statistical information is available. By far the most important of these are the cotton and jute manufacturing industries, which have made rapid progress in recent years, as the following figures show:—

LARGE
INDUSTRIES.

Year.	Cotton Mills.				Jute Mills.			
	No.	Capital.	Looms.	Spindles.	No.	Capital.	Looms.	Spindles.
		000 £				000 £		
1883-4	74	5,525	16,251	1,895,284	23	2,124	6,139	112,650
1888-9	109	6,747	22,156	2,670,022	25	2,599	7,419	151,207
1893-4	138	8,121	29,392	3,539,681	27	2,701	9,180	191,228
1898-9	174	10,182	37,288	4,463,342	33	3,821	13,421	279,482
1903-4	206	11,392	45,281	5,167,608	38	4,954	18,400	376,718
1906-7	217	12,601	59,599	5,546,288	44	6,330	25,284	520,504
1907-8	227	13,160	66,718	5,763,710	50	7,019	27,244	562,274

The 227 cotton mills at work in India (including Native States and Pondicherry) in 1907-8 included 98 exclusively spinning, 13 exclusively weaving, and 116 both spinning and weaving mills. The majority of the mills, viz., 161, are in Bombay Presidency, and they contain 71 per cent. of the spindles and 80 per cent. of the looms. Bombay City contains 82 mills and Ahmedabad 50, no fewer than 9 mills being added in the latter centre. The industry is to a large extent in the hands of Indians. Although the last two years have been unfavourable, and some mills have worked short time or not at all, the industry, as the above table shows, has continued to develop.

Cotton mills.

The outturn of yarn in recent years in British India, excluding the mills in Native States or foreign territory, is shown in the margin. It will be observed that the production of yarns of counts above No. 25 has increased, and that these finer yarns now constitute over 9 per cent. of the total. They are chiefly spun in the Bombay mills. Imports of yarn amount to only about 5½ per cent. of the Indian production, but a very small proportion is of counts under 25. Phenomenal profits were realised in the cotton industry in 1905-6. There was a decline in prosperity during 1906-7, which became accentuated in 1907-8. The output

of the mills was restricted owing to poor crops and to the disorganisation of trade with the Far East, especially China, which is the principal market for Indian yarn. In China trade was affected by famine, violent fluctuations in exchange, and Japanese competition. Some compensation was found in European markets, to which much larger shipments were made. There was also a large demand for yarn for weaving in Indian mills. The mills of the Bombay Presidency produced nearly 75 per cent. of the total output of yarn, Bengal 7 per cent., Madras 6 per cent., the United Provinces 6 per cent., and the Central Provinces and Berar 4 per cent.

Owing to the vicissitudes of the spinning business increased attention has been devoted to weaving, which has been greatly extended. This movement has been favoured by a strong internal demand for indigenous manufactures. Looms are increasing at a more rapid rate than spindles, and goods of finer quality are being produced. The production of woven goods in recent years is given in the margin. Weaving is concentrated to an even greater degree than spinning in the Bombay mills, which in 1907-8 produced about 85 per cent. of the total output of cloth in British India; the United Provinces contributed about 5 per cent.; and the Central Provinces and Madras about 4 per cent. each. These goods are mainly unbleached grey fabrics. As the marginal table shows, however, there is a decided tendency to increase the output of other and finer fabrics, this tendency being specially marked in Madras.

While the cotton mills are largely owned by Indians and are mainly situated in Western India, jute mills are nearly all concentrated in Bengal in the vicinity of

Jute mills.

Year.	Grey.	Other Kinds.	Total.
	Million Lbs.	Million Lbs.	Million Lbs.
Average : 1896-7 to 1900-1	80.6	11.3	91.9
1901-2 to 1905-6	109.9	25.0	134.9
Year 1906-7	129.6	29.4	159.0
" 1907-8	147.6	33.7	181.3

LARGE INDUSTRIES.

Calcutta, and are mostly in the hands of Englishmen. As will be seen from the statistical table on the previous page, the jute industry is of smaller dimensions than the cotton industry, a much smaller amount of capital being invested in it, but it has enjoyed almost uninterrupted and increasingly rapid progress, the number of looms and spindles having doubled in the last decade. The number of jute mills in 1907-8 was 50, containing 27,244 looms and 562,274 spindles, and employing a daily average of nearly 188,000 persons. The paid-up capital employed by 49 of these mills was £8,664,000, including debentures; of this total about £3,000,000 was sterling capital. In 1907-8 the number of spindles increased by $7\frac{1}{2}$ per cent., and the number of looms by nearly 8 per cent. The year was a prosperous one for jute manufacturers, and exports increased considerably.

There is now considerable activity in the manufacture of jute in Germany and the United States, but the principal centre outside India is Dundee. It is questionable how far there is actual competition between Dundee and Calcutta. The Calcutta mills are employed chiefly in coarse weaving, whereas those of Dundee are engaged in finer work, and their looms are adapted for a much wider range of cloth.

Woollen mills.

There were six woollen mills at work at the end of 1907, containing 820 looms and 28,868 spindles, and producing goods valued at about £230,000 for the year. The industry shows little sign of expansion. The fabrics consist chiefly of cloth for the army and the police, and an admixture of Australian wool is used. The produce of Indian mills represents only a small share of the total trade in woollen goods, for, although the demand for woollen goods in India is not very large, certain varieties can be produced much more easily and cheaply by European mills. There are in India many small hand-loom factories for weaving carpets and rugs, whose production is in the aggregate extensive.

Paper mills.

There were eight paper mills at work at the end of 1907, producing about 55½ million lbs. of paper, valued at £486,000, the largest production yet recorded. Most of the foolscap, blotting paper, notepaper, and envelopes used in Government offices is now obtained locally; but the development of paper-making in India has been checked by the competition of cheap wood-pulp paper from Europe, and imports of paper have increased much more rapidly than the home production. A favourable report was made in 1906 by an expert sent out from England on the subject of the possibilities of wood-pulp manufacture in India.

Breweries.

At the end of 1907 there were 23 breweries, which produced during the year about 5½ million gallons of beer. The Army Commissariat Department bought 38 per cent. of this quantity for the use of European soldiers, the rest being consumed mainly by Europeans in the hill stations, soldiers or civilians. The largest brewery is at Murree in the Punjab Himalayas, and its output was nearly a million gallons. More than 40 per cent. of the whole Indian production was brewed in the Punjab. The quantity of beer imported in 1907 was 4,805,640 gallons.

Other large industries.

In 1906 the officials administering the Factories Act recorded that there were within the scope of the Act 92 factories belonging to the State and to local bodies.

	No of Works.	No of Operatives.	
Cotton presses -	962	94,894	Among these were 14 printing presses and 14 railway workshops, 10 canal and engineering workshops, and 14 military arsenals and factories. Factories worked by steam, and owned by private persons, numbered 1,687, compared with 1,442 in 1905. There were also 76 factories not worked by steam. The number of works in the principal industries in 1906, together with the number of persons employed, is given in the marginal table. A large number of the factories are connected with the ginning, cleaning, and pressing of cotton. Statistics received for 1907 show that of these there were 320 in the Central Provinces and Berar, 272 in Bombay, 174 in the Punjab, and 96 in the United Provinces. In Bombay 167,553 operatives are employed in the cotton industry. In Madras and the Central Provinces and Berar, cotton weaving and spinning are the principal industries. Rice mills and saw mills in Burma exist for the exploitation of the two principal products of the province, rice and teak. There was a further increase in the number of rice mills in
Cotton mills -	217	211,156	
Jute presses -	126	23,639	
Jute mills -	44	166,895	
Rice mills -	92	12,756	
Saw mills -	62	7,731	
Iron and brass works and foundries -	74	26,123	
Indigo factories -	196	102,118	
Tile factories -	86	15,645	
Printing presses (private) -	88	14,828	
Printing presses (State and municipal) -	14	7,524	
Dockyards -	11	9,170	
Railway open lines -	34	391,865	
Railway workshops -	87	87,419	
Arsenal, arms and ammunition factories (State) -	14	16,037	

LARGE INDUSTRIES.

1907 to 153, and of saw mills to 79. Printing presses are numerous in Bengal and Madras. In Eastern Bengal and Assam 86 out of 108 factories were jute presses. The new factories established in the United Provinces included two sugar mills and an up-to-date flour mill. In the same province some small weaving and knitting factories have been started, and also a factory for dyeing yarn for hand-weavers. Soap and perfume factories were also started. Of the 16 new factories in Bengal may be mentioned factories for bobbin-making, shoe-making, and cigarette making. Only one company manufactures iron on European lines in Bengal, and its production is confined to pig-iron. Another firm has arranged to erect blast furnaces and steel rolling mills in the Singhbhum district. In the Punjab flour and rice mills are becoming popular, but many of these are not technically factories, as less than 20 persons are employed.

From inquiries instituted regarding the supply of industrial labour in the United Provinces and in Bengal it seems that, though there is a shortage in the supply of skilled artisans, there is no real deficiency in the amount of labour potentially available, and that no difficulty in that direction need be anticipated, if the conditions of work in the mills be made more congenial to the labourer and if the manufacturers adopt more systematic methods of recruitment. Considering the enormous increase in recent years in the demand for industrial labour, it is surprising how readily the supply has responded, and a small increase in the wages offered would largely increase the possible field of recruitment. There is apt, however, to be difficulty in Bengal during the three hot months of the year, when the up-country workers prefer to return home.

Industrial labour.

FACTORY LEGISLATION.

FACTORY LEGISLATION.

The law respecting factories in India is Act XV. of 1881, as amended by Act XI. of 1891. The changes introduced by the latter were, briefly:—

The law could be applied to establishments employing 20 hands or over, instead of only to those with 50 hands or over, factories of the latter description being brought in all cases under the Act;

The minimum age for child labourers was raised from seven to nine years, and the maximum age from 12 to 14 years;

The maximum hours for child labour in any one day were reduced from nine hours to seven hours, and night-work forbidden;

The hours of actual labour for women workers, which were unrestricted under the Indian Factory Act of 1881, were limited by the Act of 1891 to 11 hours a day, with intervals amounting to $1\frac{1}{2}$ hours;

A rest period during work was prescribed for all labourers.

In December 1906 the Government of India appointed a small Committee, with Commander Sir H. P. Freer-Smith, R.N., late Superintending Inspector for Dangerous Trades in England, as chairman, to conduct a preliminary inquiry into the conditions of factory labour in textile factories in India. The Committee recommended that the working hours of adult males should be limited to 12 hours a day; that before children or adults are allowed to work in factories certificates of age and physical fitness should be required; that night-work of women should be prohibited; and that Medical Inspectors should be appointed. The Committee's report was presented to Parliament in 1907 (Cd. 3617).

The conclusions of this Committee formed the basis of investigation by a representative Commission, whose report was presented to Parliament in 1908 (Cd. 4292). The majority of the Commission deprecated a statutory limitation of the working hours of male adults. But they recommended the formation of a class of "young persons," between 14 and 17 years of age, whose hours should be limited to 12, and considered that this would indirectly secure a 12 hours' day for male adults. They also recommended that the hours of work for children should be reduced from 7 to 6 hours and that the hours for women should be assimilated to those of "young persons," night-work being prohibited for both classes. They recommended that children should be certified as to age and physical fitness.

The recommendations of the Committee and of the Commission have since been under the consideration of the Government of India and the Local Governments with a view to the amendment of the Indian Factories Act.

FACTORY
INSPECTION.

FACTORY INSPECTION.

The statistics of the factories inspected during 1907 are as follows.—

PROVINCE.	Number of Factories working, and liable to be inspected.	Average Number of Hands employed daily.				Number of Factories.			Number of Persons convicted of breach of Act.	Number of Accidents reported.			
		Men.	Women.	Children.	Total.	With Sunday Holiday.	With other Weekly Holiday.	Exempted from Sunday serpage.		Fatal.	Serious.	Minor.	Total.
Bengal	204	42,809	5,621	1,834	50,264	122	32	3	—	50	358	561	969
United Provinces	157	23,286	3,420	1,290	27,996	132	73	14	1	10	56	87	153
Punjab	253	34,860	812	284	35,955	224	13	6	2	14	25	212	251
North West Frontier Province	2	20,298	10,374	1,783	33,055	167	159	1	12	3	57	74	134
Burma	261	34,860	812	284	35,955	224	13	6	2	10	99	75	184
Central Provinces and Berar	344	34,860	812	284	35,955	224	13	6	2	10	99	75	184
Madras	123	161,147	42,899	10,106	214,152	338	148	3	17	21	184	1,420	1,625
Bombay	519	16,985	980	582	18,547	52	—	56	—	1	1	21	26
Eastern Bengal and Assam	108	8,678	205	96	8,979	2	2	—	—	—	4	36	40
Ajmere-Merwaraj	4	—	—	—	—	—	—	—	—	—	—	—	—
Total, 1907	1,975	546,693	102,796	41,223	690,712	1,253	384	100	37	116	833	2,771	3,720
Total, 1906	1,732	—	—	—	—	—	—	—	28	86	738	2,739	3,563

* Information not yet available.

† Figures for 1906.

In 1907 the law was generally well observed as regards sanitation and water-supply. In the Bengal jute mills there were general efforts to improve ventilation and to provide well-built houses for operatives. There were some complaints of imperfect fencing of machinery. In the United Provinces, the Punjab, and Berar, action was necessary to enforce the law regarding child labour. Accidents in mills are said to be largely due to the carelessness of the operatives. Proposals are under discussion for increasing the inspecting staff in the several provinces.

PATENTS AND DESIGNS.

PATENTS
AND
DESIGNS.

The laws for granting exclusive privileges to inventors and for protecting inventions and designs were amended and consolidated by the passing of the Inventions and Designs Act (V. of 1888). Proposals for amending this Act are under consideration.

The total number of applications for leave to file a specification under the Act in 1907 was 615, or 5 less than in 1906. Of these, 47 were refused or abandoned, and 117 were undecided at the end of the year. Only 63 of the applications were made by natives of India, 135 were made by Europeans and others resident in India, while 417 came from outside India, of which 217 were from the United Kingdom. The range of inventions for which protection was sought was, as usual, very wide, and, as in previous years, those relating to railways and textile industries predominated. Exclusive privileges were kept alive by payment of prescribed fees in 620 cases, while 419 ceased. Applications for the registration of designs numbered 34, of which 25 were allowed.

CHAPTER IX.

TRADE.

TRADE.

(Detailed information regarding the Trade of British India is annually furnished in three Parliamentary Bluebooks: *Tables of the Trade of British India, Review of the Trade of India, and the Statistical Abstract for British India, Tables 134 to 174, 177, and 211-2.*)

FOREIGN SEABORNE TRADE.

The foreign sea-borne trade of India has greatly increased during the last 25 years, as the following figures relating to private merchandise show (values in thousands of pounds at 15 rupees to the pound):—

Year.	Imports.	Exports.
	000£	000£
Year 1882-3	33,335	53,732
Average—1883-4 to 1887-8	37,161	55,655
1888-9 " 1892-3	44,181	65,752
" 1893-4 " 1897-8	47,267	67,865
" 1898-9 " 1902-3	50,090	75,504
" 1903-4 " 1907-8	69,700	107,796
Year 1907-8	86,571	115,652

If the value of the trade in 1882-3 be compared with that of 1907-8, imports show an increase of nearly 160 per cent., and exports an increase of 115 per cent. in the 25 years.

The foreign seaborne trade of British India during the five years to 31st March 1908 was as follows:—

	1903-4.	1904-5.	1905-6.	1906-7.	1907-8.
	£	£	£	£	£
Imports :					
Private Merchandise	56,548,862	64,452,192	68,722,713	72,205,055	86,570,892
Government Stores	5,179,320	5,156,305	6,019,781	5,956,410	4,428,153
Total Merchandise	61,728,182	69,608,497	74,742,494	78,161,465	90,999,045
Treasure, Private	21,295,508	22,018,353	13,947,526	18,133,990	21,880,286
Government	4,388,564	4,320,430	7,153,150	11,585,884	6,309,379
Total Treasure	25,684,072	26,338,783	21,100,676	29,719,874	28,189,665
Total Imports	87,412,254	95,947,280	95,843,170	107,881,339	119,188,710
Exports :					
Private Merchandise :					
Indian Produce and Manufactures.	99,755,597	102,760,848	105,459,482	115,388,009	115,651,878
Foreign ditto	2,217,458	2,248,715	2,352,540	2,322,693	2,511,557
Government Stores : Indian	371,718	138,472	78,392	71,940	384,921
Total Merchandise	102,344,773	105,148,035	107,890,414	117,782,642	118,248,356
Treasure, Private	5,364,782	5,392,377	4,299,838	3,808,672	3,630,819
Government	4,596,339	5,634,834	6,013,499	3,497	1,514
Total Treasure	9,961,121	11,027,211	10,313,337	3,812,169	3,632,333
Total Exports	112,305,894	116,175,246	118,203,751	121,594,811	121,880,689
Total Sea-borne Trade	199,718,148	212,122,526	214,046,921	229,476,150	241,069,399
Net Exports of Merchandise	40,616,591	35,539,538	33,147,920	39,621,177	27,249,311
Net Imports of Treasure	15,722,951	15,311,572	10,787,339	25,907,705	24,557,332
Net excess of Exports (balance of trade).	24,893,640	20,227,966	22,360,581	13,713,472	2,691,979

TRADE.

While imports of merchandise have advanced 48 per cent. in value in the last four years, the exports have advanced only 15 per cent. The figures for 1907-8 are remarkable. Exports remained stationary, while imports increased by 16 per cent. as compared with 1906-7. This was due partly to the improved purchasing power of the people and a higher range of prices, and partly to speculation in excess of the demand. The lack of progress in exports is ascribed to the widespread failure of crops, especially in Northern India, and to the influence of the American financial crisis, which affected the second half of the year. The net excess of exports was extremely small.

The following table shows the values of the chief articles of merchandise imported and exported during the last three years (in thousands of pounds):—

Principal Imports.				Principal Exports (Indian Merchandise).			
Articles.	1905-6.	1906-7.	1907-8.	Articles.	1905-6.	1906-7.	1907-8.
	000£	000£	000£		000£	000£	000£
Cotton manufactures -	26,012	25,130	29,566	Cotton, raw -	14,228	14,652	17,135
" yarn -	2,284	2,149	2,462	Rice -	12,427	12,353	13,559
Metals -	6,028	6,693	8,791	Jute manufactures -	8,299	10,477	12,198
Sugar -	5,183	5,825	6,151	" raw -	11,417	17,892	11,982
Railway material -	1,082	2,772	4,801	Seeds -	7,073	8,681	11,210
Machinery and millwork -	3,284	3,860	4,390	Hides and skins -	9,171	10,230	7,301
Hardware and cutlery -	1,510	1,769	2,110	Tea -	5,898	6,572	6,867
Mineral oils -	1,491	1,618	2,103	Cotton yarn -	8,258	6,931	5,982
Woollen goods -	1,617	1,368	1,815	Opium -	6,315	6,205	5,782
Provisions -	1,590	1,616	1,827	Wheat -	5,690	4,836	5,723
Apparel -	1,478	1,408	1,722	Lac -	2,120	2,333	2,722
Silk manufactures -	1,268	1,217	1,123	Wool, raw -	1,410	1,618	1,402
Liquors -	1,345	1,238	1,337	Cotton manufactures -	1,359	1,181	1,196
Spices -	734	960	1,041	Coffee -	1,171	664	743

The imports of cotton goods furnished another record in spite of the increased out-turn of Indian mills and the boycott movement against foreign goods. Indeed, cotton imports have never been so large as in the three years during which this movement has been active. There was a further increase in the imports of sugar, which is mostly cane sugar from Java and Mauritius. Java, which obtained a footing in the Indian markets when the imposition of countervailing duties restricted supplies of beet sugar, provided in 1907-8 about 63 per cent. of the refined sugar imports, besides sending large quantities of molasses and unrefined sugar. The progress in imports of metals, chiefly iron, steel, and copper, and in machinery and millwork, is evidence of activity in indigenous mining and manufacturing enterprise. Among articles the increasing imports of which point to the growing prosperity of the people may be mentioned silk and woollen goods, sugar, mineral oils, hardware and cutlery, provisions, cigarettes, spices, and glass and glassware. As there is a large number of State railways, the Government imports of railway material should be added to the figures given above, thus bringing the total value of railway material imported to £6,592,000. Railway material constitutes about one half of the Government imports of stores.

The table brings out clearly the immense preponderance amongst Indian exports of raw agricultural produce, and the figures fluctuate widely according to the character of the season. An abundant Indian crop and the world-wide activity in the cotton industry in 1907-8 account for the enormous export of raw cotton at enhanced prices. The rice exports were better than for several years, while the wheat trade was brisk. A heavy fall in the price of raw jute and a decline of 11 per cent. in the quantity exported led to a decrease of 33 per cent. in the total value of the exports as compared with 1906-7. Exports of jute manufactures, however, were much larger. Hides and skins fell away in value, owing mainly to short supplies and to slackened demand. Exports of seeds attained a record figure in value, business in linseed, rapeseed, castor seed, and cotton seed being especially active. The tea trade showed further growth, the high prices for lower grades being a marked feature. The increased demand for Indian tea in Russia is noteworthy. The coffee trade was somewhat better. Opium tends to decline owing to the limitations now placed on exportation. The unfavourable state of the China market mainly explains the decline in the exports of cotton yarn. The trade in lac continues prosperous.

Further details with regard to the trade in some of the principal agricultural products are given in Chapter V.

The value of foreign merchandise re-exported from India is relatively small, and the trade is not progressive. Of the total in 1907-8, £2,511,557, cotton goods shipped to the Persian Gulf, Arabia, East Africa, &c. formed about 37 per cent. of the total.

In comparing the magnitude of the trade of different countries with India great care is necessary. In the returns imports are classified according to the countries whence they were shipped direct to India and not according to the countries of production, while exports are ordinarily credited to the countries containing the ports at which the goods are discharged, whether destined for those countries or not. Much of the trade shown as to or from Holland and Belgium is really trade with Germany, and Switzerland does a large trade with India through other countries. The figures as they stand show that the share of the United Kingdom in the total trade in private merchandise in 1907-8 was 43·1 per cent., while that of Germany was 8·3; of China, 5·7; of the United States, 5·5; of Belgium, 4·7; and of France, 4·4 per cent. Taking imports and exports separately, about 67 per cent. of the total import trade and 26 per cent. of the export trade was conducted with the United Kingdom. In consequence, however, of the re-exports of Indian produce, the proportion retained in England is considerably lower. The proportion of the trade assignable to other parts of the British Empire cannot be stated accurately, since the large transactions with Aden, Ceylon, the Straits Settlements, and Hong Kong, which are chiefly distributing centres, are really for the most part trade with foreign countries. As regards the self-governing colonies, the largest trade was done with Australia (£2,673,000).

The value of India's trade in private merchandise with the chief countries, for the last three years, has been as follows (in thousands of pounds):—

Countries.	Imports from			Exports (Indian) to		
	1905-6.	1906-7.	1907-8.	1905-6.	1906-7.	1907-8.
	000£	000£	000£	000£	000£	000£
United Kingdom -	45,826	48,199	57,766	26,655	31,290	29,937
Germany -	2,915	3,861	3,446	9,799	13,150	13,494
China (including Hong Kong).	1,183	995	1,466	14,210	12,568	9,989
United States -	1,495	1,698	2,158	8,672	10,416	9,012
Belgium -	2,984	2,904	3,538	4,334	4,799	6,098
France -	1,152	975	1,355	6,360	7,470	7,669
Japan -	856	1,073	1,445	6,618	4,730	5,914
Straits Settlements -	1,701	1,846	2,090	4,200	4,353	4,549
Austria-Hungary -	2,738	2,046	1,769	3,194	4,012	4,234
Ceylon -	447	566	629	3,690	4,254	4,165
Italy -	802	721	795	3,126	3,804	3,695
Mauritius -	1,386	1,445	1,642	753	833	735
Russia -	187	72	268	388	494	648

Germany sends chiefly woollen goods, cotton goods, earthenware and porcelain, paper, metals, hardware and cutlery, apparel, &c. in exchange for raw cotton and jute, raw hides and skins, rice, oilseeds, &c. She buys four times as much as she sells to India. The trade with China consists mainly in the exportation thereto of opium and cotton yarn, while silk and silk goods and tea are imported. The United States buys large quantities of jute, raw and manufactured, raw hides and skins, and lac, and sells mineral oil and iron and steel. Belgium takes raw cotton, oilseeds, wheat, rice, &c. in exchange for iron, steel, dyes, cotton goods, &c. France buys large quantities of raw jute and cotton and oilseeds, and sells apparel, silk goods, and liquors.

The following figures show the proportionate share of the six chief ports in the private trade with foreign countries in merchandise only:—

Port.	Imports (percentages).				Exports (percentages).			
	1904-5.	1905-6.	1906-7.	1907-8.	1904-5.	1905-6.	1906-7.	1907-8.
Calcutta -	39·7	40·4	38·9	40·5	38·9	41·9	44·4	39·5
Bombay -	34·1	35·4	35·1	34·5	28·0	30·0	25·7	27·5
Karachi (Sind) -	8·0	8·4	8·7	8·1	11·4	7·1	8·9	10·2
Madras -	7·3	6·1	7·1	6·6	3·2	3·6	3·8	3·5
Rangoon -	9·0	7·8	8·4	8·4	8·2	8·1	6·9	8·0
Chittagong -	0·3	0·3	0·3	0·4	1·7	1·8	2·2	2·1

TRADE. The value of the exports from Calcutta was reduced by the fall in the price of jute, while imports were higher owing mainly to heavy imports of cotton goods. The increase in exports from Bombay was due to the larger shipments of seeds, cotton, &c.

Treasure. The net import of gold, which was exceptionally large in 1906-7, increased from £12,060,000 to £13,672,000, the highest figure on record. The net import of silver reached a total of £12,979,000, as compared with £16,004,000 in 1906-7.

Balance of trade. By reference to the table on page 59, it will be seen that the balance of trade fell in 1907-8 to the unprecedentedly low sum of £2,692,000, the average for the four preceding years being £20,299,000. The figures relate only to the trade of British Indian ports, and exclude land frontier trade, the trade of certain Native States on the west coast, the trade of French and Portuguese possessions, private remittances to and from India, and precious stones and pearls re-exported by post.

LAND FRONTIER TRADE.

Land frontier trade. The statistics of land frontier trade shown in the margin include a great deal of trade that is not strictly foreign. Owing to difficulties of registration accurate returns are impossible, but there is a large and increasing trade with Afghanistan, Nepal, Western China, and Siam. The principal exports from India are cotton yarn and manufactures (chiefly foreign), sugar, metals, salt, spices, and fish; and the chief imports into India, rice and other grains, provisions, wood, fruits, living animals, wool, hides and skins, oilseeds, drugs, and raw silk.

COASTING TRADE.

Coasting trade. The combined import and export trade in merchandise and treasure carried on by coasting vessels amounted to £39,200,000 during 1907-8, or 12·5 per cent. more than in 1906-7. This amount is arrived at by adding to the value of the imports into British ports from other British ports the sum of the imports and exports in the trade between British and non-British ports in India. The chief increases were in gunny bags, which were sent from Calcutta mainly to Burma and Bombay, and in rice, a large quantity of which was exported from Burma to Bengal and Bombay. Burma sent larger supplies of mineral oil, and Bombay much greater quantities of Indian cotton piece goods to Indian ports.

SHIPPING.

Shipping. During 1907-8 the number of steamers and sailing vessels with cargoes and in ballast which entered from and cleared to all countries was 9,312, with a tonnage of 14,239,180, as compared with 9,329 vessels of 13,775,436 tons during 1906-7. Of the total, 98 per cent. was steam tonnage.

The entries from and clearances to the United Kingdom were 3,119,233 tons, as against 3,121,861 tons in 1906-7.

The number of vessels under the principal flags is given below:—

Nationality.	1903-4.	1904-5.	1905-6.	1906-7.	1907-8.
British - - - - -	4,772	5,633	4,838	4,918	4,785
German - - - - -	393	339	387	371	375
Norwegian - - - - -	173	141	174	195	188
Austro-Hungarian - - - - -	134	156	162	159	157
Japanese - - - - -	37	—	2	83	123
Italian - - - - -	63	74	85	77	79
French - - - - -	143	94	105	67	61

FREIGHTS.

Freights. The following statement gives minimum quotations for typical rates of freight from the principal Indian ports to London in March of each of the last five years. Since 1895 freights have been on a lower level than formerly, and in the case of Bombay and Karachi have never exceeded £1 per ton. Freights in 1908 were, on the whole, abnormally low, as a result partly of the decline in exports, partly of the general fall in freight rates in the world's carrying trade. The tendency to avoid

entrepôts is becoming more marked. The freights for Bombay cotton and Karachi wheat to Liverpool were abnormally low at the close of the year.

—	1904.	1905.	1906.	1907.	1908.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Calcutta—Rice - - - - -	0 17 6	1 0 0	0 15 0	0 17 6	0 15 0
Wheat - - - - -	0 17 6	1 0 0	0 15 0	0 17 6	0 15 0
Jute - - - - -	1 0 0	1 2 6	0 17 6	1 0 0	0 17 6
Linseed - - - - -	1 0 0	1 2 6	0 17 6	1 0 0	0 17 6
Tea - - - - -	1 11 3	1 16 3	1 13 9	1 15 0	1 12 6
Bombay—Wheat and seeds - - -	0 16 0	0 15 0	0 13 6	0 15 0	0 13 0
Cotton (to Liverpool) - - -	0 16 6	0 15 6	0 14 6	0 15 0	0 12 0
Karachi—Wheat (to Liverpool) -	0 16 0	0 15 6	0 14 0	0 15 0	0 10 0

WORKING OF THE MERCHANDISE MARKS ACT.

The Indian Merchandise Marks Act (IV. of 1889) was passed to prevent the fraudulent sale of goods bearing false trade marks or false trade descriptions (as of origin, quality, weight, or quantity). The Act also requires that all piece-goods must be stamped with their length in yards. Out of 1,483 detentions under the Act in 1907-8, 560 were on account of counterfeit trade marks or false trade descriptions, 630 (an exceptionally large number) for non-description or false description of origin, and 293 for unstamped or insufficiently stamped piece-goods. Detention is rarely followed by confiscation, and only two such cases occurred in 1907-8. Goods were released with a fine in 650, and without a fine in 831, cases. A "Merchandise Marks Manual" was published in 1908.

JOINT STOCK COMPANIES.

During the year 1906-7 there were 307 new companies registered in India under the Companies Act (VI. of 1882), with a paid-up capital of about £650,000, while 112, with a capital of £715,000, ceased to work. The aggregate paid-up capital of 534 companies was increased by £1,736,000, while 78 companies reduced their paid-up capital by £76,000. The net result was that at the end of the year there were in operation 1,922 companies, with a paid-up capital of £29,512,000. There has been an increase of 36·9 per cent. in the paid-up capital in the last 10 years. The companies are most important in the provinces of Bengal and Bombay, which possess 39·8 and 37·7 per cent. respectively of all the paid-up capital, while the share of Madras, which comes next, was only about 8·7 per cent. of the whole. The average of paid-up capital is highest in Bengal, where it amounts to £26,300 for 446 companies, while for the 431 companies of Bombay it is £25,800, and for the 579 of Madras only £4,450. In Madras 335 money-lenders, mostly carrying on a small business, are registered under the Companies Act. The distribution of paid-up capital among registered companies of the different classes was as follows:—

	£		£
Banking and insurance -	3,541,000	Mills and presses - -	14,441,000
Trading and shipping -	5,660,000	Tea and planting - -	2,389,000
Mining and quarrying -	2,124,000	Other industries - -	1,358,000

(The capital stated above represents in all cases share capital only; the total value of the debentures issued amounted to £3,700,000.)

As will be seen, the largest aggregate capital, £14,441,000, constituting nearly half of the total paid-up capital, was invested in cotton, jute, and other mills; and nearly 54 per cent. of the capital of such undertakings was invested (mostly in cotton mills and presses) in Bombay Presidency. More than a third of the capital of trading companies is invested in railways and tramways. The capital invested in coal companies (more than 86 per cent. of which is in Bengal) has doubled in the last 10 years.

The number of companies which carry on work with sterling capital exclusively, or almost exclusively, in India, but which are registered elsewhere, is 175, and their paid-up capital amounts to £68,510,376, besides £35,346,280 debentures. The railways represent £41,407,558 paid-up capital and £31,740,420 debentures. Of the rest the sterling share capital invested in the tea industry is £12,262,000, in jute mills £2,658,894, in cotton mills £850,521, in rice mills £934,585, and in gold fields in Southern India £2,437,141. Thus, while the railway, gold, and tea concerns are mainly financed from abroad, the great bulk of the mill and press industries are registered in India.

CHAPTER X.

PUBLIC WORKS.

GENERAL.
RAILWAYS.IRRIGATION.
BUILDINGS AND ROADS (CIVIL).

GENERAL.

The operations included under the head of "Public Works" are of three kinds, viz., Railways, Irrigation, and Buildings and Roads. The Railway Department is an Imperial service under the control of the Government of India, or of the Railway Board, in so far as the powers of the Government of India have been delegated to it. The establishment employed on irrigation, and on buildings and roads, is subdivided into different Provincial services, controlled by the local administrations subordinate to the Supreme Government. Under the head of "Buildings and Roads" are included many miscellaneous works, such as improvements in towns, paving, water supply and drainage, harbours, lighthouses, &c.

The annual expenditure on public works is met partly from money raised by loan, and partly from the ordinary revenues of the year. The class of works on which borrowed money is expended comprises the railways and large irrigation works, which are expected to yield sufficient net revenue to cover the interest on the capital expended on them. For the railways and more important irrigation systems, distinct capital and revenue accounts are kept, but for the smaller works of irrigation, and most of the works included in the class of buildings and roads, such accounts are not kept, though a distinction is made in the accounts between expenditure on new works and expenditure on repairs to existing works.

The following statement of the total receipts and expenditure under the head of "Public Works" for 1907-8 is compiled from the Finance and Revenue Accounts:—

—	Receipts.	Expenditure.		
		—	Charged to Revenue.	Not charged to Revenue.
	£		£	£
Railways - - -	27,624,601	Construction - - -	180	10,567,045
		On Revenue Account - - -	26,052,039	—
Irrigation - - -	3,485,912	Construction - - -	65,267	845,722
		" from Famine Relief Grant.	417,240	—
		On Revenue Account - - -	2,864,240	—
Buildings and roads - -	524,313	Civil Works - - -	6,024,638	—
TOTAL - - -	31,634,826		35,423,604	11,412,767

The expenditure charged against revenue includes the following items of "Interest on Debt":—Railways, £5,243,208; Irrigation, £980,912.

Of the permanent public debt on the 31st of March 1908, £177,702,283 is classed as incurred for railways and £29,872,728 for irrigation.

The amount paid under the head of "Annuities in purchase of railways," which is included in the Railway Revenue Account, is £2,869,335.

The engineer establishments of the Department are divided into (a) the Public Works Department and (b) the Public Works Department (Railway Branch). These establishments, including those of Bombay and Madras, but excluding that of the now separate Military Works Department, were considerably increased during the year. The upper subordinate engineering staff is largely composed of Indians.

The following statement shows the strength of the superior engineer and upper subordinate establishments as they stood on the 30th June in 1907 and 1906:—

—	Public Works Department.			Public Works Department (Railway Branch).	Total.
	India.	Madras.	Bombay.		
Civil Engineers (including 1907	479	83	91	176	829
Military Officers) - - 1906	445	80	86	174	785
- - 1907	517	177	215	72	981
Upper Subordinates - - 1906	468	178	216	76	938

RAILWAYS.

(For further details see Statistical Abstract for British India, Tables 44 to 47, 68-9, 71, 74 to 78, and 124 to 132.)

In the financial year 1907-8 there was a surplus of revenue over expenditure amounting to Rs. 2,35,88,424 or £1,572,526. The table below is taken from the Finance and Revenue Accounts of the Government of India for 1907-8:—

—	Imperial.	Provincial and Local.	England. (Sterling converted at £1 = Rs. 15.)	TOTAL.
REVENUE.	£	£	£	£
Railways—				
State railways—(Gross traffic receipts) -	27,290,123	53,028	230	27,343,381
Guaranteed companies—(Net traffic receipts) -	228,615	—	—	228,615
Subsidised companies—(Repayment of advances of interest).	13,922	—	38,683	52,605
TOTAL - - - - £	27,532,660	53,028	38,913	27,624,601
EXPENDITURE.				
Railway Revenue Account—				
State Railways—				
Working expenses - - - -	14,642,584	31,117	—	14,673,701
Share of surplus profits, &c. - - -	430,240	—	—	430,240
Interest on debt - - - -	2,412,980	—	2,830,228	5,243,208
Annuities in the purchase of railways -	—	—	2,869,334	2,869,334
Sinking funds - - - -	—	—	154,058	154,058
Interest chargeable against companies on advances.	231,528	7,044	288,434	527,006
Interest on capital deposited by companies -	77,640	4,719	1,383,506	1,465,865
Guaranteed companies—				
Surplus profits, land and supervision -	11,739	—	—	11,739
Interest - - - -	3,792	—	576,576	580,368
Subsidised companies—				
Land, &c. - - - -	13,536	1,179	—	14,715
Miscellaneous railway expenditure - -	80,718	1,087	—	81,805
TOTAL - - - - £	17,904,757	45,146	8,102,136	26,052,039
		Net gain - - - £		1,572,562

In the figures of expenditure are included all charges falling on the Government for the management and working expenses of railways, for interest on capital outlay, as well as for the gradual redemption (by charge to the revenue account) of the commuted capital of the East Indian, Eastern Bengal, Sind, Punjab, and Delhi, and Great Indian Peninsula railways, through the agency of sinking funds and annuities, and of that portion of the Oudh and Rohilkhand railway debt incurred in excess of the money raised through the agency of the "Discount" Sinking Fund. The figures also include charges for control, for land required by the companies, and for miscellaneous items, such as headquarters establishment and surveys.

The statistical results of working the various classes of railways during 1908 are given in the following table. The aggregate net earnings of all Indian railways, including steamboat service and suspense items, but excluding indirect charges, produced a return of 4.30 per cent. on the total capital outlay on open lines, against 5.87 per cent. in the previous year:—

Class.	Length of Line open on the 31st December 1908.	Total Capital Outlay on Open Lines to the 31st December 1908, including Steamboat and Suspense.	Total Number of Passengers carried.	Total Weight of Goods carried.	Gross Earnings, including Steamboat Service.	Working Expenses, including Steamboat Service.	Net Earnings, including Steamboat Service.	Percentage of Net Earnings on Capital Outlay on Open Lines.
5' 6" Gauge.	Miles.	£	£	Tons.	£	£	£	
State lines worked by companies -	8,911.96	128,328,267*	138,580,800†	32,700,000†	14,023,333	7,786,000	6,237,333	—
State lines worked by the State -	5,355.56	65,012,867	62,431,600	12,519,000	5,940,867	4,624,934	1,315,933	—
Companies' lines guaranteed under modern contracts.	32.04	196,266	320,500	83,000	24,266	12,133	12,133	—
Assisted companies' lines -	943.32	4,359,200	9,339,000	1,423,000	585,133	292,733	292,400	—
Lines owned by Native States and worked by companies.	711.31	4,916,533	3,745,600	1,197,000	384,933	137,133	247,800	—
Lines owned by Native States and worked by State railway agency.	201.68	802,800	3,596,400	480,000	138,134	73,267	64,867	—
TOTAL FOR 1908 -	16,155.87	203,615,933	218,013,900	48,402,000	21,096,666	12,926,200	8,170,466	4.19
TOTAL FOR 1907† -	15,821.42	184,660,200	186,180,000	44,033,000	22,984,067	11,543,267	11,440,800	6.20
3' 3½" Gauge.								
State lines worked by companies§ -	8,052.46	43,599,200	54,524,800	8,400,000	5,716,000	3,374,667	2,341,333	—
State lines worked by the State -	846.60	5,168,400	10,417,000	1,543,000	702,467	494,733	207,734	—
District Boards' lines -	152.74	452,133	2,549,000	268,000	64,533	34,733	29,800	—
Assisted companies' lines -	1,604.67	7,780,334	23,046,200	3,434,000	808,400	368,733	439,667	—
Lines owned by Native States and worked by companies.	843.46	4,116,067	8,860,300	878,000	349,400	186,600	162,800	—
Lines owned and worked by Native States.	1,309.63	3,242,933	5,310,900	787,000	411,867	208,467	203,400	—
Lines in foreign territory -	73.60	1,173,800	852,000	392,000	57,067	32,667	24,400	—
TOTAL FOR 1908 -	12,883.16	65,532,867	105,560,200	15,702,000	8,109,734	4,700,600	3,409,134	4.64
TOTAL FOR 1907† -	12,635.32	71,695,733	112,336,000	17,144,000	8,121,667	4,423,467	3,698,200	5.16
Special (2' 6" and 2' 0") Gauges.								
State lines worked by companies -	571.18	1,622,200	Included with figures for 5' 6" gauge lines.		107,467	68,000	39,467	—
State lines worked by the State -	31.75	61,933	193,300	16,000	6,667	6,067	600	—
Assisted companies' lines -	402.39	1,276,200	3,901,200	240,000	179,267	101,867	77,400	—
Unassisted companies' lines -	33.27	72,867	607,100	31,000	7,733	5,333	2,400	—
Lines owned by Native States and worked by companies.	392.15	665,533	1,632,700	143,000	58,200	32,333	25,867	—
Lines owned by Native States and worked by State railway agency.	33.60	101,000	252,000	47,000	12,933	5,133	7,800	—
Lines owned and worked by Native States.	75.23	180,267	63,500	28,000	8,400	6,067	2,333	—
TOTAL FOR 1908 -	1,539.57	3,980,000	6,649,800	505,000	380,667	224,800	155,867	3.92
TOTAL FOR 1907† -	1,499.93	4,688,133	7,373,000	921,000	406,733	235,200	171,533	3.66
TOTAL OF ALL RAILWAYS FOR 1908.	30,578.60	273,128,800	330,223,900	64,609,000	29,587,067	17,851,600	11,735,467	4.30
TOTAL OF ALL RAILWAYS FOR 1907.†	29,956.67	261,044,066	305,889,000	62,098,000	31,512,467	16,201,934	15,310,533	5.87

* Includes the capital outlay of the metre gauge section of the Madras and Southern Mahratta railway for which separate figures are not available.

† Includes the figures for the metre and 2' 6" gauge sections of the South Indian railway and 2' 6" gauge branches of the Bengal-Nagpur railway.

‡ As corrected from later information.

§ The Birur-Shimoga, Hindupur, and Mysore-Nanjangud railways are included with the Mysore State railway under this classification, as separate figures for these lines are not available.

It will be observed that, with an increase of 621.93 miles, or 2.08 per cent., in the open mileage, as compared with 1907, the gross earnings decreased by £1,925,400, or 6.11 per cent., while the working expenses increased by £1,649,666, or 10.18 per cent., resulting in a falling off of £3,575,066 in the net earnings.

In connection with this it may be pointed out that the year 1908 was remarkable for a rapid and almost universal depression in trade from which India was not exempt. There is perhaps no enterprise which is so sensitive to trade conditions as railway working, and the gross earnings of Indian railways have declined in proportion to the intensity of trade depression. The situation was aggravated by the failure of crops and the establishment of famine conditions in the United Provinces, which, by raising the price of food grains produced elsewhere in the country, practically killed the remunerative and usually very heavy export traffic in that commodity, and also resulted in a large amount of empty running to ports for the accommodation of imports and to Bengal coal-fields for the upward coal traffic.

Of the large fall of £3,575,067 in net earnings, practically the whole amount, £3,270,333, is contributed by the broad gauge trunk lines, owing to a drop of over

11 per cent. in gross earnings, and to an increase of a little over 8 per cent. in working expenses, due in large measure to heavy renewals of permanent way and rolling stock which could not be deferred, and of increased running expenses in which the enhanced cost of coal formed the chief factor.

There was an increase of 24,334,900 in the number of passengers and of 2,511,000 tons in the weight of goods carried, as compared with the previous year. That a heavy decrease in earnings has been accompanied by an increase in the number of passengers and in goods tonnage carried is attributable partly to a larger number of passengers travelling shorter distances, and in some instances to the introduction of lower fares; partly to the earnings on paying goods traffic, such as grain and seeds, having declined largely owing to smaller harvests and short leads to famine tracts for consumption there, instead of long leads to the seaboard for exportation; and partly to a substantial increase in the volume of coal traffic (towards which the strengthening of railway reserves of coal contributed) which pays a lower minimum rate of freight than any other commodity.

The total railway mileage opened, under construction, and sanctioned for construction during the year was as follows:—

Gauge.	Miles opened.	Miles sanctioned for construction.	Total Mileage under construction or sanctioned for construction at the close of the Year.
5' 6" gauge -	133.25	494.78	1,608.53
3' 3½" " -	265.43	86.11	885.52
2' 6" " -	192.45	36.81	305.08
2' 0" " -	26.42	—	—
Total -	617.55	617.70	2,799.13
Add correction of mileage -	4.38	—	—
Net total addition to open mileage -	621.93	—	—

The lines opened during the year included the Gondia-Nagbhir railway, 147.78 miles; the Kyangin extension of the Burma railways, 52.16 miles; the Bezvada Masulipatam railway, 49.38 miles; the Moradabad Ramnagar branch of the Rohilkund and Kumaon railway, 48 miles; the Warora Balharshah railway, 37.75 miles; the Morak-Kotah section of the Nagda Muttra railway, 37.50 miles; and 16 other lines of shorter length. Among the lines sanctioned for construction during the year, the most important are the Sutlej Valley railway, 209.28 miles; the Itarsi-Nagpur railway, 178.45 miles; the Amla Purassia branch of the Great Indian Peninsula railway, 53 miles; the Thanesar Kaithal branch of the Delhi Umballa Kalka railway, 28 miles; and the Chupra Mushrak extension of the Bengal and North-Western railway, 26.32 miles.

Full particulars in regard to the works completed and in progress during 1908, and projects for new lines under consideration during the year, will be given in the Administration Report on Indian Railways for 1908, which will be published as a Parliamentary Paper. A few details of the more important works of the year are, however, given below.

Important works in progress during the year included the Kotah Muttra section of the Nagda Muttra railway, 204.35 miles, on which the earthwork and masonry of the major bridges were completed; the Katihar Godagari extension of the Eastern Bengal State railway, 105 miles, which was opened to traffic on 1st January 1909; a new double line bridge over the Ichamutti on the Eastern Bengal railway; the doubling of the Great Indian Peninsula railway from Karla to Poona, 34.5 miles; and the Kali Sindh bridge on the Baran Kotah railway, which is to consist of 4 spans of 150 feet, 11 spans of 100 feet, and 2 spans of 60 feet. The Lodhran-Khanewal chord of the North-Western railway, 56.59 miles, was completed and will shortly be opened to traffic; the Shorkot Road-Chichoki branch, 135.80 miles, and the doubling of the line between Amritsar and Saharanpur, 195 miles, were in progress. A new bridge (25 spans of 100 feet and 1 of 40 feet) was in course of construction over the Ganges river at Cawnpore, and others over the Teetas river on the Assam-Bengal railway and over the Gogra river on the Bengal and North-Western railway were begun. The extension of the Bengal and North-Western railway from Benares to Allahabad, 83 miles, is nearing completion, with the exception of the section from Jhusi to Allahabad, which includes a bridge over the Ganges, 40 spans of 150 feet,

RAILWAYS work on which is only about to commence. The doubling of the Dabain-Pegu section of the Burma railways has made good progress, and the remodelling of the Pegu and Rangoon station yards was also undertaken. The site of the Lower Ganges bridge was definitely fixed at Sara, and preliminary operations have been commenced.

Projects for new lines. Among the projects for new lines which were under consideration during the year, the most important were the Bombay Sind connection along the northern route, on which further investigations are being made; the Idar Road-Brahmakhet extension of the Ahmedabad Dholka railway, which was sanctioned; and the Patti-Kasur extension of the Amritsar Patti railway, negotiations for which were practically completed. As regards the Indo-Ceylon connection, the South Indian Railway Company are in negotiation for the establishment of a ferry service between Danishkodi and Manaar, and it is understood that the Ceylon Government are arranging for the construction of an extension of their railway to Manaar. Negotiations are also in progress between the Madras Government and the South Indian Railway Company in regard to the construction of certain branch railways proposed by district boards in the Madras Presidency.

Rolling stock and safety appliances. For the year 1908-9, the Railway Board made a provision of Rs. 547½ lakhs for additional rolling stock for open lines of Indian railways. This amount included a sum of Rs. 119½ lakhs transferred out of the special grant of 1½ crores for wagon stock made in 1907-8, the total net grant for which year thus stood at Rs. 603 lakhs.

The addition made during the year 1908 to the rolling stock of the railways consisted of 395 engines, 679 coaching vehicles, and 9,987 goods vehicles, the number under supply being 444 engines, 2,063 coaching vehicles, and 10,962 goods vehicles.

Good progress is being made in the provision of automatic brakes to existing rolling stock. Greater conveniences in the general fitting-up of coaching stock are being introduced; and orders have issued to the three State lines on the subject of the introduction of electric lighting on all new first and second class carriages.

Train signalling with automatic block instruments. As a result of a serious collision which occurred between Ghaziabad and Dasna stations on the Oudh and Rohilkund railway in May 1908, a committee of electrical experts was appointed to consider and report on the proper working of Tyer's tablet instruments and the possibility of accidents occurring in consequence of defects in the system, also what steps should be taken to remedy the defects, if any. The report of the committee, together with the opinion of the various railway administrations using tablet instruments, was submitted to the Indian Railway Conference Association; and, on the recommendation of that association, rules for the working of Token instruments have been issued for adoption by railways.

Flood damages. Owing to exceptionally heavy rains in August and September 1908, floods occurred on the Hapur branch of the East Indian railway, on several parts of the North-Western railway, on the Nizam's Guaranteed State railway, on the Bengal Dooars railway, and on the Madras and Southern Mahratta railway, and traffic was suspended on these lines for periods varying up to 21 days. In July 1908 the Udaipur Chitor railway was breached in several places, and in November the Burma railways were badly breached in three places, causing interruptions to traffic.

Accidents. Serious accidents occurred during 1908 on the Oudh and Rohilkund railway on 6th May, on the East Indian railway on 21st June, on the Bombay, Baroda, and Central India railway on the 26th June, on the Great Indian Peninsula railway on 5th August, and on the North Western railway on 3rd December, resulting in the death of 62 persons and injuries to 115 persons.

Concessions to the public. *Carriage of Commercial Travellers' Luggage by Mail Trains.*—The Indian Railway Conference Association has agreed that commercial travellers' luggage, for which no concession rates were previously allowed when carried by mail trains, may now be so carried at half parcel rates, subject to a limit of five maunds, any excess weight being either paid for at full parcel rates or forwarded by passenger train.

Retention of lower Passenger Fares on the Bombay, Baroda, and Central India Railway.—As in certain cases the passenger fares charged on the Bombay, Baroda, and Central India Railway infringed the amended schedule of maximum and minimum fares and rates for the carriage of coaching traffic sanctioned for the line, and it was necessary that in these cases the charge should be less than the sanctioned minimum fares, sanction was accorded to the lower passenger fares being retained.

Abolition of Tolls on certain Bridges.—During the year the boat-bridge over the Kabul river at Nowshera, and the North Western railway bridge between Nowshera and Mardan Road, were declared free of tolls, the cost of maintenance and the initial

capital outlay entailed in the opening of the latter to road traffic being met by the local administration. **RAILWAYS.**

In February 1908 it was decided to dismantle the bridge of boats over the Indus river at Khushalgarh, since the cost of maintenance exceeded the toll receipts, and to throw open the roadway of the newly constructed railway bridge to the public free of tolls, the cost of constructing the roadway and the approaches to it being paid jointly by the Governments of the Punjab and the North-West Frontier Province. The whole cost of the maintenance of the roadway over the bridge, and of the left approach, will be defrayed by the North-West Frontier Province, while the approach on the Punjab side will be maintained from funds supplied by the Attock District Board.

Rebate on Afghan Trade.—In July 1908, sanction was accorded to the extension of the rebate of two-thirds the freight over the North Western railway previously granted on all goods traffic coming from or going to Persia by the Quetta-Nushki-Seistan route, to such traffic when it was booked and despatched by passenger train, and to both these concessions being extended to Afghan trade which passes through Nushki and does not break bulk at that station. A similar concession, but limited to one-third rebate was sanctioned on the Oudh and Rohilkund railway. Both these sanctions are in force up to the 31st March 1909, and the question of their continuance after that date is to be considered hereafter.

Railway Finance Committee.—The Indian Railway Finance Committee appointed by the Secretary of State in May 1907 submitted their report in March 1908. The recommendations of the Committee are under the consideration of the Government of India. The main feature of the report is the recommendation that the provision for capital outlay on railways should be raised to 18.75 crores of rupees per annum for the next 10 years. The capital programme for the year 1909-10 was accordingly prepared on this basis in the first instance, and received the approval of the Secretary of State, but later, in consequence of altered financial conditions, it was found necessary to reduce the amount to Rs. 15 crores. **Administrative matters.**

Railway Board.—The following changes were introduced, with effect from the 1st October 1908:—

- (i) The Chairman of the Railway Board became President of the Board, with enhanced powers; and
- (ii) The Board with its staff became collectively the Railway Department, distinct from and independent of the Department of Commerce and Industry Secretariat, though remaining in the administrative charge of the Honourable Member, Commerce and Industry Department, as Railway Member.

Other Matters.—The separation of the Carriage and Wagon Department from the Locomotive Department of State railways was carried into effect on the Oudh and Rohilkund railway in 1907, and in the year under review a similar arrangement was made on the North-Western railway.

A revised scale of appointments and pay for managers and heads of departments and other officers of Class I. of the Superior Revenue Establishment of State Railways was sanctioned and brought into operation with effect from 20th December 1908.

Representation on the Port Trust Board, Bombay, of the Great Indian Peninsula and Bombay, Baroda, and Central India Railways.—In view of the change made in the Local Government control exercised over the railways terminating in Bombay, and also of the community of interests of the Great Indian Peninsula and the Bombay, Baroda, and Central India railways, and of the Port Trust, the Government of Bombay are taking steps to amend the Bombay Port Trust Act in order to allow of the enlargement of the Board, so that the two railways may have direct representation on it.

Use of local Manufactures for Railway purposes.—The use of articles of local manufacture is being gradually extended and railway administrations have been encouraged to purchase such articles where permissible. **Miscellaneous.**

An instance of the larger field opened to local industries is the raising of the limit of the span of the railway girders which may be purchased locally. An Indian company was able to show that its shops are capable of turning out girders of large spans and the limit was therefore raised from 80 feet to 150 feet.

Orders were also issued permitting the purchase of points and crossings from firms in India and contracts for a considerable proportion of wagon frames and bodies for State worked lines were let to private firms in Calcutta.

RAILWAYS.

An officer has been appointed and located at Calcutta with the designation of Superintendent of Local Manufactures to inspect work during the process of manufacture.

Rent and Maintenance of Telegraph Wires supplied to Railways by the Telegraph Department.—In September 1907 it was decided that an all-round rate of Rs. 2.3.0 per mile per mensem, fixed in August 1896, should continue to be charged for the rent and maintenance of telegraph wires supplied to railways by the Telegraph Department until further notice. The question of the suitability of this rate having been carefully examined, it was decided on the 14th December 1908, that, with effect from the 1st April 1909, the charge should be fixed at Rs. 2 per mile of wire and that this rate should continue in force until further orders.

Goods Tariff simplification.—The Indian Railway Conference Association at their meeting in October 1908 approved of a draft revised goods classification and directed that it should be circulated to all railways for remarks. It is hoped that this much needed tariff simplification will be accepted and introduced throughout Indian railways before the close of 1909.

IRRIGATION.

IRRIGATION. (For further details see *Statistical Abstract for British India*, Tables 44 to 47, 68–9, 71, 74 to 76, 119, and 133.)

The class of works dealt with by the Public Works Department under the head of Irrigation may be roughly divided into canals and tanks, though these two kinds of works are frequently used in combination.

The works under the former head take off, in most cases, from the larger rivers, which, drawing their water from lofty mountain ranges, can, even in times of drought, be depended upon for an unfailing supply. They have been utilised on the largest scale and with the most successful results in the United Provinces of Agra and Oudh, the Punjab, and the deltas of the large rivers in the Madras Presidency. In tank irrigation, on the other hand, the supply of water is more or less dependent on the local rainfall, either directly or through the medium of the smaller rivers, which dry up in hot seasons. This is the common system of irrigation in Southern India, where irrigation is largely dependent on storage works. In the Madras Presidency alone there are some 60,000 tanks. The works are for the most part of native origin; but much has been done under the British Government in improving old tanks, and in constructing new works in Madras, the Bombay Deccan, and Ajmere-Merwara.

In parts of Baluchistan, where the rainfall is scanty and very capricious, a method is practised of drawing the water from underground springs by means of tunnels driven into the hill sides. There remains the method of irrigation more extensively used in India than any other, viz., that by wells, which, however, does not come directly within the scope of operations of the Public Works Department.

An experiment, which may have an important bearing on future irrigation operations, was commenced in 1905–6 in the shape of the Divi pumping project in Madras, which is intended to irrigate 50,000 acres in the Divi Island at the mouth of the Kistna River by water raised from the river by means of pumping machinery. Should the scheme prove a success, the introduction of other similar schemes may be expected.

Financially considered, the irrigation works are classed as “major” or “minor.” The former class includes all the works which have been undertaken from loan funds, in the expectation that they would be sufficiently productive to cover the interest charges on the sums spent on their construction. It also includes the works classed as famine protective, which are constructed not from borrowed funds, but out of the annual grant from revenue for famine relief and insurance. The cost of constructing the “minor” works, as well as the sums annually required for their working and maintenance, are met from the ordinary revenues, and for the greater part of this class of works distinct capital and revenue accounts are not kept.

The distinction implied in the words “major” and “minor” is not in complete correspondence with the facts, as there are some minor works which are of more importance than some major works. But, speaking generally, the “major” class includes the works of the greatest engineering importance, which have been constructed, or, as in a few cases of old Native works, almost entirely reconstructed by British officers.

The following statement gives a general view of results obtained from working the canals for which full accounts are kept for 1905–6, 1906–7, and 1907–8:—

IRRIGATION.

	Capital Outlay (Direct and Indirect) to End of Year.	Gross Receipts.	Working Expenses.	Net Receipts.	Percentage of Net Receipts on Capital Outlay.	Area irrigated.
	£	£	£	£		Acres.
Major Works - - - - -	30,724,002	3,286,624	1,103,733	2,182,891	7.10	14,286,231
Minor Works - - - - -	3,819,029	279,098	131,844	147,254	3.85	1,790,657
Total for 1907–8 - - - - -	34,543,031	3,565,722	1,235,577	2,330,145	6.74	16,076,888
Total for 1906–7 - - - - -	33,329,664	3,761,726	1,192,152	2,569,574	7.71	15,799,558
Total for 1905–6 - - - - -	32,094,250	3,220,047	1,147,003	2,073,044	6.45	16,815,927

There are great differences in the financial success of the irrigation works in the various provinces. These are due to the various physical conditions of the country in regard to surface, soil, climate, and the absence or presence of large rivers with a permanent supply of water, as well as to the differences in the character and habits of the people in different districts. There are also considerable differences in the manner in which the irrigation revenue is assessed and collected, which have an important bearing on the financial success of the works. In Madras the bulk of the irrigation revenue is collected with, and on most of the works is consolidated with, the land revenue. In Bengal and Bombay the receipts of the Irrigation Department consist to a great extent of “occupiers’” rates, and are not supplemented by “owners’” rates, as in the United Provinces of Agra and Oudh, nor, with a few exceptions, by a share of the land revenue. In Sind the revenue of the canals consists almost entirely of the share of the land revenue allotted to irrigation. Cultivation is dependent on the artificial supply of water, and the consolidated revenue from the irrigated lands is divided in the proportion of 90 per cent. to irrigation and 10 per cent. to land. In the United Provinces of Agra and Oudh, and in the Punjab, the direct water rates are assessed partly on the occupier and partly on the owner of the land, the bulk of the rates falling on the former, and the irrigation receipts are further increased by a not unimportant contribution from the land revenue. The contribution from the land revenue is the amount considered due to irrigation when an enhancement of land revenue is levied at the periodical revision of the land settlement. Like the owner’s rate, which is directly levied, it falls upon the owner of the land.

The immense systems of large artificial water channels with which some parts of India are covered would appear at first sight to offer unrivalled opportunities for water carriage. But though efforts have been made to organise navigation services on the larger irrigation canals, it cannot be said that, on the whole, they have met with a large measure of success. In many cases the receipts from the traffic have failed to cover the working expenses. It is, indeed, obvious that the canals, being designed primarily for irrigation purposes, must often be unsuitable from their alignment and level for navigation.

The following more detailed account of the irrigation operations of the year is given under the heads of the different provinces in which the works are situated.

The general results for 1907–8 of working all the irrigation and navigation systems for which full accounts are kept are compared with the results of the five previous years in the following statement:—

Year.	Capital Outlay to end of Year.	Receipts.	Expenditure.	Net Receipts.	Percentage of Net Receipts on Capital Outlay.	Area irrigated.
	£	£	£	£		Acres.
1902–3 - - -	*5,220,323	168,431	95,709	72,722	1.39	800,440
1903–4 - - -	5,229,813	163,191	95,648	67,543	1.29	809,331
1904–5 - - -	5,281,000	173,319	95,953	77,366	1.46	800,227
1905–6 - - -	5,353,895	176,597	102,382	74,215	1.38	813,405
1906–7 - - -	5,432,579	188,927	124,472	64,455	1.19	904,087
1907–8 - - -	5,456,751	194,066	141,297	52,769	0.97	1,013,290

* Includes 40,404l. and 10,039l. expended on two abandoned projects, viz., Tirhut and Damodar projects.

During the year under review there were in Bengal six major irrigation works, two of which were classed as protective. Of the productive works, three combine irrigation with navigation, and the fourth (Hijili tidal canal) is purely a navigation

IRRIGATION. work. The two protective works, the Dhaka and the Tribeni canals, were sanctioned in 1900-1, and are still in course of construction, the capital expenditure at the end of the year amounting to £32,984 and £211,951 respectively.

The financial results obtained from the working of the major and minor works, excluding the Tribeni canal, during the year under review are shown in the following statement :—

Canal.				Capital Outlay to end of Year.	Net Receipts.	Percentage of Net Receipts on Capital Outlay.	Area irrigated.
				£	£		Acres.
Major Works	Orissa Canals	-	-	1,777,601	1,567	0.09	289,506
	Midnapur	-	-	566,069	-2,608	—	62,040
	Sone Canals	-	-	1,782,058	56,769	3.18	648,920
	Hijili Tidal Canal	-	-	174,144	1,072	0.61	—
	Dhaka Canal	-	-	32,984	-133	—	12,824
Total Major Works				4,332,856	56,667	1.31	1,013,290
Minor Works	Calcutta and Eastern Canals	-	-	623,218	3,601	0.57	—
	Orissa Coast Canal	-	-	240,872	-7,367	—	—
	Saran Project	-	-	47,654	-133	—	—
Total Minor Works				911,744	-3,899	—	—

Besides the minor works mentioned above, there are four works of this class for which capital accounts are not kept, viz., the Nadia river system, the Gaighatta and Buxi Khals, and the Eden and Madhuban Canals. The first-named, comprising about 472 miles of channel, is used for navigation purposes only.

United Provinces of Agra and Oudh.

In the United Provinces of Agra and Oudh, the total capital outlay on canals during 1907-8 was over £231,700, of which nearly £167,000 was spent on protective works, mainly on the Ken Canal, now open for irrigation, on the Dhassan and Betwa Canals, and on the Dhukwan Reservoir. Among productive works the only important undertaking was the extension of the Fatehpur-Sikri distributary. Good progress was made with irrigation works in Bundelkhand, while work on the long-considered project of the drainage of the Hardoi district was begun during the year. The gross receipts declined by over £63,000 as compared with the previous year. The area irrigated, nearly 3,965,000 acres, was over 51,000 acres less than the record area of 1905-6, but the decrease was caused by the exceptionally small supply of water in the rivers; with 14,359 miles of channels working during the year, the supply was quite unequal to the demand. The question of the further extension of irrigation in the province is the subject of anxious consideration by the Government, and it is hoped that a scheme may shortly be devised for a Sarda-Ganges-Jumna feeder, by which the waters of the Sarda river may be used for the benefit of the province.

Punjab. The general results for 1907-8 of working all the irrigation systems in operation, for which full accounts are kept, are shown in the following statement, as compared with the results for the previous year :—

Canals.		Length of		Capital Outlay to End of Year.	Net Earnings.	Percentage of Net Revenue on Capital Outlay.	Area irrigated.
		Main and Branch Channels.	Distributaries.				
		Miles.	Miles.	£	£		Acres.
Major Works	Western Jumna (including Sirsa Branch).	301	1,606	1,156,981	134,591	11.63	685,135
	Upper Bari Doab	354	1,580	1,374,402	142,880	10.40	907,516
	Sirhind (British portion)	319	1,945	1,666,283	141,162	8.47	788,301
	Lower Chenab	427	2,303	1,878,775	341,040	18.15	1,705,296
	Upper Sutlej	332	393	116,837	22,497	19.25	193,853
	Sidhnai	68	131	87,118	26,704	30.65	88,841
	Lower Jhelum	150	1,093	1,058,602	60,735	5.74	543,529
	Indus Inundation	657	121	153,213	3,743	2.44	133,753
	Shahpur (Imperial)	66	72	14,394	578	4.01	17,435
	Ghaggar (Imperial)	44	24	22,888	-1,040	—	9,617
Total for 1907-8		2,718	9,268	7,529,493	872,890	11.59	5,073,276
Total for 1906-7		2,718	9,369	7,445,051	1,014,275	13.62	5,395,768

The decrease in the net profit for the year is due to the partial failure of the monsoon, to low supplies in the rivers during the rabi season, and to heavy special remissions on the Lower Chenab and Upper Bari Doab canals of charges on wheat and grain crops ruined by untimely rains.

Work was continued on the large projects for the Upper Chenab and Lower Jhelum canals. The drought, which was so disastrous in other ways, helped greatly the works in hand and the manufacture of materials.

The navigation operations on the Western Jumna canal resulted in a profit of £3,780. Those on the Sirhind canal caused a loss of £646.

In Lower Burma there are no large irrigation works. The expenditure recorded under the head of "Irrigation and Navigation" has reference to the river embankment and drainage works and navigation canals.

In Upper Burma there are four large irrigation canals, the Mandalay, the Shwebo, the Mon and the Yeu, the first two only being in operation. The area irrigated by these works in 1907-8 amounted to 124,173 acres, as compared with 90,921 acres in the previous year. The net receipts in the case of the Mandalay canal amounted to £20,623, giving a return of 6.03 per cent. on the capital outlay, and in the case of the Shwebo canal to £11,072, giving a return of 3.38 per cent. Moderate progress was made in the construction of the Mon canals, but very little work was done during the year on the Yeu canal.

The various minor canal systems in the dry zone of Upper Burma supplied water to 253,000 acres, as compared with 246,000 acres in 1906-7, and earned a net revenue of £21,470.

Irrigation from works constructed by the State is still a novelty to the people of the Central Provinces and Berar, and it is still necessary to offer its benefits on the most liberal terms in order to encourage their acceptance. The otherwise deplorable failure of the monsoon in 1907 was at least useful in making cultivators appreciate the efforts of Government in this direction. All the State tanks filled well; the cultivators of the protected areas eagerly sought water to save their crops, and the area irrigated from the tanks increased more than sevenfold. The construction of projects is being carried on vigorously. Work on the Ramtek tank in Nagpur made good progress in spite of an outbreak of cholera among the labourers. No canals at present exist, but three important canal schemes are in contemplation. The Tendula canal has already been sanctioned, and for the Mahanadi canal complete detailed proposals have been prepared, while for the other—the Wainganga canal—a detailed estimate is in course of preparation. In addition to these, about 130 minor works, including those constructed with the help of grants-in-aid of private enterprise, were under construction during the year.

From an irrigation point of view the Madras Presidency is distinguished by the variety and extent of its works, ranging from the great deltaic systems of the Godavari, Kistna, and Cauvery to the small tanks and channels maintained by the Revenue Department.

The number of tanks directly or indirectly dependent on the local rainfall is very large, and, speaking generally, the success of the irrigation operations is more affected by local climatic conditions than in Northern India, where the irrigation works draw their supply from large rivers fed by the melting of the snow on distant mountain ranges.

The total outlay on irrigation works during the year 1907-8 amounted to £439,800, against £513,867 in the previous year. The area irrigated by all classes of works, including first and second crops, was 6,719,000 acres. The total revenue realised was £1,591,800, a decrease of £70,109 as compared with 1906-7.

The capital expenditure on major productive works amounted to about £92,870, incurred chiefly on the Nagavalli and Divi projects, the Periyar system, and the Kistna delta system. The area irrigated by works of this class was 3,236,000 acres, against 2,897,000 acres in the previous year. Gross receipts increased by £66,670 and working expenses by £20,000. The profit after paying interest charges gave a return of 6.51 per cent. on the capital outlay; excluding the Kurnool-Cuddapah canal, this return amounted to 10.05 per cent.

Under major protective works a capital expenditure of £5,000 was incurred during the year, chiefly on the Rushikulya system and the Mopad project. The area irrigated on the former system, which is in operation, amounted to 102,018 acres, a decrease of 1,316 acres as compared with 1906-7. The revenue derived showed a slight increase, and the working expenses a decrease of £2,208. Though the net revenue,

IRRIGATION. after paying interest charges, shows a deficit, yet there is an improvement on the results of the previous year.

The capital outlay on minor works and navigation amounted to £12,330. The area irrigated and the revenue derived were 323,000 acres and £34,670; the working expenses were £19,930.

Up to the end of the year about 42·36 per cent. of the area to be investigated under the Tank Restoration scheme had been examined, and the expenditure during the year amounted to £33,800.

Three large schemes—the Tungabhadra, Kistna, and Cauvery projects—are under examination by the Government of India.

Bombay,
including
Sind.

In the Bombay Presidency, excluding Sind, the water system does not as a rule admit of the construction of large irrigation works. The rivers or streams are mostly small and more or less dependent on the rainfall, and a constant supply cannot be obtained from them without the aid of large reservoirs or tanks. In Sind the success of the irrigation operations is dependent on the regular rise of the River Indus.

During the year the total expenditure upon irrigation works throughout the Presidency and Sind amounted to £393,330, as compared with £316,670 in 1906-7. Of this total, £116,670 was spent on works, £161,670 on repairs, and nearly £100,000 on establishment. The expenditure was divided between the Presidency and Sind in the proportion of £161,670 to £231,660. Famine relief outlay on irrigation works amounted to only £42.

The total area irrigated from the Deccan and Gujerat works for which capital and revenue accounts are kept was 130,808 acres, against 108,787 acres in the previous year. The gross assessed revenue rose from £63,144 to £72,504. Special surveys for protective irrigation works in the Deccan continued throughout the year, the principal projects investigated being the Mula, the Kukadi Left Bank, and the Ghatprabha Right Bank canals, and the possibility of a large Godaveri Left Bank canal.

In Bombay the season was on the whole a good one, the kharif rainfall being considerably above the normal. The rabi rains were, however, a failure in all divisions, thus increasing the demand for irrigation. As a result, in the northern division the Hathmati and Khari Cut canals irrigated an area four times as great as the average for the last ten years; in the central division there was an increase of 11,000 acres in the area irrigated, and of nearly £17,000 in the gross assessed revenue, compared with the average for the last ten years. In the southern division there was a decrease of 9 per cent. in the total area irrigated, and of 13 per cent. in the revenue assessed, as compared with the decennial average, due to copious and timely rainfall in the kharif season. Substantial progress was made with the dam at Chankapur, the Girna Left Bank canal, and the Waghad tank; on the Godaveri canal project, the most important irrigation work now in hand, nearly £40,000 was expended during the year out of a total estimated expenditure of £636,700.

In Sind the existence of cultivation depends upon irrigation, and there is constant demand for water from the canals. This fact, and the comparatively inexpensive nature of inundation canals, account for the favourable results generally obtained from the working of irrigation canals in the province. In the year 1907-8 the rainfall was good, but inundation was poor, being characterised by a late rise and an early fall. The area irrigated by all classes of works was 2,785,738 acres, against 3,487,653 acres in the previous year. The gross assessed revenue amounted to £461,685, the corresponding figure for 1906-7 being £569,962. Though there was abundance of water in the Indus, it was at too low a level to give the Sind canals the supply required; and the fact that the area irrigated was 700,000 acres less and the gross assessed revenue £108,000 less than in the preceding year is a clear indication of the need for means of raising the water of a poor inundation the few feet necessary to supply the canals. With this object in view, surveys and plans were in progress during the year for a barrage at Sukkur, a right bank canal from Sukkur to Sehwan, a left bank canal from Rohri to Hyderabad, and for improvements to the canals of the Eastern Nara system.

North-West
Frontier
Province.

The only major work in operation in the North-West Frontier Province is the Lower Swat River canal, with a length of 22 miles in the main and branch channels and 186 miles in distributaries. Other major works—the Paharpur Inundation canal and the Upper Swat River canal—are in course of construction as productive works.

The working of the Lower Swat River canal and the Kabul River canal continued to be satisfactory. Considerable difficulty was experienced in the construction of the

Paharpur canal in connection with hill torrent crossings, which necessitated the preparation of a revised estimate for the work.

Several tanks in North Coorg were repaired and improved, and the two irrigation channels proceeding from the Devanur anicut were virtually completed.

BUILDINGS AND ROADS (CIVIL).

BUILDINGS
AND ROADS
(CIVIL).

The Buildings and Roads branch of the Public Works Department embraces all the operations of the Department which are not classed under the special heads of Railways and Irrigation. It includes the extension and maintenance of the road system, the construction and repair of all the buildings required for the proper discharge of the functions of government in all its branches, and a large miscellaneous class of works of public improvement, including lighthouses, harbours, embankments, boat bridges, and ferries, and the water supply and sanitation of towns.

The operations of this branch of the Department are classed primarily under the head of Civil Works, the expenditure on which is chiefly met from provincial and local resources. The classification of this expenditure for 1907-8 under the various heads is shown in the following table:—

	Central Pro- vinces and Berar.	Burma.	Eastern Bengal and Assam.	Bengal.	United Pro- vinces of Agra and Oudh.	Punjab.	North- West Frontier Pro- vince.	Madras.	Bombay.	India General.	Total.
Imperial - - -	£ 3,925	£ 23,209	£ 9,276	£ 137,991	£ 63,383	£ 77,330	£ 110,405	£ 11,606	£ 61,999	£ 207,717	£ 706,841
Provincial* - - -	394,901	704,981	387,009	510,548	350,741	306,032	—	334,487	489,924	—	3,478,623
Local* - - -	69,087	132,807	169,689	312,137	230,890	143,317	7,128	449,402	228,824	5,233	1,748,514
Total - - -	467,913	860,997	565,974	960,676	645,014	526,679	117,533	795,495	780,747	212,950	5,933,978
* Includes expenditure by the Civil Department in addition to that by the Public Works Department.										Expenditure by Civil Officers from Imperial Funds - £	22,558
										Expenditure in England - £	68,102
										Grand Total - £	6,024,638

The greater part of the expenditure from local funds is absorbed by the maintenance and extension of roads. A portion of this expenditure is under the direct control of the Public Works Department, but the larger part of the local funds outlay under the head of Buildings and Roads, as well as a small portion of the provincial outlay, is under the management of the Civil Department, and is not controlled by the Public Works officers.

The extension of local government in India has thrown a large portion of the smaller class of public works into the hands of the local boards. Speaking generally, the boards maintain their own establishments, but in the case of any works of unusual difficulty they have recourse to the professional skill of the Public Works officers.

The following short account of Civil Works for the year under review is given under the heads of the different provinces in which the expenditure was incurred:—

The principal Imperial works which were in progress during the year were residences for the staff of His Excellency the Viceroy in Calcutta and new buildings for the Department of Mines at Dhanbaid. As regards Provincial works, the year was one of notable activity. A new court house for the district magistrate at Howrah, and four new courts for judges in other localities were under construction. An extension to the High Court was nearly completed. The new presidency jail buildings at Alipore and the Police Training College at Doranda were practically finished. Numerous buildings for educational and medical purposes were also under construction.

Under Communications, the new high level Tista Valley road was nearly finished; considerable progress was made in opening out new roads and improving existing lines of communication in the Sambalpur district, also in improving the communications between Cuttack and Sambalpur. Important improvements were also in progress in the Chota Nagpur district.

Under Miscellaneous Public Improvements, an equestrian statue of Sir John Woodburn, late Lieut.-Governor of Bengal, was erected at Dalhousie Square Park, Calcutta, the drainage of the Calcutta Maidan was improved, and a telephone exchange was established at Cuttack.

Bengal.

**BUILDINGS
AND ROADS
(CIVIL).**

United Pro-
vinces of
Agra and
Oudh.

In the United Provinces of Agra and Oudh nearly £946,700 was spent in 1907-8 by the Public Works Department on buildings and roads, of which over £373,000 represents the outlay on famine relief. The most important buildings undertaken were the Currency Office at Cawnpore, the X-ray Institute at Dehra Dun, courts for the Commissioner at Meerut and the Judge at Lucknow, and considerable extensions of the Roorkee Engineering College. Much important work was also undertaken on behalf of the Jail, Medical, and Police Departments. The work on road communication and bridge building was extensive. During the year 6,164 miles of metalled road and 1,722 miles of unmetalled road were maintained by the Department, while 95 miles of new metalled road were constructed. The work in connection with famine was extremely heavy, and consisted mainly in raising roads, digging tanks and canal distributaries, and making railway embankments.

Punjab.

The most important Imperial work completed during the year was a new office for the Accountant-General at Lahore. At Kasauli two estates were purchased for the Pasteur and Research Institutes. Several works were completed, chiefly in the Jhelum Colony and the Lyallpur District, for the Army Remount Department.

Under Provincial Civil Works the Public Works Secretariat Offices at Lahore were completed, additions were made to the Government College, Lahore, and the work of rebuilding Bishop Cotton School, Simla, was completed. A new court house was built at Gurdaspur, a sessions' house at Lyallpur, and district jails at Lyallpur and Campbellpur. Work on the Agricultural College at Lyallpur was in progress.

The expenditure on roads continues heavy, but owing to a new system of accounts, whereby half the charge is debited to district funds, the outlay by the Public Works Department appears less than usual. Good progress was made in carrying out the programme of new feeder roads prepared in 1906.

Burma.

A change of some importance in the classification of buildings was carried out, with effect from 1st April 1907, buildings belonging to certain Imperial departments being transferred from the Provincial to the Imperial List. As a result, there was an apparent reduction of expenditure under the head of Provincial Buildings, although practically the same amount was spent as in the previous year. Expenditure on communications again declined owing to less being spent on new metalled roads. The bridge over the Sittang River at Toungoo was opened during the year. Progress was made with various important building operations in Rangoon. Work on the new Chief Court and the General Hospital advanced a stage, extensive additions were made to the Currency Buildings, and the foundations of the Press Building were completed. The new jail at Moulmein was finished, and progress was made with the Police Training School at Mandalay.

Central Pro-
vinces and
Berar.

The year was a busy one in the Public Works Department of the Central Provinces and Berar. Apart from the steady increase which the development of the province necessitated, special expenditure to the extent of £47,000 was incurred on a large expansion of operations for road construction with a view to providing work in tracts where distress was apprehended on account of extensive crop failure. The works thus provided were of the greatest assistance in obviating recourse to famine works; they were in no sense famine works, but were carried out under ordinary conditions of employment, and would sooner or later have been undertaken on their merits. There was great activity in the erection of buildings, especially for the Police and Civil Judiciary Departments. A number of bonded warehouses were built for the Excise Department, and considerable sums were spent on the equipment of the Government Agricultural Farms at Labhandih, Powarkhera, and Nagpur. The new Secretariat building at Nagpur made good progress.

Eastern
Bengal and
Assam.

Under Imperial works, extensions to the Post Offices at Dacca, Patiya, and Bogra, and to the Telegraph Offices at Chittagong and Silchar, were in progress.

In the class of Provincial works, work was begun on the new Government House at Dacca, and on a residence for the Lieutenant-Governor at Chittagong. Numerous residences for officials in the new civil station of Dacca and throughout the province were also in progress. Circuit-houses at Faridpur and Rangamati were completed, and others at Chittagong, Dinajpur, and Noakhali were commenced. A new court at Jorhat and the Dacca College were practically finished. Under miscellaneous works the most important were the improvement of the Gauhati waterworks and the laying out of a site for the new station at Jorhat.

Extensive improvements were made to the road system throughout the province, and a number of new roads were projected or commenced.

There were no Imperial works of importance in progress, and the year's expenditure came almost entirely under the heads of Provincial and Local civil works.

The number of buildings completed or in progress was 248. The new Huzur Treasury at Bellary, the Central Record Office at Madras, the Metcalfe Students' Hostel at Rajahmundry, the Marine Aquarium on Madras beach, the Collector's Cutcherry at Cocanada, and the Government Training Schools at Nellore and Villupuram were practically completed during the year. Accommodation was provided at Vellore for a Central Training School for constable recruits, and several of the hospitals at Madras received additions. A lighthouse at Cotta Point in Malabar was in course of construction.

Under the head of Communications a few important roads are in the hands of the Provincial Public Works Department. Existing roads were improved or maintained in good order, and a new feeder road on the Shevaroy was constructed during the year.

Out of the total expenditure for the year, rather more than £54,000 was spent on buildings required for the Imperial Departments, the most important being the new General Post Office at Bombay, the extension of the Central Telegraph Office at Bombay, and the Consulate Buildings at Bunder Abbas. Under the head of Provincial civil works, £67,000 was spent on Administrative buildings, nearly £60,000 on Educational buildings, about £26,000 on buildings for the administration of Law and Justice, and an equal amount for buildings required for the Jail Department. Buildings for the Police Department absorbed about £50,000, and those for the Medical Department about £70,000.

On roads the expenditure amounted to nearly £112,000, of which over £61,700 was spent on original works, and £50,300 on the maintenance of existing roads.

There were no Famine Relief Works in charge of the Public Works Department.

The gross expenditure on Imperial Public Works was rather over £17,000, including some £5,330 on civil buildings and £7,800 on communications. The Mercara and Virajendrapet hospitals were completed during the year, and the other buildings constructed comprised two girls' schools and numerous police lines and quarters. The work on communications consisted more in the improvement of existing lines than in the opening of new ones. Over £660 was spent on the Wynaad road, and £540 on a new bridge over the Harangi river at Kudige.

The principal buildings completed during the year were a court house at Peshawar, a munsiff's court at Abbotabad, and circuit houses at Kohat, Peshawar and Malakand. The works under construction included a post office at Nowshera, and police stations, rest-houses, and quarters for officials. Under Communications the road from Dera Ismail Khan to Zam Chaudwan was completed, and numerous others were under construction or improvement. Boat bridges over the Indus at Dera Ismail Khan and Khushalgarh were maintained as usual, the former being replaced during the hot weather by a steam ferry service under the North Western Railway.

**BUILDINGS
AND ROADS
(CIVIL).**

Madras.

Bombay.

Coorg.

North-west
Frontier
Province.

CHAPTER XI.

POST OFFICE AND TELEGRAPHS.

(For further details, see Statistical Abstract for British India, Tables 90 to 96 and 98 to 100.)

POST OFFICE.

Post
Office.

Financial Results.—The receipts and charges of the Post Office for the last three years, as shown in the Finance and Revenue Accounts, have been as follows :—

YEAR.	Receipts.	Expenditure.	Net Revenue.
	£	£	£
1905-6	1,651,477	1,575,936	75,541
1906-7	1,751,146	1,602,933	148,213
1907-8	1,823,999	1,772,720	51,279

Extent of Postal Operations.—The extent of the operations of the Post Office, and their development during the last three years, are shown in the tables in the margin.

YEAR.	Post Offices.	Letter Boxes.	Village Postmen.	Length* of Postal Lines.
	No.	No.	No.	Miles.
1905-6	16,775	37,107	8,376	151,871
1906-7	17,180	39,523	8,383	153,606
1907-8	17,777	41,648	8,335	154,338
Increase or decrease in 1907-8 as compared with 1906-7	+597	+2,125	— 18	+732

* Including the Bombay-Aden line.

YEAR.	Letters (including Postcards).	Newspapers.	Book and Pattern Packets.	Parcels.	TOTAL.
	No.	No.	No.	No.	No.
1905-6	645,126,942	40,200,838	43,719,064	4,955,379	731,002,223
1906-7	683,707,568	44,045,566	46,521,568	5,281,884	779,556,586
1907-8	723,519,579	48,294,479	48,941,096	5,884,169	826,639,323
Increase in 1907-8 over 1906-7	39,812,011	4,248,913	2,419,528	602,285	47,082,737

letter carried for $\frac{1}{2}$ anna was raised from $\frac{3}{4}$ to 1 tola, and the weight carried for 1 anna was raised from $1\frac{1}{2}$ to 10 tolas: the weight of a letter carried for 1 anna to the parts of the British Empire to which the Imperial Penny Postage Scheme applies was raised from $\frac{1}{2}$ oz. to 1 oz.: and in accordance with the decision of the Rome Postal Congress of 1906, the unit of the foreign letter post was raised from $\frac{1}{2}$ oz. to 1 oz., and the rates for foreign parcels were reduced.

A new contract with the P. and O. Company came into force in February 1908, by which the time allowed for transit between Bombay and Brindisi was reduced from 278 to 270 hours.

The practice of granting discount on the sale of stamps was discontinued, the savings thus effected being utilized to improve the pay of the employés who had been accustomed to profit by the discount system.

Amount of Postal Matter dealt with.—The total number of articles received for delivery, including money orders, was nearly 850 millions, of which 95.1 per cent. were delivered, as compared with 95.06 in the preceding year.

The work of the dead-letter offices has increased considerably in the last two years, owing to a strict application of the postcard rules: when these rules are infringed, the postcard is treated and charged as a letter, in which case the addressee frequently refuses to accept it. In 1907-8 the receipts of postal articles (other than money orders) at the dead-letter offices were 8,443,149; of this number 6,110,967

The increase in the length of postal lines was greatest in Madras and Bombay.

The general correspondence returns, of which a summary is given in the margin, show an increase of 47 millions of articles (excluding money orders) for 1907-8, as compared with the figures for 1906-7. Of the additional articles 17 millions were postcards.

Alterations in Postal Arrangements during 1907-8.

—Important reductions of postal rates were made with effect from 1st October 1907.

The weight of an inland

articles were either delivered to addressees or returned to senders, and 2,332,182 could not be disposed of. This last figure is only 0.28 per cent. of the total number of articles given out for delivery, and a large proportion of the articles not disposed of were of such a nature that they could not possibly be delivered.

The following table gives an estimate of the amount of postal matter exchanged with the United Kingdom and with other countries in 1895-6 and 1907-8 :—

Correspondence exchanged.	With United Kingdom.			With other Countries.			Total.		
	1895-6.	1907-8.	Increase.	1895-6.	1907-8.	Increase.	1895-6.	1907-8.	Increase.
Letters and Postcards	6,107,000	16,792,000	10,685,000	4,267,000	8,682,000	4,415,000	10,374,000	25,474,000	15,100,000
Newspapers, Book packets, and Samples.	5,596,000	11,130,000	5,534,000	2,961,000	6,586,000	3,625,000	8,557,000	17,716,000	9,159,000
Total	11,703,000	27,922,000	16,219,000	7,228,000	15,268,000	8,040,000	18,931,000	43,190,000	24,259,000

Insurance, Value Payable Post, Money Orders, Savings Bank, &c.—Information regarding certain other branches of the work of the Post Office can be most conveniently given in a tabular form :—

	1906-7.	1907-8.	Increase.
INSURANCE OF LETTERS AND PARCELS :—			
Number of articles insured	691,004	856,386	165,382
Number of claims admitted	21	39	18
Net payment in respect of claims	£312	£547	£225
Receipts from Insurance Fees	£16,974	£20,562	£3,588
VALUE PAYABLE POST :—			
Number of articles sent	5,943,385	6,165,600	222,215
Value specified for recovery	£4,333,000	£5,000,000	£667,000
MONEY ORDERS :—			
Value of Ordinary Inland Orders issued in India	£21,879,147	£23,510,012	£1,630,865
“ Telegraphic Money Orders	£1,627,325	£1,803,879	£176,554
Average value of an Inland Money Order	Rs. 16.13.7	Rs. 16.15.1	1 anna 6 pies.
“ “ a Telegraphic Money Order	Rs. 93. 8.8	Rs. 89. 9.2	Rs. 3.15.6
Value of Foreign Orders issued in India	£491,118	£517,201	£26,083
“ “ “ paid “	£1,471,480	£1,637,217	£165,737
SAVINGS BANK :—			
Number of Post Offices transacting Savings Bank business at end of year.	8,049	8,328	279
Number of accounts in Post Office Savings Banks	1,190,220	1,262,763	72,543
Amount of Deposits at beginning of year	£9,328,417	£9,844,652	£516,235
“ New Deposits during year	£3,657,418	£3,677,695	£ 20,277
“ Interest credited “	£ 276,788	£ 287,868	£ 11,080
“ Withdrawals “	£3,417,971	£3,689,260	£ 271,289
Amount of Deposits at end of year	£9,844,652	£10,120,955	£276,303
Securities held on behalf of Depositors at end of year—	£277,160	£343,450	£66,290
Number of Accounts classified according to class of Depositor—			
I. Professional	383,873	409,224	25,351
II. Domestic	206,221	214,431	8,210
III. Commercial	47,015	50,394	3,379
IV. Agricultural	23,822	27,386	3,564
V. Industrial	42,366	45,956	3,590
VI. Indefinite (including persons whose incomes are derived from others).	486,923	515,372	28,449
LIFE INSURANCE AND ANNUITIES :—			
Number of policies in existence at end of year	12,651	15,458	2,807
Sum insured	£1,247,900	£1,447,409	£199,509

Offences.—During the year under review there were 32 cases in which the mails were plundered by highway robbers, of which 29 were in British territory and 3 in Native States. The figures for the preceding year were 21 and 3 respectively.

POST
OFFICE.

The number of cases in which the servants of the Post Office were found guilty of offences punishable by the law was 424. The defalcations and losses amounted to £2,457, as compared with £3,595 in 1906-7. A sum of £1,329 was recovered from the offenders or their sureties; £194 was charged against the Post Office Guarantee Fund, and the remainder was written off as irrecoverable or remained unadjusted at the close of the year.

Complaints by the Public.—The number of complaints made by the public was 46,718, against 42,185 in the previous year. In 32·26 per cent. of the whole number the complaints were ascertained to be well founded; 39·18 per cent. were entirely groundless; and in the remaining cases, either the investigation of the complaints had not been completed at the end of the year, or no definite conclusion had been arrived at.

Sale of Quinine.—Quinine is sold at Post Offices throughout India. The supplies issued to Post Offices in 1907-8 were less than in 1906-7. This is attributed to the exceptionally large supplies issued to certain offices in 1906-7, to the opening of new agencies for the sale of quinine otherwise than through Post Offices, to the abatement of the plague, and, “in the case of the Punjab and North West Frontier Circle, partly “to misrepresentations that the drug contained poison, with the result that the “village postmen of the Derajat Division were threatened with violence, and had to “deny that they sold quinine or had any in their possession.”

TELE-
GRAPHS.

TELEGRAPHS.

The following statement refers to the whole of the telegraph system under the direct control of the Government of India, but excludes the Indo-European Department, extending from Karachi to Teheran and Fao, for which, as usual, a separate account is given. The system now consists of 68,568 miles of line, 269,388 miles of wire, and 371 miles of cable.

Events of interest during the year were the introduction of reduced rates, with effect from 1st May 1907, for telegrams between India and Burma on the one side and Aden, Obock, Abyssinia, Yemen and Italian East Africa on the other; the application from 1st April 1908 of the Indian inland rules and rates to telegrams exchanged between India and Burma on the one side and the Indo-European telegraph offices on the Mekran coast and in Baluchistan on the other; and the reduction—consequent on the opening of the Central Persia line—of the rates for State telegrams exchanged between the Government of India and H.B.M. Minister at Teheran and between the Persian Government and the Consul-General for Persia in India, to half the usual rates for private telegrams.

The report of the Telegraph Committee appointed by the Government of India in 1906 has not been published for general information, but effect has already been given to several of its recommendations. Among these may be mentioned the employment of women in the Telegraph Department as Signallers and also as Booking Clerks in some of the larger offices. A new system for the selection and training of Sub-Assistant Superintendents has also been introduced.

Mr. Newlands, the telegraph traffic expert deputed to India to advise and assist in the reforms contemplated by the Committee, commenced his duties in October 1907. The improvements suggested by him, and in course of being adopted, are calculated—by the introduction of improved devices for the rapid handling of messages—to increase the efficiency of the service in a marked degree.

An agitation for improved prospects and the removal of certain grievances was started among the Signalling Staff in November 1907, and eventually ended in a partial strike. The matter was, however, satisfactorily settled, though not till considerable loss and inconvenience had been caused to the public. A strike of telegraph task work messengers also took place in the early part of 1908, and as the men proved not amenable to reason, they were dismissed the service and their places filled by new men.

During an expedition up the Bazar Valley in the early part of 1908, the ordinary telegraph signallers in the offices of the Khyber Pass were replaced by military telegraphists, and several new field offices were opened. The special offices were closed and the ordinary routine resumed at the permanent offices on the termination of the expedition's mission in March 1908.

The following statement shows, for a period of five years, the progress that has been made in extending public telegraphic communication :—

TELE-
GRAPHS.

Year.	Capital Expenditure.	Miles of Line.	Miles of Wire.	Miles of Cable.	Offices open to the Public.		
					Departmental, Ordinary and Postal combined.	Railway and Canal.	Total.
	£						
Up to beginning of 1903-1	5,304,582	56,830	200,267	199	2,051	3,106	5,157
During 1903-4	244,629	2,862	11,771	25	76	363	439
" 1904-5	274,820	1,992	15,398	21	62	328	390
" 1905-6	380,474	2,699	15,776	34	120	122	242
" 1906-7	379,798	2,814	15,648	42	129	142	271
" 1907-8	272,745	1,371	10,529	50	106	179	285
To end of 1907-8	6,857,048	68,568	269,389	371	2,544	4,240	6,784

* Excludes £6,861 cost of cable lines transferred to Military Works Department on the 1st April 1899.

A general view of the operations of the Department in 1907-8, in comparison with those of the four previous years, will be gained from the following statement :—

Year.	Number of Messages during Year.	Gross Receipts, including State but excluding <i>pro forma</i> Revenue.	Charges.	Net Receipts.	Percentage of Net to Gross Receipts.	Return on Capital.
		£	£	£		
1903-4	7,307,087	730,994	538,272	192,722	26·37	3·47
1904-5	9,098,345	765,274	546,914	218,360	28·53	3·75
1905-6	10,461,117	805,748	599,052	206,696	25·65	3·33
1906-7	11,385,166	827,744	644,205	183,539	22·17	2·79
1907-8	12,749,923	875,778	752,411	123,367	14·08	1·80

The whole of the annual expenses connected with the telegraphs in India, whether incurred on capital account for the construction of new lines, or on revenue account for the maintenance and working of the system, are defrayed from the revenues of the Government of India. In 1907-8 the receipts of the Department were not sufficient to cover both the working expenses and the amount expended on capital account, and there was a charge on Government revenues of £149,378.

The gross receipts of 1907-8 exceeded those of 1906-7, the previous best on record, by £48,034, but working expenses also increased in a greater proportion, exceeding those of 1906-7 by £108,206. As a result the net receipts were £60,172 less in the year under review, while the percentage of net revenue on capital outlay fell to 1·80, the lowest figure recorded since 1878-9, the year after the Department first showed a profit on its working. The large increase in working expenses was due to the increased cost of stationery and printing, to the inclusion for the first time of pensionary charges, to heavier repairs to lines, and to the increase in signalling and clerical establishments found necessary to cope with the increased traffic.

The number of telegrams increased during the year by 11·99 per cent.; their value, however, increased only by 5·92 per cent. The increase is due to a normal increase in message revenue, to the Bazar Valley expedition, and to famine and the consequent speculation in grain.

The following figures show, for the last two years, the division of the traffic between State and Private, and between Inland and Foreign, messages respectively :—

Class of Telegram.	1906-7.		1907-8.	
	No.	Value.	No.	Value.
		£		£
Inland State	891,145	107,075	968,418	110,973
Foreign State	15,859	3,617	16,361	4,005
Total State	907,004	110,692	984,779	114,978
Inland Private	9,308,342	377,832	10,537,969	404,766
Foreign Private	1,169,820	146,003	1,227,175	149,143
Total Private	10,478,162	523,835	11,765,144	553,909
Total State and Private	11,385,166	634,537	12,749,923	663,887

TELE-
GRAPHS.

The subscriptions to the Telegraph Department for telephone and similar services rendered during the calendar year 1907 amounted to £21,714, being an increase of £3,945 over the figures of the previous year. The average annual subscriptions for the past five years amounted to £16,338.

Interruptions during the year on the lines to foreign countries were somewhat more numerous than in 1906-7. The Raheng route to Bangkok was considerably improved, both on the Indian and Siamese sections, and it is now regularly used as an alternative when the Kanburi route to Bangkok is either blocked with traffic or interrupted. The traffic between India and Siam by these routes increased by 29 per cent. over the figures of the previous year.

Wireless telegraphic communication between Diamond Island and Port Blair, Diamond Island and Bassein, and Calcutta and the Pilot Vessel at the Sandheads was maintained throughout the year. The traffic dealt with amounted to 17,069 telegrams containing 479,437 words.

INDO-EUROPEAN TELEGRAPH DEPARTMENT.

INDO-
EUROPEAN
TELEGRAPH
DEPART-
MENT.

The system of telegraph lines and cables connecting the terminus of the Indo-European Company's telegraphs at Teheran with the Indian telegraph system at Karachi is controlled by the Indo-European Government Telegraph Department, and consists of 1,950 knots of cable, 2,585 miles of line, and 6,546 miles of wire. The increase in the mileage of line and wire, as compared with the previous year, is due to the inclusion of the Central Persia line which was completed throughout on 1st July 1907, and the line from Karachi to Nok Kondi which was finished and opened to traffic on 5th November 1907.

The Department also maintains a line from Teheran to Meshed, 568 miles, which is the property of the Persian Government.

The financial results of working the Department, as compared with the four preceding years, were as follows:—

Year.	Total Capital Outlay.	Gross Receipts.*	Expenditure.	Net Receipts.	Percentage of	
	£	£	£	£	Net Receipts to Capital.	Expenditure to Gross Receipts.
1903-4	913,320	107,173	61,749	45,424	4.97	57.61
1904-5	931,438	112,907	71,845	41,062	4.40	63.63
1905-6	957,491	111,082	59,457	51,625	5.39	53.52
1906-7	988,204	102,674	72,104	30,570	3.09	70.22
1907-8	997,094	109,002	75,690	33,312	3.34	69.44

* This represents the revenue of the Department after adjustments made in accordance with the provisions of the Joint Purse arrangement.

The gross earnings of the year increased by £6,328, due to an increase in the traffic carried. Working expenses also increased by £3,586, due mainly to the increased cost of the Signalling Staff and to heavier outlay on office contingencies. The capital expenditure of £8,890 incurred during the year was used principally on the construction work in completion of the Central Persia line and of the Indian extension of that line, and on the line from Teheran to Ardistan.

The number of messages forwarded during the year amounted to 271,149, being an increase of 4.55 per cent. as compared with 1906-7.

Under the Joint Purse Agreement, the share of the Department was £4,575 more than last year, being £112,536, as against £107,961 in 1906-7. This was principally due to the increase of traffic mentioned above. The amount paid into the Joint Purse for the year under review was £68,391.

The Departmental receipts from the Australasian Message Fund for 1907-8 amounted to £5,984, being £32 less than in 1906-7, and a decrease of £251 on the receipts for 1899, on which the original Australasian Message Fund was based.

Interruptions were not serious during the year. Acts of wilful damage, however, numbered 1,095, or 349 more than in the preceding year. These were largely due to the state of unrest and disorder which prevailed throughout the country generally, the insecurity of the roads necessitating an escort for those who had to travel. Several cases occurred of assaults and robberies of telegraph officials while on interruption or patrol duty.

CHAPTER XII.

SCIENTIFIC DEPARTMENTS.

GENERAL.	CIVIL VETERINARY DEPARTMENT.
SURVEY OF INDIA.	FOREST RESEARCH INSTITUTE.
OTHER SURVEYS.	BOARD OF SCIENTIFIC ADVICE.
METEOROLOGICAL DEPARTMENT.	ARCHAEOLOGICAL DEPARTMENT.
AGRICULTURAL DEPARTMENTS.	MEDICAL RESEARCH INSTITUTES.

GENERAL.

SCIENTIFIC
DEPART-
MENTS.
General.

Owing to the progress made in recent years in the application of science to various branches of the work of Government, it is proposed in this chapter to deal not only with surveys, but also with other scientific departments that have been established by the Imperial or Provincial Governments for the conservation and development of the natural resources of the country. In 1907-8 expenditure on Scientific Departments amounted to about £650,000, against which must be set about £78,000 for receipts. More than half the expenditure was for agricultural and veterinary work and the bulk of the remainder for survey work.

SURVEY OF INDIA.

The work of the Survey of India Department falls under various heads, namely, the trigonometrical survey, topographical surveys, forest and cadastral surveys, special surveys and explorations, and map production. The latest available information on most of these matters relates to the year ending 30th September 1907.

The Department has been materially increased during the last few years, and the work has improved owing to closer supervision and the better instruction of field surveyors and draughtsmen. The total cost of the Department for the year to 31st March 1907 was £203,950.

In 1904 the Government of India's attention was drawn to the defective state of the topographical survey maps of India, and a strong Committee, assisted by two officers of the British Ordnance Survey, was appointed to examine and report on the subject. The Committee found that the Survey Department had been required, of recent years, to divert the major portion of its establishments to field-to-field surveys in connection with the land revenue settlement, to the neglect of topographical work. To overtake the arrears of revisional survey and to secure that the map of India should be brought up to date and revised at proper intervals, they recommended a considerable increase of establishment and an increased expenditure of £210,000 a year for the next 25 years. They also made numerous recommendations for improving the quality of the maps, which they considered were of an inconvenient size and not up to modern standards. They recommended a re-issue of a uniform series of maps, based on a revisional survey, of half the present sheet size on the scale of 1 inch to the mile, to cover the whole of India, and their reproduction in colours. They advised that the surveys should be drawn, in the first instance, on the scale of 2 inches to the mile, and reduced to the 1-inch scale for publication.

After further inquiry the Government of India has come to the decision that a scale of 1 inch to the mile will ordinarily be sufficient, reserved forests and special areas being surveyed on the scale of 2 inches to the mile, and the $\frac{1}{2}$ inch scale being employed for waste and barren tracts. This decision will somewhat reduce the standard of establishments and expenditure proposed by the Committee.

During 1906-7 the field operations were carried on by 22 survey parties and four detachments. Of these, one party was employed on principal triangulation; 13 parties on topographical surveys; one party on traverse and cadastral surveys; two on traverse surveys for cadastral purposes; one party on traverse and topographical surveys; four parties on scientific operations; and the four detachments on town and cantonment surveys.

A scheme is under discussion for strengthening and reorganising the trigonometrical branch and raising the standard of the work. The triangulation party continued the series of principal triangulation through barren and almost uninhabited country trending westwards from Kalát, the length completed being 150 miles. Fifteen triangles, covering 3,390 square miles, were completed.

Trigono-
metrical
survey.

SCIENTIFIC
DEPART-
MENTS.
Topo-
graphical
and forest
surveys.

The total area of detail topographical and forest surveys during the year 25,740 square miles, of which 17,361 were on the 2-inch scale. Of the total 8,713 square miles were covered in Burma, where a five years' programme of topographical survey was arranged in 1905, embracing a large portion of the more important tracts of country. Topographical operations were also carried on in Eastern Bengal and Assam, in the Central Provinces and Berar, and in Bombay, Bengal, Madras, and the United Provinces. The Forest Survey Branch was abolished on 15th October 1906. All reserved forests are in future to be surveyed on a scale of 2 inches to the mile in the course of the general programme of the Survey of India. During the year forest surveys were carried out in Burma and Madras.

Cadastral
and traverse
surveys.

Two cadastral parties were engaged in Bengal (Behar) and Burma, and two parties were employed on the traversing of areas in Bengal and Eastern Bengal and Assam, which will be cadastrally surveyed by the Settlement Department. On the completion of the programme for 1907-8 all future revenue operations in Burma will devolve on the Land Records Department.

Special
operations.

The gravimetric survey was continued. To determine the variation in the value of gravity, pendulum observations were taken at 12 stations. It was found that at the base of the Himalayas and Siwaliks, and at some distance from them, there is always a defect in the force of gravity, though the amount of the deficiency is not constant.

Systematic observations of Himalayan peaks in connection with the difficult problem of refraction were continued, but definite conclusions cannot yet be drawn.

Tidal and
levelling
operations.

The recording of tidal curves by self-registering tide gauges, their reduction, and the publication of tide tables were continued during the year at eight stations. Three detachments were engaged on levelling operations.

Magnetic
survey.

Four detachments of the Magnetic Survey party continued and extended the work of the Magnetic Survey in Eastern Bengal and Assam, Bengal, Madras, and Burma. Very abnormal values of terrestrial magnetism have been found to exist in eight or nine different places in India, and more detailed surveys will be required.

Head-
quarters
offices.

The most important work before the Drawing Office is the compilation of the 1 million sheets, the 32-mile, and the smaller scale maps. The work of the Photo-Litho. Office has been much improved. A scheme has been submitted for the re-organisation of all the offices connected with mapping, map printing, and issue.

OTHER SURVEYS.

Marine.

Two new marine survey vessels, the "Investigator" and the "Palinurus," thoroughly equipped for modern requirements, have been placed on the service. Surveys were made of the approaches to Madras Harbour and roadstead, of the mouths of the Indus, and of the Arakan coast.

Geological.

The first object of the Geological Survey Department is the preparation of a geological map of India, and this work was continued during 1907 by surveys in the Northern Shan States (Upper Burma), Central India, and the Central Provinces. Various economic investigations, which are becoming an increasingly important part of the Department's work, were conducted. These included studies of manganese-ore deposits in Southern India (on which a memoir is to be published), the copper-bearing belt in the Singhbhum district, Bengal, the oil-fields in Upper Burma, and tin in the Mergui district, Lower Burma.

Owing to the extraordinary increase in the activity of prospectors for minerals, especially manganese ore and coal, demands for information were unusually numerous.

Botanical.

Plant collections were made by or on behalf of the Botanical Survey in different parts of India. The study of economic problems forms no part of the work of the Botanical Survey as such, but much work of this kind was done by the officers of the Survey who serve as Economic Botanists to the local Governments. Researches were made regarding cotton, the fodder grasses of Bombay, jute, food grains, &c.

Zoological.

The work of the Zoological Survey in 1907 included surveys of the invertebrate fauna of stagnant water, the Himalayan fauna, the insects of Calcutta, Indian rats, and the fauna of the Indian seas.

METEOROLOGICAL DEPARTMENT.

The area under observation by the Meteorological Department embraces not only India but the whole of the Arabian Sea and Indian Ocean, the Persian Gulf, Persia, and the area northwards up to Kashgar. The observation stations were 272 in number at the close of 1907-8, ranging from the well-equipped observatories at Kodaikanal, Madras, Bombay, Alipore (Calcutta), Allahabad, and Lahore, to small stations at which observations of temperature, rainfall, and snowfall only are recorded. The Department inspects their working and collects the results; it also studies the meteorology of the Indian Ocean by means of the logs of vessels arriving at Indian and other ports, and conducts seismographic observations. Experimental work for determining the conditions of the upper air by means of kites and small free balloons was continued during the year. Special investigations comprised wind observations, solar and terrestrial radiation observations, sunshine observations, seismological observations, barometric observations, and observations of atmospheric electricity. Daily, weekly, and monthly weather reports, as well as seasonal forecasts and storm warnings, are issued. Warnings of approaching storms are sent to ports on the Bay of Bengal from Calcutta, and to ports on the Arabian Sea coast from Simla. The system of flood warnings to canal, civil, and railway officers, to military officers, and to private firms, continued to be useful, and 1,149 such warnings were issued during 1907-8. In the course of the year a Meteorological Atlas of the Indian Seas and the North Indian Ocean was prepared for publication by Mr. W. L. Dallas.

Great attention is now paid to the correct registration of rainfall. The average rainfall of past years and the actual rainfall of the three years 1905 to 1907, in the regions into which India has been divided, were as follows:—

Meteorological Division.	Normal Rainfall.	Actual Rainfall.			Variation of 1907 Rainfall from the Normal.
		1905.	1906.	1907.	
	Inches.	Inches.	Inches.	Inches.	Inches.
Punjab Plains	21.28	15.75	23.67	19.18	- 2.10
United Provinces	38.18	28.32	39.95	25.14	- 13.04
Rajputana, East	25.98	8.49	20.11	22.87	- 3.11
West	11.71			17.59	+ 5.88
Central India States	43.40	29.60	45.01	32.28	- 11.12
Behar	45.58	54.70	45.21	38.80	- 6.78
Western Bengal	53.69	54.91	52.29	57.59	+ 3.90
Lower Bengal	66.16	81.31	64.78	55.77	- 10.39
Assam and Cachar	95.09	107.50	106.92	90.91	- 4.18
Orissa and Northern Circars	51.87	46.98	51.74	47.96	- 3.91
Central Provinces, South	52.47	48.02	55.03	48.87	- 3.60
Berar and Khandesh	34.92	24.92	37.88	30.42	- 4.50
Gujarat	33.02	26.30	33.60	37.25	+ 4.23
Sind and Cutch	8.26	4.36	9.93	7.94	- 0.32
North Deccan	30.78	19.60	28.74	31.71	+ 0.93
Konkan and Ghâts	139.17	85.26	109.75	135.36	- 3.81
Malabar and Ghâts	114.93	108.66	101.22	135.57	+ 20.64
Hyderabad	33.54	27.06	34.16	28.78	- 4.56
Mysore and Bellary	29.15	23.90	33.61	25.46	- 3.69
Canara	36.84	33.59	43.96	35.74	- 1.10
Arakan	154.03	176.63	148.40	145.64	- 8.39
Pegu	72.55	83.92	67.24	79.90	+ 7.35
Tenasserim	173.33	177.20	164.51	199.79	+ 26.46
Upper Burma	39.50	39.85	38.31	35.69	- 3.81

AGRICULTURAL DEPARTMENTS.

The greater part of the scheme for the development of agricultural experiment and instruction formulated in 1905 has now been realised. It is based on the generally accepted principle that effective improvement in Indian agriculture depends largely, or mainly, on the application of European science to Indian conditions. Although India is a land of skilled agriculturists, the outturn per acre of many crops is comparatively small, and the quality of some kinds of produce is inferior. Much can be done to improve and develop Indian agriculture by energetic research and by the application of more scientific methods and greater scientific knowledge than were

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formerly available. The necessary scientific knowledge must inevitably be obtained in the first instance by the recruitment of trained specialists from the United Kingdom; but it is an essential part of the scheme that facilities for the best agricultural training shall be made available in India, in order that the country may become self-supporting, so far as possible, in the scientific development of agricultural methods on lines suited to local conditions.

India now possesses an Imperial Department of Agriculture, under an Inspector-General and an Assistant, while there are nine provincial Departments of Agriculture under Directors and Deputy-Directors. To the Imperial Department is attached the Pusa Central Research Institute and Agricultural College, which has been provided with a Director and European experts in agriculture, entomology, botany, mycology, chemistry, and bacteriology, together with a cotton specialist. Further, there have been established in seven provinces an agricultural college and a research station, equipped with laboratories and class-rooms, and connected with a farm of suitable size. The principals of the colleges have a staff of chemists and botanists. In Eastern Bengal and Assam there is a special fibre expert. In the various provinces there is a number of agricultural stations and of botanical, horticultural, and agri-horticultural gardens. The provincial departments distribute seeds and manures, and furnish advice as to implements and crops.

A brief sketch will be given of the work carried out during 1907-8 in each province in connexion with agricultural development.

Bengal.

Progress has been made in the establishment of agricultural stations. The equipment of new stations at Bankipur and Sabaur (Bhagalpur) was almost completed. Stations are being started at Chinsura, Kharagpur (Midnapur), and Ranchi to represent the special agricultural conditions of the deltaic districts, the laterite area, and the Chota Nagpur plateau respectively. Two new demonstration farms were started at Kalimpong and Fraserganj. Grants of Rs. 1,000 each were made to the Divisional Agricultural Associations, which are doing useful work. Two well-equipped jute farms were maintained by the Provincial Agricultural Association. The agricultural shows and fairs held during the year received grants-in-aid from Government.

Experiments were made in paddy, jute, and potatoes at the Cuttack and Burdwan agricultural stations, and in sugar-cane, &c. at the Dumraon station. With a view to the improvement of the wheat crop an agricultural survey of the varieties grown in the province has been made. Experiments in flax cultivation are being continued with the aid of a Belgian expert. The indigo research work, aided by a Government grant of Rs. 50,000, was continued. Experiments were made with a sugar-cane crushing mill. A survey of soils was made.

In consequence of the report of the Committee appointed to inquire into the state of the silk industry, the Government has decided to construct a central nursery, with 20 small subsidiary nurseries, for the supply of pure seed, i.e., live cocoons, and to appoint Babu Apurva Kumar Ghosh as Sericultural Superintendent. Experiments were continued at the *tasar* silk-rearing station at Chaibassa.

Seven students of the agricultural classes at Sibpur obtained diplomas in November 1907. Two students were sent to America for further training, and four who returned from that country were found employment under Government.

The Department prepared 12 leaflets on jute, wheat, and other subjects, and vernacular translations of 11 of these were widely circulated. A quarterly journal of agriculture was started.

United
Provinces.

The division of the province into three agricultural circles was carried out during 1907-8. It is regrettable that the new agricultural service has failed to attract the upper and middle classes. The Agricultural College at Cawnpore is now fairly started. During the year the temporary laboratories were completed, and the staff trained in research. The buildings and permanent laboratories were nearly completed. Owing to lack of funds it was impossible to stock two agricultural stations for which land has been acquired. Investigations into wheat, linseed, poppy, and cotton and manurial experiments were conducted at the Cawnpore station. Cotton, ground-nuts, wheat, &c. were tried at the agricultural station, Orai, Jalaun. Great attention was devoted to demonstrations of iron sugar-cane mills, and a conference on the subject was held at Bareilly. Depôts are being started for the exhibition of novel implements. Good work was done by the seed depôts in the sale of acclimatised American cotton seed, which is beginning to produce satisfactory results and is becoming popular. There is a growing demand for well-borers for sinking masonry wells.

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DEPART-
MENTS.
Punjab.

The superior staff of European experts for the new agricultural department was completed during 1907-8. It is hoped that the Lyallpur College will be ready by July 1909. Meanwhile the members of the staff have been studying the agricultural conditions of the province. The utility and economy of mechanical reapers have been demonstrated to the colonists on the Chenab Canal. The popularisation of machinery may obviate the most serious obstacle to the development of the canal colonies, the scarcity of labour. A Government machinery depôt is to be established at Lyallpur. Experiments at the Lyallpur agricultural station have, on the whole, resulted in favour of indigenous cereals and cottons. A classification of the types of Punjab wheat has been completed, and thus a sound basis has been laid for experiments to determine the species best suited to various conditions of soil and climate. The efforts to acclimatise American and Egyptian cottons have not so far been a success, but attempts to improve indigenous cottons show more promise. Investigations of great importance to the whole province, especially to the canal tracts, are being made into the saline efflorescence known as *reh*. During the year experiments were made with cotton, jute, sugar-making, and manures. Much information was gleaned regarding insect pests. Attempts are being made to revive sericulture in the province. An agricultural station is to be established in the Jullundur district.

The Peshawar experimental farm was prepared for operations, while an experimental seed farm was established in Dera Ismail Khan district and experiments made in wheat cultivation.

North-West
Frontier
Province.

The superior staff of the Agricultural Department was completed during 1907-8. The staff now includes two Deputy Directors in charge of demonstration and experimental work, while most of the subordinate staff of 27 assistants are employed under them on similar work. The Agricultural School has been converted into a college, and numerous changes in the syllabus are in progress. Disinclination among the students for practical work continues to be the main obstacle to success. The "Agricultural Gazette" increases in popularity and its circulation has risen to 3,140. There are four agricultural stations and a seed farm in the province. The bad monsoon interfered with experimental work, but progress was made with cotton, wheat, rice, jowar, jute, and fodders. Analyses of soils, the survey and classification of varieties of crops, and the study of insect pests were undertaken. The successful cultivation of jute in lands lying below tanks has been proved possible. Demonstration work to show the advantages of transplanting rice was carried out with success in Chhattisgarh and the method was taken up by cultivators. Much attention has been paid to the demonstration of improved implements, and certain simpler descriptions, especially the turnwrest plough, corn-shellors, American winnowers, and chain-pumps, are gradually obtaining a sale. The more elaborate labour-saving appliances from America do not find much favour, as labour is cheap. The District Agricultural Associations, consisting of representative landowners, are of service in promoting the introduction of improved methods recommended by the department.

The operations of the new Agricultural Department were curtailed through lack of funds. The College agricultural station at Mandalay was fully worked under the management of the principal. A few experiments in cold weather cultivation were undertaken at Hmawbi. A site for the dry zone farm at Meiktila has been selected. Attempts were made to discover whether paddy lands in Lower Burma can be made to produce, economically, a crop during the winter season. Experiments made with jowar, maize, jute, and sunn hemp were not promising, but experiments with peas, beans, gram, and Egyptian cotton were more successful. It was concluded that wheat will not grow on paddy land. In consequence of a complaint by the Burma Chamber of Commerce that Arakan rice was becoming more and more unsuited to European demands owing to its tendency to absorb moisture, selected seed of moisture-resisting varieties was distributed to cultivators in the Akyab district. Both cultivators and millers were satisfied with the results of this experiment. Efforts to develop the cultivation of ground-nuts in the dry zone of Upper Burma were continued, and the outturn was nearly double that of the previous year. A number of cultivators' leaflets were distributed and aroused great interest. The Agricultural Chemist, who has completed the equipment of his laboratory, did some work on laterite soils and the chemical properties of toddy-palm juice.

Burma.

The reorganisation of the Agricultural Department was in progress. The new college and research institute at Coimbatore was opened in 1908. Much useful work was done at the ten agricultural stations. At three, experiments in cotton cultivation

Madras.

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DEPART-
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were continued, and it was proved at Koilpatti that properly conserved cattle manure is superior to expensive artificial manures for this purpose. Experiments were also made with regard to pepper, paddy, jute, &c. The introduction of new crops, such as ground-nut in some districts and sugar-cane in others, has been attended with success. There was a satisfactory increase in the number of oil-engines and pumps used for irrigation. Entomological assistants were engaged in the study of the ground-nut pest, paddy stem borer, and other agricultural pests.

Bombay.

The year was one of varied activity and substantial progress. There are 11 agricultural stations and farms. Cotton, as usual, absorbed much attention. The hybrids grown on the Surat farm maintain their superiority in value over the local variety. The conditions requisite for the successful cultivation of Egyptian cotton in Sind, as also the suitability of American cottons and Cambodias to certain districts, have been ascertained. Broach cotton, a failure so far in the Deccan, was a complete success in western Dharwar. Certain foreign varieties of ground-nut introduced into the Satara district have proved superior to the indigenous kind. Experiments were made with sugar-cane, tobacco, potatoes, and wheat. The success of sulphate of ammonia as a manure for sugar-cane was noteworthy. A large number of artificial fertilisers were tested. The question of seed selection received much attention, and it is proposed to establish a seed-testing station at Poona. A cheap and effective means of defeating the attacks of the potato-borer has been found. Other insect pests were investigated. The Poona Agricultural College steadily progresses.

CIVIL
VETERINARY
DEPART-
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CIVIL VETERINARY DEPARTMENT.

Horse, mule,
and donkey
breeding.

In those districts of the Punjab, Baluchistan, the United Provinces, and Bombay in which the breeding of equines specially flourishes, the entire control of horse, mule, and donkey breeding has been transferred from the Civil Veterinary Department to the Army Remount Department, the work of the former being confined to cattle. Outside these districts the Civil Department controls breeding operations of every sort. Government stallions are allotted only to selected districts, but the stallions provided in the non-selected districts, partly from District Board funds and partly from provincial revenues, aided by grants from the Government of India, are controlled by the Department. Of these there were on the register, at the end of 1907-8, 66 horses, 106 ponies, and 99 donkeys, mostly located in the United Provinces and the Punjab. The district stallions covered 10,285 mares in 1907-8. A much needed further supply of donkey stallions was obtained, mainly from Spain and Sicily. There has been an all-round improvement in breeding operations.

Cattle-
breeding.

As regards bovines, operations are directed towards improvement of the breeds, investigation of diseases, inoculation, and maintenance of veterinary dispensaries. There were during the year 30 Government bulls and 458 bulls owned by district boards, the majority of them being in the Punjab. There were five provincial cattle farms, viz., two in Bengal, one in Eastern Bengal and Assam, one in Bombay, and two in the Central Provinces, and proposals for the establishment of such farms elsewhere are under consideration. The most important centre of cattle breeding is the Hissar Government Cattle Farm, in the Punjab. The farm contained 22 herd bulls and 1,097 cows, besides a large number of young stock and cultivation bullocks, and some mules, donkeys, and sheep. The aim is to maintain a herd of 1,200 cows, so as to meet present demands for ordnance bullocks and for bulls required by the districts and at the farm. A large number of cattle fairs and shows were inspected. Prizes are offered out of both Imperial and local funds. Attempts are being made at Hissar and in other parts of India to improve the breed of sheep for both mutton and wool.

Horse and
cattle
disease.

There was a great decline in cases of glanders, especially in Bengal. Several provinces, and particularly the United Provinces, suffered losses from surra. Endeavours are being made to map out the areas in which surra is enzootic and prevalent. Only 78 cases of anthrax amongst equines were reported in the whole of India; and of these 50 were in Eastern Bengal and Assam.

Owing to the difficulty of collection, statistics of mortality from contagious diseases among cattle are defective. Among bovines, rinderpest continued to be very destructive, and is reported to have caused 181,940 deaths, nearly 70 per cent. of which were in Madras. Eastern Bengal and Assam and Bombay also suffered severely. The available staff in Madras and Bombay was insufficient to cope with the outbreak. Considerable progress has been made in breaking down the opposition of the people to inoculation,

which was performed in over 296,000 cases. The reported cases of anthrax numbered 15,728, but the figures are an understatement. Inoculation was performed in 25,000 cases. There were 16,000 cases of hæmorrhagic septicæmia, chiefly in the Punjab and Madras, and 22,000 deaths from foot and mouth disease, which was widely prevalent. The preparation "Blacklegoids" was used with success against black quarter. Considerable progress has been made in the study of camel diseases. The sera for inoculation (482,833 doses) were prepared at the Bacteriological Laboratory, Muktesar. The serum method has been found very satisfactory, and is growing in favour.

A veterinary conference was held, and a number of papers on the subject of tropical diseases were published by the Department, during the year.

The work of the Department increases rapidly. The subordinate staff has been reorganised. The establishment is below the sanctioned strength, as trained men cannot be obtained. Fifty-four veterinary inspectors and 537 veterinary assistants were employed in 1907-8. Of these 403 assistants visited on tour 52,827 villages and dealt with 295,205 cases. The veterinary hospitals and dispensaries, at which 335,000 animals were treated during the year, numbered 336, an increase of 21 over 1906-7.

The number of students who graduated in 1907-8 at the four veterinary colleges, viz., the Punjab, Bengal, Bombay, and Madras, was 148, compared with 120 in 1906-7. There were 485 students under training at the four colleges and 63 at the Burma school. The buildings and equipment of the colleges were much improved. The Punjab College has the strongest teaching staff and the greatest facilities for teaching. In the Punjab and Bengal the demand of students for admission far exceeds the accommodation. There is in all a dearth of officers specially qualified for research work. The demand for veterinary graduates still remains much in excess of the supply.

The total cost of the Department, both Imperial and Provincial, amounted to £130,000, being an increase of £23,700 over the expenditure in 1906-7.

FOREST RESEARCH INSTITUTE.

At the Imperial Forest Research Institute an inquiry was begun as to the success or failure in the past of artificial plantations with regard to (1) the agri-sylvicultural system of obtaining artificial reproduction, and (2) the restocking of arid lands and lower slopes. Work was undertaken in connection with working plans, forest botany, zoology, and chemistry, while the Forest Economist was engaged in inquiring into lac cultivation and into the utilisation of many kinds of forest produce, such as the best woods for matches, lead pencils, and tea boxes. At the Imperial Forest College 57 students attended the Rangers' class in 1908.

THE BOARD OF SCIENTIFIC ADVICE.

This Board was constituted in 1902, and includes the heads of the Meteorological, Geological, Botanical, Forest, Survey, Agricultural, and Civil Veterinary Departments, and other scientific authorities whose special attainments may be useful. The Board was established to co-ordinate official scientific inquiry, to ensure that research work is distributed to the best advantage, and to advise the Government of India in prosecuting practical research into those questions of economic or applied science on the solution of which the agricultural and industrial development of the country so largely depends. The programmes of investigation of the various departments are annually submitted to the Board for discussion and arrangement, and an annual report is published on the work done, as well as a general programme of research for the ensuing year. The reports and the programmes formulated are communicated for consideration to an Advisory Committee, of the Royal Society, who from time to time furnish valuable suggestions and advice.

ARCHÆOLOGICAL DEPARTMENT.

In the United Provinces £6,800 was spent in the conservation of monuments, chiefly in Agra, where the Fort and the Taj were under repair, and the tomb of Mariam Begam at Sikandra was purchased for £4,000. Work was also done at Fatehpur-Sikri, Lucknow, and elsewhere. Excavations at Sarnath and Sahet Mahet resulted in discoveries of exceptional interest. Among the monuments in other parts of British India that were the subject of special attention, the most prominent were the following:—

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of Scientific
Advice.Archæo-
logical
Department.

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In the Bombay Presidency, the buildings at Bijapur, the Sarkhej palace, and the Khed-Brahma (Idar); in Madras, the remains at Amaravati, Sankaram, and Perambair; in Bengal, the Black Pagoda at Kanarak, and the ancient buildings at Pandua and Tribeni; in the Central Provinces, the forts at Chanda and Deogarh; in the North-West Frontier Province, the Takht-i-Bahi and the Buddhist ruins of Jamalgarhi; and in Burma, the Seinnyet Pagoda at Pagan and the site of ancient Prome. The survey map of Vijayanagar was completed. The Chamba State (Punjab) proves an inexhaustible mine of inscriptions. Lists of buildings to be maintained at the public cost, and lists of those thought worthy of preservation, were in preparation. In Burma action was taken under the Ancient Monuments Preservation Act for the protection of monuments of historic and architectural interest. Those now maintained at Government expense have been notified as "protected," and others will be added to the list.

MEDICAL RESEARCH INSTITUTES.

Medical
Research
Institutes.

In 1907 the bacteriological laboratories in India were placed on a definite footing, and the Bacteriological Department now comprises 12 appointments distributed among the institutions named below. At the Central Research Institute, Kasauli, the staff during 1907 was mainly engaged in an enquiry regarding the etiology and mode of spread of enteric fever and of dysentery in India. Problems of immunity and vaccine therapy were also investigated. An investigation into the causation, prevention, and treatment of dysentery was commenced. The Bombay Bacteriological Laboratory was utilised for the work of the Plague Research Commission. Much work was done in connexion with plague vaccines, which are prepared here for the whole of India, with disinfectants for killing fleas, and with poisons and other methods for destroying rats. Nearly 108,000 rats were examined for the Bombay Health Officer, and 15,370 were found to be infected with plague. Practical instruction in plague inoculation was given, and booklets were issued on the preparation and use of anti-plague vaccine and on the cause and prevention of plague. A great deal of bacteriological work was done. At the King Institute of Preventive Medicine, Madras, much chemical and bacteriological work was carried out. Lectures were given on sanitary engineering and vaccination. There has been a steady increase of work at the Pasteur Institutes for anti-rabic treatment at Kasauli and Coonoor. A pamphlet on Rabies and Anti-Rabic treatment was issued. A special committee investigated malaria and blackwater fever. Mr. W. M. Haffkine, C.I.E., has been entrusted with scientific research at the laboratory attached to the office of the Sanitary Commissioner of the Government of India in Calcutta. Seven memoirs or pamphlets bearing on medical research were issued in 1907.

CHAPTER XIII.*

JUSTICE AND POLICE.

CIVIL JUSTICE.
CRIME AND POLICE.CRIMINAL JUSTICE.
JAILS.

(For further details see Statistical Abstract for British India, Tables 24 to 42.)

CIVIL JUSTICE.

In Bengal the year under review was marked by a large decrease in the number of original suits instituted in the mofussil courts, but, in consequence of disposals falling considerably below the number of the previous year, the pending file was only slightly smaller than at the end of 1906. A further reduction was however effected in the number of suits pending for more than a year. In subordinate courts the outturn of work, both original and appellate, was smaller than in the previous year, and there was an unsatisfactory increase in appellate arrears. District and additional judges disposed of fewer appeals than in 1906. On the appellate side of the High Court institutions increased, and disposals decreased in consequence of the bench not being at normal strength for the whole of the year, with the result that there was a rise in the number of cases pending at the end of the year.

In the lower courts of Eastern Bengal and Assam, although there was a decrease in the number of institutions, the pending files of both original suits and appeals showed a considerable increase over the figures of the previous year, this being especially noticeable in the case of suits pending more than a year. These results were due to the smaller outturn of the staff, especially in the case of Munsifs. The total number of original suits instituted in the province during the year showed a decrease of 743. The number of appeals decided by the High Court was 1,016, and the number pending at the end of the year 2,160, or 252 more than at the end of 1906.

For legislative purposes the North-Western Provinces and Oudh are united, but inasmuch as Oudh is not subject to the High Court of the North-Western Provinces, the judicial statistics of the two are given separately.

It was remarked in last year's Report that the number of institutions in the North-Western Provinces was exceptionally high; but the number for the year now under report shows a further increase of 6,586 suits. The matter is at present the subject of an inquiry by a special committee. The outturn of work in 1907 was slightly greater than in 1906, although the number of cases pending at the end of the year increased by 1,732. There was a slight increase in the average duration of cases.

In Oudh the total number of suits decreased by 5,799, the fall being most marked in the case of Small Cause Court suits. The result may be attributed chiefly to the prevalence of scarcity in the last few months of the year. The reduction of the pending file from 7,257 to 6,863 was not as great as might be expected considering the decrease in the number of cases. The average duration of cases, both contested and uncontested, rose slightly. The number of appeals decided by the Judicial Commissioners fell from 1,020 to 520, the average duration rising from 156 to 178 days.

Litigation in the Central Provinces as a whole maintained the level of 1906, though in Nagpur district there was a considerable rise in the number of suits instituted. As a set-off, the figures for Nimar and West Berar show a considerable decline. As regards the different classes of suits, the variation on the figures for the previous year are so slight as to call for no notice; but suits under the Rent Law have declined steadily since 1904. The pending file increased, but several old and complicated suits were disposed of during the year. The presence of only two judges on the bench for six months of the year accounts for the rise in the pending files of the Judicial Commissioner's Court, but to check this rise it was arranged that all three judges should remain on duty through the vacation.

In the Punjab the number of institutions has risen somewhat in the last two years, and in 1907 was 137,887; but it is still much below the figures for the years prior to

* The period covered by this chapter is the year ending 31st December 1907.

CIVIL
JUSTICE.

the passing of the 1904 Act, by which the period within which suits for the recovery of money could be instituted was increased from three to six years. There was a marked decrease in the number of suits instituted in respect of land, but matrimonial and guardianship suits have shown a great increase in the last five years. In Munsifs' Courts uncontested cases were decided with greater promptitude, but the duration of contested cases still remained high. As regards the appellate work of Divisional Courts, disposals increased considerably and the pending file was reduced.

Bombay.

In Bombay the total number of suits instituted in all courts showed a decrease of 6,918, which is attributed to the extension of the Dekkan Agriculturists' Relief Act to the whole Presidency. The Act appears to have decreased the number of suits, but to have increased the number of appeals. Fewer suits were disposed of during the year than in the previous year, but the pending file was reduced by about 2,000 cases. The average duration of suits fell in all courts except the District Courts. During the year an additional judge was appointed to the High Court for one year, principally to dispose of references under the Land Acquisition Act.

Madras.

In the village courts of the Presidency there was a continued increase in the number of suits instituted and disposed of. These courts during the year disposed of 100,657 suits, or 4,892 more than in 1906, a number which represents more than a quarter of the total litigation of the Presidency. The number of suits tried by the village bench courts showed also a marked improvement. These results were satisfactory, as showing the success of district officers in encouraging the people to bring their petty litigation before local tribunals. In the courts of District Munsifs there was an unprecedented increase in institutions of ordinary and small cause suits, accompanied by a corresponding advance in the outturn of work; but, notwithstanding the general advance in disposals, there was a considerable addition to the number of arrears. In the City Civil Court the number of suits, 480, instituted during the year was the highest on record since the establishment of the court, and the disposals nearly doubled; while at the same time there was a considerable reduction of arrears. Arrears were still very heavy in the High Court. The addition of a seventh judge was sanctioned, but he was able to take his seat only two months before the close of the year.

Burma.

One of the most important measures brought into effect during the year in Burma was the constitution of the Provincial Judicial Service. As far as possible the Provincial and Subordinate Judicial Services were placed on the same footing as the corresponding executive services, and officers who elect to serve in the judicial branch have similar prospects to those of executive officers.

In Lower Burma there was a decided decrease in the number of suits filed, from 63,622 to 58,802. This may be explained to some extent by local and temporary conditions, and to some extent by the check placed on vexatious litigation by instructions issued during the year to prevent the improper use of arrest or attachment of property before judgment. There was a slight increase in the number of cases pending at the end of the year. In the Chief Court, on the original side, the pending file continued to increase, and on the appellate side, though disposals increased by nearly 60 per cent., the number of cases pending at the end of the year was only one less than at the end of 1906.

In Upper Burma institutions decreased by 1,406, disposals by 851, and the pending file was reduced by 153. The Court of the Judicial Commissioner had 600 appeals before it, and left 271 cases pending at the end of the year, the average duration of appeals rising from 252 to 279 days.

North-West
Frontier
Province.

In the North-West Frontier Province the total number of civil suits instituted (22,573) was the highest since the creation of the province, but the increase was confined to the districts of Peshawar and Bannu, the other three districts showing slight decreases. There was an extraordinary rise, from 445 to 1,689, in the number of suits brought by money-lenders against agriculturists; and the number of cases arising from matrimonial disputes continued very high. Ninety-two per cent. of the suits for disposal were disposed of, the average duration being 36 days in the case of contested and 23 days in the case of uncontested suits.

Coorg.

In Coorg there was again an increase in the number of civil suits filed, and a diminution—to the extent of 16 per cent.—in their aggregate value. The bulk of the litigation consisted, as usual, of suits for money and moveable property. The appeal test showed that the original work was satisfactorily performed.

CRIME AND POLICE.

CRIME AND
POLICE.
Madras.

The season was generally unfavourable over the greater part of the Madras Presidency. The prices of food grains continued as high as in the preceding year, yet grave crime decreased appreciably. The total number of true cases of cognisable* crime decreased by 586 to 47,500. There were 325 less nuisance cases. The number of murders reported during 1906 was the highest on record, and there were only 13 less in 1907. There were 503 dakaities as against 484 in 1906, and 796 robberies as against 751. The number of thefts showed a decline, from 14,468 to 14,015, in spite of the prevalence of bad conditions. There were two serious riots, one at Cocanada, where Europeans were assaulted and the English club raided; the other at Villapuram, where a mob of Hindus attacked a Roman Catholic procession. As to detection, success was slightly less than in 1906, mainly owing to the slow introduction of re-organization. The percentage of murders and dakaities detected rose slightly to 24·8 and 21·2 respectively; but the percentage of the total number of true cases detected fell from 32·8 to 32·4. The proportion of convictions to cases prosecuted by the police remained practically the same at 78·4 per cent. Property lost during the year was valued at £96,721, of which 25·4 per cent. was recovered.

The total sanctioned strength of the police was 25,886. Recruiting was easy in most districts, and the quality of recruits improved. The conduct of the force improved, departmental punishments and judicial convictions showing a marked decrease. The number of casualties was 2,264, as against 2,302 in 1906. The proportion of illiterate constables (13·1 per cent.) was slightly larger, owing to the enlistment of a large number of temporary police for plague duty. The Provincial Training School, Vellore, continued to do excellent work. The Criminal Investigation Department was further strengthened, and the work of the Finger-Print Bureau continued to be satisfactory. The total cost was £409,974, an increase of £53,104.

The actual strength of the Madras City Police was raised by re-organization from 1,509 to 1,782, 69 below sanctioned strength. Their conduct and work were satisfactory.

In Bombay the total number of cognisable cases reported during the year was 30,555, a decrease of 2,467 on the figures for the preceding year. Murders fell by 5 to 515, dakaities by 9 to 222, robberies by 29 to 665. There were 3,417 cases of cattle theft and 10,187 cases of ordinary theft, as against 3,983 of the former and 11,218 of the latter in 1906. The majority of the cases of murder, housebreaking, and cattle theft occurred in Sind. Investigation was refused by the police in 303 cases. Adding the cases pending from the previous year, and deducting cases in which investigation was refused and cases which were pending at the close of the year, orders were received on 29,504 cases, or 3,785 less than in 1906. Nine thousand eight hundred and forty resulted in convictions. This represents a percentage of 50·7 of true cases, last year's figure being 54·15 per cent.; the decrease shows a regrettable falling-off in the detective efficiency of the police. The value of property stolen during the year, in connection with cognisable crime, was estimated at £87,124, of which 30·6 per cent. was recovered. The strength of the Criminal Investigation Department remained the same. Nearly the whole force was engaged on special duty in Bombay in connection with the Amir's visit in February 1907, and rendered useful service. As regards the work of the Finger Print Bureau, the number of slips received for trace was less, but the number of cases traced was more, than in the preceding year.

The total strength of the police force in the Presidency was 22,608, a decrease of 386, and the total cost £341,411, an increase of £37,385. The difficulty of recruitment increased and efficiency showed no upward tendency, both probably due to the unsettlement caused by the introduction of re-organisation. The number of punishments fell from 2,500 to 2,134, of rewards from 4,051 to 3,240. A percentage of 54·1, practically the same as in the preceding year, were able to read and write. Resignations numbered 1,139, as against 1,017 in 1906 and 648 in 1903. There was a noticeable improvement in the health of the force.

The strength of the Bombay City Police remained the same. Much credit is due to them for the excellence of the arrangements made at short notice for the Amir's visit, for the capture of a notorious burglar who had eluded arrest for 20 years, and for their conduct in dealing with the strikes of mill hands.

* Cognisable offences are those for which the police can arrest without a warrant.

CRIME AND
POLICE.
Bengal.

The total number of cases of cognisable crime reported in Bengal during the calendar year 1907 was 122,241. This shows a decrease of only 410 cases on the figure for the preceding year; the number is still high, and is to be accounted for by the high price of grain. The number of serious crimes against the person fell from 3,555 in 1906 to 3,452 in 1907. Murders rose from 284 to 306, 180 being brought before the courts, and 43 per cent. resulting in conviction, a disappointing record. There was a satisfactory decrease in rioting cases. The number of dakaities fell by 14 to 204, the police being particularly successful in dealing with this class of crime. Excluding public nuisances and offences under special or local laws, the percentage of police cases resulting in conviction to cases decided rose from 80 to 82, which seems to point to improvement in detective work. The work of the Criminal Investigation Department was most successful, and great progress was made in the classification of finger-prints and in the establishment of identity by these means.

The Department was still in a state of transition, but substantial progress was made towards re-organisation. Additions were made to the strength of all ranks, and continuous efforts were made in the direction of improved recruitment and improved training. Good work was done at all the training institutions. The Police Training College was moved to Ranchi. The sanctioned strength of the force was 90 superior officers and 20,523 subordinate officers and men. The total expenditure was £412,378, an increase of £33,653. The education of the force improved; the percentage of literate men being 32, as against 26·4 in 1906. The percentage of officers departmentally punished rose from 17·5 to 19. The number of charges of extortion brought against the force has steadily decreased. The standard of health was generally better.

As regards the Rural Police, the new system of *chaukidari* administration referred to in last year's report is being carefully watched. It has not been universally satisfactory so far, but it is as yet too early to report definitely upon it. In the Town Police further progress has been made towards the complete replacement of *chaukidars* by constables. The results are so far satisfactory. There was a general increase of crime on all the Railway Police systems; the number of obstructions on the line fell, but there was one serious case, viz., the attempt to blow up the Lieutenant-Governor's train.

Re-organisation was gradually introduced in the Calcutta Police Force, which numbered 3,704. The riots in October placed a heavy strain on them, and on the whole their conduct at this time reflected credit on their discipline, though some departmental punishments had to be made for lapses from duty.

United
Provinces.

The total volume of reported crime in the United Provinces during 1907 showed an increase of 1·6 per cent. on the figures for 1906, the total number of cognisable offences being 161,285; but, if compared with the figures for 1900, the last marked year of scarcity, when the number of offences was 194,072, a considerable improvement was shown. For during the year under review the failure of the monsoon brought great scarcity and consequent high prices. Investigation was refused in 49·8 per cent. of the cases, as compared with 45·5 in the preceding year. The total number of cases decided was 48,155, as against 53,249. In cases investigated by the police the percentage of convictions fell back to 47·6, the figure for 1905, from 48·2, the figure for 1906. The percentage of persons convicted to persons arrested fell from 79·3 to 76·9. In murder cases, which numbered 589, the detective ability of the police did not appear in a favourable light, for 233 cases were undetected and in only 197 cases were convictions obtained. There was a very large increase in dakaity, from 428 to 670. The number of true cases of robbery reported was 833, an increase of 63, and cases of mischief to cattle rose by 40 to 581. The amount of property stolen was valued at £282,779, of which 11 per cent. was recovered. The Criminal Investigation Department did good work.

The progress of re-organisation was continued, notably in the conversion of municipal and cantonment *chaukidars* into constabulary, the increase of pay of the lowest grade of sub-inspectors and of constables of 10 years' service or over, and the re-organisation of the police training school. The sanctioned strength of the force was 2,247 officers and 30,445 men, the increase being due to the first of the reforms mentioned above. Difficulty was found in obtaining literate recruits, and the standard of literacy fell off. Fourteen men deserted, 590 resigned, and 423 died during the year. The total expenditure on the force for the year was £371,905, considerably less than in the previous year.

CRIME AND
POLICE.

The railway police controlled an increased mileage of 5,159 miles. There was an increase in crime, the number of offences per 10 miles being 11, as compared with nine in 1906. A small detective force was started, and already did good work during the year.

There was little crime in the Punjab at the beginning of the year under review, Punjab. but with the failure of the monsoon and the unparalleled virulence of plague in the latter half of the year crime rose rapidly, and the result was an increase in volume on the preceding year. Cognisable offences, however, decreased by 878 to 66,632. There were riots at Lahore and Rawalpindi in connection with the political unrest. There were 12 more murders than in 1906; but in only 41 per cent. of the cases were convictions obtained. Detective results were, however, more satisfactory in the case of attempts to murder, culpable homicide, and burglaries. There were 69 cases of dakaity in 1907, as against 46 in 1906. Burglaries increased by 1,145 to 13,451, and ordinary thefts decreased by 443 to 8,253. Of the total number of persons arrested (27,645) 49 per cent. were convicted. The value of property stolen was stated at £98,922, of which 37 per cent. was recovered.

There was no notable change in the strength of the Police Establishment. The orders of the Government of India regarding the improvement of the pay of constables were brought into full working. Plague led not only to an increase in the number of deaths by 166, but to a considerable rise in resignations and desertions (by 281 and 50 respectively). Punishments rose from 1,239 to 1,386, and rewards from 2,226 to 2,558. The police passed through a trying time during the disturbances in the Province, and conducted themselves creditably, though the abuse constantly hurled at them by a section of the Press and by certain of the pleaders gained for them a great deal of undeserved unpopularity. The Criminal Investigation Department continued to make satisfactory progress, and the improvement in the percentage of persons traced by finger-prints was maintained. The total cost was £318,581.

The mileage in the jurisdiction of the Punjab Railway Police was increased to 4,251 miles. The number of cognisable cases reported rose by about 300. The conduct of the force was satisfactory.

Including those pending at the end of 1906, the total number of cognisable cases for disposal in Eastern Bengal and Assam during the year under report was 82,923, Eastern Bengal and Assam. against 83,660 in 1906; 30,708 (37·03 per cent.) against 29,411 (35·2 per cent.) were decided, and of these 17,409 (56·7 per cent.) against 17,939 (61 per cent.) ended in conviction. The number of cases in which the police abstained from investigation was 12,077, as against 11,169 in 1906. There were 2,096 cases of rioting, 54 of which were serious and attended with loss of life, the disturbances at Mymensingh in May taking the form of a rising of Muhammadan peasantry against their Hindu landlords and creditors. Of 232 murder cases, 55 ended in conviction, 81 in acquittal, and 96 remained undetected. The small number of persons brought to trial for all serious offences against the person was particularly striking. There were seven less dakaities and 517 less burglaries than in 1906. There was also a decrease in the number of ordinary thefts, probably due to the slightly better harvests.

The actual strength of the Civil Police was 9,895, or 333 below sanctioned strength. The number of recruits enlisted in 1907 was 1,422, nearly double that in 1906. Of these 35·5 per cent. were Muhammadans, and 64·4 Hindus or others. The Military Police were 52 sepoy short of sanctioned strength. As regards this force the most important change during the year was the enlistment of two companies at Dacca, to form the nucleus of a new battalion, in regard to which proposals are before Government.

A further instalment of the reforms recommended by the Police Commission was introduced during the year. A police training school was opened, and the Criminal Investigation Department, the Railway Police, and the Armed Reserves were considerably strengthened. Nearly all the posts of superintendent, and all those of deputy-superintendent were filled up, and from the close of the year all constables were admitted to the system of approved service increments.

In consequence of the political unrest during the year in some parts of the Province, the force was put to a severe strain and bore it well. It was found necessary to borrow over 400 men from other provinces. In consequence of the introduction of additional police, and the progress made with the reforms and re-organisation, the total cost of the Police Establishment rose from £231,411 in 1906 to £274,779 in 1907.

CRIME AND
POLICE.
Central
Provinces
and Berar.

In the Central Provinces and Berar there was an increase in the total volume of crime, which may be attributed in some part to the improvement in the registration of crime in several districts, and partly to the scarcity in the last four months of the year, the prevalence of plague, and the existence of a certain amount of semi-religious, semi-political excitement. The total number of cognisable offences, excluding nuisance cases and offences under special and local laws, was 21,570, as compared with 18,895 in 1906. Of these 13,813 were investigated, and in 64 per cent. convictions were obtained. The number of murders was 209, an increase of 17 on the exceptionally high total registered in 1906. Dakaities increased by 11 to 26 in the Central Provinces, and by 31 to 66 in Berar, and robberies rose in number in the Central Provinces from 127 to 150, and in Berar from 151 to 181. There was a larger number of rioting cases than in the previous year, some arising from disputes between Hindus and Muhammadans, but none being directed in any way against the authority of Government. The total value of property stolen during the year was £54,085, the percentage of value of property recovered to value of property stolen being 30. The corresponding figures for 1906 were £54,442 and 31.1 per cent.

An advance was made in the introduction of the reforms recommended by the Police Commission, the ranks of the deputy-superintendents being gradually filled up, the number of inspectors increased, and the Armed Reserve and Railway Police strengthened. The total actual strength of the force was 548 officers and 10,512 men (*i.e.*, 88 and 389 respectively below sanctioned strength). The number of deaths (155) was 40 less than in 1906, and resignations fell from 511 to 464. The punishment return shows 789 departmental punishments, other than dismissal, inflicted on constables, an increase of 32. There were 2,400 rewards, other than promotion, granted in 1907, as against 2,662 in 1906. The number of literate men rose by 20 to 5,464. The total expenditure was £175,201, an increase of £16,250.

Burma.

There was a decrease in the total volume of crime during the year in Burma, and it appeared that the number of true cases reported to the police was not tending to increase in proportion to the growth of wealth and population. On the other hand, there was an unwelcome increase in the number of dakaities and robberies, and in the number of crimes in which fire-arms were used. This growth of serious crime may in some degree be traced to the increase of wealth, the spread of the drinking habit, and the loosening of the bonds of religion and primitive customs. The total number of true cases of cognisable crime reported during the year was 39,962, or 2,507 less than in the previous year. Forty-five thousand seven hundred and nineteen persons were brought to trial, and 66 per cent. were convicted. Cases of violent crime showed an increase of 21 on the figure for 1906. There were seven cases of dakaity with murder and 108 other dakaities. Of the 317 cases of murder, 211 were brought to trial and 127, or 40 per cent., ended in conviction; a slight improvement on the preceding year. There were fewer offences under the Opium Act and the Arms Act.

The re-organisation of the police force in accordance with the recommendations of the Police Commission was carried into effect. The pay of all ranks was raised, and the new rank of deputy-superintendent created. The sanctioned strength of the force was 1,139 officers and 18,553 men, the actual strength 1,072 officers and 11,949 men. Of the whole strength 87 per cent. were literate. There were fewer dismissals and fewer departmental punishments than in 1906.

The military police numbered 15,601 officers and men, or 695 below sanctioned strength, the deficiency being largely due to the increase of the established strength of the Lower Burma Military Police. The force continued to be efficient and useful, but no active operations were undertaken.

The re-organisation of the Rangoon Town Police, as a result of the Police Commissioner's Report, was completed during the year, and both the sanctioned strength and the cost increased by about 10 per cent. The good conduct of the force was fully maintained. By an amendment of the Rangoon Police Act they were given extended power of arrest without warrant. There was little improvement in the detection of crime.

North-West
Frontier
Province.

In the North-West Frontier Province there was a slight decrease in the total number of cases during the year under report, but there was a recrudescence of violent crime, especially in the Peshawar District, the unsettled state of the border being largely responsible. Murders increased by 23 (18 in the Peshawar District) to 207. There was an increase of 38 cases of grievous hurt, 30 being in the Peshawar District. There were 32 dakaities, 15 of which may be put down to trans-border raiders, and of

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POLICE.

these some 11 to members of the Afridi tribe. Burglaries rose by 124 to 764. Sanction for the establishment of a Criminal Investigation Department was received in the autumn. The percentage of cases convicted to cases tried was 78, an improvement of 1 per cent. The value of property stolen was £11,506, of which 44 per cent. was recovered.

The revision of the rates of pay of constables and the redistribution of the strength of the staff at police stations, in accordance with the Police Commission's recommendations, were both carried out during the year. The total strength of the force was 3,868, an increase of 744. There were fewer punishments, but more resignations, and literacy showed no improvement. Five hundred and fifty recruits were enrolled during the year, but in consequence of the re-organisation scheme there were still 500 vacancies at the end of the year. It was difficult to obtain recruits for the Peshawar Police, where service is unpopular.

The number of cognisable offences reported in Coorg during the year under review, *viz.*, 445, was 32 more than in the previous year. There was a marked increase in the number of serious offences against person and property, and breaches of special and local laws, while under other heads the numbers declined. Police investigation was refused in six cases, as against three in 1906. The percentage of convictions remained high, 78.5 against 72.34. There were two cases of dakaity. The actual strength of the police was 256 against 249 in the preceding year. The number of those literate in Kanarese increased from 215 to 224. Recruits were trained as usual at the Mercara training school. The total expenditure on the department decreased by £66 to £3,653.

CRIMINAL JUSTICE.

CRIMINAL
JUSTICE.

As detailed statistics are available in the Statistical Abstract, they have been eliminated as far as possible from this chapter, which aims only at giving the salient features of the administration of justice in each province during the year.

In Madras, the figures for 1907 show an increase as compared with those for 1906 in the number of offences reported, both under the Indian Penal Code and under special and local laws. The percentage of convictions under the Indian Penal Code was considerably lower than the strikingly low average percentage of the previous five years. There was a slight increase in the use made by magistrates of the provisions in the Procedure Code for the release of first offenders on probation. The number of cases instituted in village magistrates' courts increased. The jury system is reported to have worked only fairly well in the province during the year, there being reason to fear that in some districts their verdicts were affected by corruption.

The total number of criminal cases disposed of in Bombay during the year under report decreased by 1,842. Of those returned as true 39.8 per cent. were under the Indian Penal Code, and related chiefly, as last year, to offences of hurt, theft, criminal assault, and criminal intimidation. There was one offence against the State. As regards punishments, there were three more death sentences than in 1906, but a decrease was shown under all other heads. There were considerably fewer appeals, 45.6 per cent. of which were rejected.

In Bengal during 1907 there was on the whole a small decrease, as compared with the previous year, in the number of criminal cases brought to trial before magistrates; but there was an appreciable increase in the amount of work coming before the magistrates of the Presidency town. There was a slight decrease of the appellate work of magistrates, and an increase of revisional work. In the Courts of Session there was a perceptible decrease of both sessions and appellate work, and a slight increase of revisional work. In the High Court a decrease of appellate work and an increase of revisional work were noticeable, as compared with the preceding year. A notable feature of the criminal judicial administration of the province in recent years has been the appearance of offences against the State, which were of rare occurrence in previous returns. During the year under report, 13 persons were under trial before the Presidency magistrates for offences against the State, as against three persons in the previous year. Besides these, 26 persons were proceeded against under section 108 of the Code of Criminal Procedure for disseminating seditious matter.

In Eastern Bengal and Assam three persons were proceeded against under this section; and seven persons were under trial for offences against the State, a class of

Eastern
Bengal and
Assam.

CRIMINAL JUSTICE.

offence which has been entirely absent from recent returns. The number of criminal cases coming before courts of first instance showed an increase on the figures for the previous year, and there was also an increase in the appellate and revisional work of magistrates. In the Courts of Session there was a considerable decrease in sessions cases, a slight increase in appellate work, and a marked decline of revisional work. In the High Court a decrease of appellate work and an increase of revisional work were noticeable, as compared with the preceding year.

Punjab.

The volume of crime in the Punjab, as measured by reported cases, reached a very high figure in 1906, but abated markedly during 1907. There were fewer murders, fewer cases of receipt of stolen property, and fewer thefts than in any of the eight years since the boundaries of the province were reconstituted, and there was a check in the number of offences relating to marriage. The increase in the number of cases relating to trespass by cattle is to be accounted for by the prevailing scarcity of fodder. As regards punishments, the number of severe sentences—of over two years' imprisonment—somewhat decreased, and there was a slight falling-off in the use of whipping as a punishment.

North-West Frontier Province.

The gradual improvement in the criminal statistics of the North-West Frontier Province, which has been very marked during recent years, came to an abrupt termination, the total number of offences reported during 1907 being the highest recorded since 1902. The reaction may to some extent be ascribed to the disturbing influence of an unsettled border. The falling-off in the percentage of convictions obtained to offences brought to trial occurred rather in the case of petty offences than under the more serious heads of crime. The decline in the number of criminal cases referred to Councils of Elders seems to show that the Frontier Crimes Regulation was administered with discretion.

North-Western Provinces.

In the North-Western Provinces the total amount of crime punishable under the Penal Code was very much the same in 1907 as in the previous year. There were, however, striking variations in the details, the general and well marked feature of the year being an increase in offences against the person and a decrease in offences against property. The results are attributed to prosperity resulting from good rain crops in 1906 and a good spring harvest in 1907. The percentage of convictions showed a further decline, due partly to the preponderance of cases of petty offences against the person. There was a marked falling-off in the number of sentences of rigorous imprisonment and in the number of whippings. Appellate work before Courts of Session increased considerably, the percentage of sentences confirmed remaining at 76.

Oudh.

In Oudh there was an increase in the total number of offences reported, especially in cases under the Penal Code. The percentage of convictions fell to 35 in cases disposed of by magistrates, and rose to 63 in the Courts of Session. In most districts there was a rise in the number of cases of mischief and criminal trespass, due to the peculiar circumstances of the year. The total number of whippings awarded during the year fell from 1,815 to 1,706. There were fewer appeals heard by Courts of Session and magistrates, but more by the Court of the Judicial Commissioner.

Coorg.

In Coorg the volume of crime dealt with by magistrates has remained fairly constant during the last five years, but the percentage of persons convicted to persons tried rose, during the year under report, to 40, compared with an average of 31 for the preceding quinquennium. The bulk of the cases tried related, as usual, to minor offences. A fall again occurred in the number of appeals presented to the Courts, but the proportion of successful applications was slightly higher.

Central Provinces and Berar.

The figures for the Central Provinces for the year under review call for little comment. The total number of offences reported rose slightly, and the percentage of cases tried by the various classes of magistrates varied very little. The average duration of cases rose slightly, except in the case of appeals heard by district magistrates. The number of appeals was about the same as in the previous year. There was a substantial fall in the number of fines imposed, but sentences to short terms of imprisonment and sentences of whipping increased in number.

Burma.

In Lower Burma the total number of offences reported rose considerably, but the increase was confined to those under local and special laws; offences under the Penal code decreased. In Upper Burma offences reported declined by 437, but the character of the cases dealt with by the Courts was, on the whole, more serious than in the previous year. Detailed statistics are given in a separate report, and the variations on the figures are not sufficiently important to call for special notice here. A noticeable

feature was the large number of sentences of short imprisonment, owing to insufficient use of the provisions for the release of first offenders and to the reluctance of magistrates to award the punishment of whipping.

CRIMINAL JUSTICE.

JAILS.

JAILS.

The variations of the jail population in the whole of India during the last five years are shown in the following table:—

	1907.	1906.	1905.	1904.	1903.
Jail population of all classes on 1st January -	99,065	98,244	93,781	93,881	101,664
Admissions during the year -	459,288	480,098	464,660	436,569	440,948
Aggregate Discharged during the year from all causes -	558,353 457,012	578,342 479,280	558,441 460,202	530,450 436,668	542,612 448,984
Jail population on 31st December -	101,341	99,062	98,239	93,782	93,865
Convict population on 1st January -	89,035	88,344	85,034	85,209	93,682
Admissions during the year -	153,759	163,956	161,783	153,380	156,112
Aggregate Released during the year -	242,794 160,439	252,300 160,022	246,817 155,220	238,589 150,289	249,794 160,503
Casualties, &c. -	2,893	3,246	3,245	3,260	4,082
Convict population on 31st December -	89,462	89,032	88,352	85,040	85,209

A falling-off in the number of prisoners admitted to jail in the course of the year occurred in all provinces except the Central Provinces and Coorg, and was most marked in the Punjab, Bengal, and Eastern Bengal and Assam. The daily average number of prisoners fell by about 2,000. The decrease in the number of persons convicted and imprisoned was common to all provinces, except the Central Provinces.

Nearly one half of the total number of convicts received in jails during the year came from the classes engaged in agriculture or cognate pursuits. About one-fifth were persons employed under Government or municipal or other local authorities. Over 120,000 were illiterate. The number of previously convicted prisoners decreased, as also did the number of youthful offenders; and there were fewer sentences to transportation.

The increase in the average daily strength was accompanied by an increase in the number of offences committed by convicts, and there was also an increase of nearly 2,000 in serious offences dealt with by major punishment. The figures for the different provinces are given in the following table:—

Province.	1907.			1906.			1905.		
	Daily average Population.	Offences dealt with by Criminal Courts.	Offences dealt with by Superintendents.	Daily average Population.	Offences dealt with by Criminal Courts.	Offences dealt with by Superintendents.	Daily average Population.	Offences dealt with by Criminal Courts.	Offences dealt with by Superintendents.
Madras -	10,043	24	11,915	10,404	10	10,278	10,130	12	11,314
Bombay -	7,538	15	15,303	7,997	16	16,199	7,928	24	14,441
Bengal -	13,632	26	25,707	13,963	25	25,268	13,516	20	26,416
United Provinces -	21,710	10	39,549	22,903	9	39,988	21,681	13	38,707
Punjab -	10,216	38	44,105	10,768	64	36,828	10,531	61	37,884
Burma -	13,009	21	38,463	12,606	17	42,092	11,951	25	44,891
Eastern Bengal and Assam -	7,173	41	7,247	6,733	53	8,292	6,277	29	7,418
Central Provinces and Berar -	2,945	26	9,609	3,062	23	9,405	3,282	30	8,360
North-West Frontier Province -	960	—	1,401	1,091	1	1,539	1,077	1	1,560
Coorg -	80	2	50	85	—	19	76	—	78
	87,306	203	193,349	86,612	218	189,928	86,449	215	191,069

The total number of corporal punishments showed a very slight decrease on the figures for the previous year, but was little more than half what it was in 1903. The total number of cases in which penal diet (with and without solitary confinement) was prescribed was 4,953 as compared with 6,505 in the preceding year.

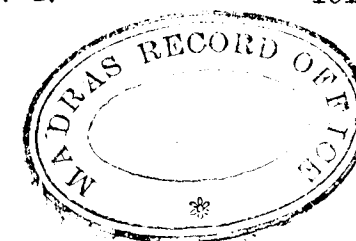
JAILS.

Total expenditure rose from £483,199 to £492,815, and total cash earnings from £83,873 to £90,051; there was, consequently, little change in the net cost to Government. Excluding Coorg, the provinces in which the average cost of maintenance was highest were Eastern Bengal and Assam, Bengal, and the Central Provinces.

Apart from plague and cholera and the effects of scarcity, which do not affect prisoners in jails, the year was not an unhealthy one. The health of the prisoners was good and the death-rate was only 18·51 per thousand, which is the lowest rate ever recorded. In most provinces the unusual dryness tended to check malaria and dysentery. The most common causes of death were dysentery, tubercle of the lungs and pneumonia. The death-rate fell in all provinces except the Punjab and the Central Provinces.

Penal Settlement, Port Blair.

Penal Settlement at Port Blair.—The convict population of the Andamans at the end of the year 1907-8 was 14,235 (13,522 males and 713 females), being 261 less than at the end of the previous year; the decrease being due, among other causes, to the discontinuance of the deportation of male term convicts and the reduction of the age limit for transportation from 45 to 40 years. The number of convicts received from India and Burma during the year was 754, as against 694 in 1906-7. There were 46 escapes, but 35 recaptures; the corresponding figures for the preceding year were 23 and 14. There was a decrease in the percentage of offences mainly among the females, and the number of corporal punishments showed a slight falling-off to 23. Some useful disciplinary measures were introduced during the year, and the procedure obtaining in the cellular jail was gradually brought more into line with that of an Indian jail. The net cost of the Settlement was £100,863, and the net cost of each convict about £7, against £82,732 and a little over £6, respectively, in the previous year. The estimated value of jail manufactures rose from £24,895 to £27,354. The outturn of coconut oil increased considerably. The financial result of the experiment of issuing locally-grown rice to convicts during the year was a loss of £89 to Government, as against £96 in 1906-7; as regards its effect on the health of prisoners, it was found to be wholesome and to have no deleterious effect, the death-rate being the lowest for many years. The rainfall during the year was 129·94 inches, the highest for many years, against 99·23 in 1906-7, and an average of 115·32 for the five preceding years. The jail building at Viper, closed as a jail in 1907, is now used for the location of invalids. The strength of the police force was reduced from 701 to 643, and was 50 short of sanctioned strength at the end of the year. The discipline of the force was not satisfactory, and there was great difficulty in obtaining recruits. There were seven schools in the Settlement during the year, an increase of one; and the number on the rolls and the daily average attendance showed improvement.



CHAPTER XIV.

EDUCATION, LITERATURE AND THE PRESS.

(For further details see Statistical Abstract for British India, Tables 105 to 116.)

EDUCATION.

EDUCATION.

General.

Educational institutions in India are of two classes :—

- (1) Those in which the course of study conforms to the standards prescribed by the Department of Public Instruction or by the University, and which either undergo inspection by the Department, or else regularly present pupils at the public examinations held by the Department or by the University. These institutions are called "public," but may be under either public or private management. To the latter class, for example, belong those "aided schools," receiving grants from Government or from local or municipal boards, which occupy so important a place in the system of Madras, Bengal, and other provinces.

- (2) Those which do not fulfil the above conditions, and are called "private."

The system of education operates, generally speaking, through three grades of institutions, viz. :—

- (i) Primary schools, which aim at the teaching of reading, writing, and such elementary knowledge as will enable a peasant to look after his own interests.
- (ii) Secondary schools, which are divided into English and Vernacular. Those in which English forms part of the regular course of study of all the scholars, or at least of all the scholars in the higher classes, are counted as English schools; if English is not taught, or is an optional subject only, they are reckoned as Vernacular.
- (iii) Colleges, the students in which, having passed the matriculation examination of a University, are reading for the examinations required for a degree.

In addition to these there are various institutions of a special character, such as technical schools teaching arts and industries, engineering, and other branches of applied science; law schools; medical schools and colleges; and normal schools for the training of teachers.

The general educational policy of the Government of India was declared at length in a Resolution published in March 1904, of which some account was given in the issue of this Statement for 1903-4.

The year 1907-8 was one of satisfactory progress in Madras, the net increase in the number of pupils under instruction, viz., 50,052, being the largest increase yet known for any one year. A scheme for the reform of Government training schools was introduced, in order to provide for a thorough course of training for teachers in elementary schools. Two inspectorships were added to the cadre of the Indian Educational Service. The University received a special grant-in-aid, which was used to enable aided colleges to bring their equipment up to the standard of the University Regulations issued in 1906. Rules were made both by Government and the University for the regulation of the conduct of both pupils and teachers. The question of a school final examination, such as exists in Bombay, was under consideration. St. Peter's College, Tanjore, was closed in December 1907, otherwise the number of Arts Colleges in the Presidency remained the same. Attendance at them, however, decreased by 367. There was a considerable extension of the hostel system. At the Law College both numbers and examination results showed a falling off as compared with 1906-7. The numbers increased by 37 at the Medical College, the efficiency of which was well maintained. There was a considerable revision of the rules at the Engineering College, the results of which will be seen next year. The process of classifying schools as "secondary" or "elementary" continued, and the consequent abolition of some "lower secondary" schools and the inclusion of others under the head of "elementary" accounts for the decrease of secondary schools from 550 to 423 and of their attendance by about 1,000 to 94,600. Elementary schools, on the other hand,

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EDUCATION. increased by 623 and had 54,000 more pupils. Female education showed a further advance, the number of girls under instruction being 168,700, more than half of whom were at mixed schools; only 2·4 per cent. were above the elementary stage. European education calls for no remark. The most striking features of the year were the extraordinary increase in numbers in the elementary stage and the great improvement in the quality of secondary education. The total expenditure on education was £712,740, the highest figure that has yet been attained in one year.

Bombay. While there is nothing of exceptional interest to record regarding the year's educational work in Bombay, yet the results show a steady progress in nearly all branches. The total number of institutions has increased from 13,967 to 14,114, and the total number of scholars from 720,547 to 749,391. As regards Arts and Science Colleges, the most noteworthy facts are that of 473 candidates for the B.A. degree, 285 were successful, and that nearly half the number of candidates (54) obtained the M.A. degree. There was a regrettable falling-off in candidature for the B.Sc. degree; of the 15 who stood, two-thirds were successful. An important event in the sphere of professional education was the opening of the new College of Agriculture at Poona. Large grants have been made to the Victoria Jubilee Technical Institute, with good results in the direction of an extended scope of operation, and the large increase in the number of candidates for the London Chamber of Commerce examinations shows a growing interest in commercial education. In the secondary stage there was a slight increase during the year in both the number of schools and the number of pupils. The condition of primary education is not so satisfactory, it being calculated that only one village in four is provided with a school. Steps for the increase of the number of schools, and of the pay of the teachers are under the consideration of Government. There are at present 9,662 such schools, with 542,121 scholars. The figures for 1907-8 show an increase of 3,114 in the attendance of girls in primary schools, the total for the Presidency being now nearly 100,000. The total expenditure on education during the year was £756,168.

United Provinces. In spite of plague and famine, education in the United Provinces has shown an appreciable advance in many directions during the year 1907-8. The inspection staff has been re-organised, and there are now nine inspectors of schools, one for each revenue division, as well as a special inspector for training institutions. There has been an extraordinary rush for English education in the last few years, with the result that many of the schools are overcrowded. The year under review shows an increase of 558 educational institutions and of nearly 50,000 scholars. The number of Arts Colleges (21) remains the same, but attendance in them has increased from 2,241 to 2,758. A board of inspectors, appointed by the University under the Act of 1904, has pointed out many directions of improvement, and in accordance with their recommendation, two professors have been added to the staff of the Muir Central College. A considerable advance in the branch of Professional Education is shown by the increase of expenditure under the head of Professional Colleges from £22,767 in 1906-7 to £29,802 in 1907-8. The bulk of the increase was in expenditure on engineering and agricultural colleges. The expansion of the Roorkee College, begun in 1906, is now nearly complete; the equipment sent from Cooper's Hill College was found very useful. A committee was appointed during the year to consider the question of the improvement of secondary education. They reported in favour of the improved pay of teachers and the institution of a final school examination; their recommendations were adopted by the local government. There are now 460,327 pupils in primary schools, i.e., an increase of 10 per cent. on the figures for 1906-7. There has been some increase in the number of girls' schools and their attendance, but real advance is still hampered by the want of proper teachers and adequate inspection, and the unwillingness of girls to read beyond the primary stage. There was an unsatisfactory falling-off in the numbers attending the Government Training College, Allahabad, but it is hoped that this will be remedied by improvement in the prospects of a teaching career. An Industrial Conference sat in 1907, and made many useful recommendations as regards the establishment of new industrial and technical schools, and the improvement of those already in existence. The total expenditure on education was £491,723.

Punjab. In the Punjab there was, during 1907-8, a steady, though not sensational development in the sphere of education. The number of scholars, which in 1902-3 was 270,000, now stands at 303,000. Pressure exerted by the University, in accordance with the Act of 1904, has resulted in an improvement in the staff and equipment of colleges. There are still 10 Arts Colleges, with an attendance of 1,725, or 127 more

EDUCATION. than in the previous year. The number of secondary schools remains practically unchanged; but the quality of instruction given has generally improved. A noticeable feature was the increased preference of Anglo-vernacular to vernacular education. The number of primary schools rose from 3,151 to 3,343, and the number of pupils from 141,559 to 146,290, and progress has been made in the improvement of buildings and equipment, and the raising of the pay of teachers. The number of training institutions remained unchanged, but the attendance at the Central Training College during the year was the largest on record. One of the main features of the year was the growing desire for scientific and technical education. Most institutions of this class showed increase in numbers and improvement in results. There were signs of progress in female education. The number of schools rose from 561 to 607, and of scholars from 21,769 to 23,588, and a larger number of girls went beyond the Anglo-vernacular higher standard. There was an increase in the number of Muhammadan boys in public institutions, from 85,317 to 87,168 and of Muhammadan girls from 6,400 to 6,892. Education is still backward in the Native States, but some progress was made, one arts college, one secondary school, and 33 primary schools being added. There was an increase in the number of boarding-houses in the province, but, with the exception of those attached to arts colleges, the equipment and management were not in a satisfactory state. The total expenditure on education was £375,741.

The year under review in the Central Provinces and Berar was, like its predecessor, characterised by the general prevalence of plague, and in the latter part there was much distress from scarcity. Educational results are, however, on the whole, satisfactory. Much of the educational activity of the year cannot, however, be calculated at present, as it was devoted, to a considerable extent, to the discussion and formulation of schemes for far-reaching reforms, such as the general improvement of secondary education and the introduction of free primary education. During the year the number of institutions and pupils rose by 4·3 and 8·7 per cent. respectively. The number of students at Arts Colleges rose from 274 to 381. The collegiate institutions were inspected during the year by the Allahabad University. The percentage of attendance fell seriously at the Morris and Jubbulpore Colleges, where there were regrettable outbreaks of political disturbance and insubordination; the figures for the Hislop College were satisfactory. The whole question of the reform of secondary education is now under consideration. The number of secondary schools rose from 378 to 386, and of pupils from 44,184 to 46,500. The matriculation results were unsatisfactory, only 189 passing out of 465 candidates. A considerable reduction was made in the fee rates for primary education. There was steady progress in this stage, and there are signs of a really awakening desire for education. The number of pupils increased by 13,000. The recruitment and out-turn of the training institutions were satisfactory; at the female normal school at Jubbulpore the number rose to 33, the highest yet reached. The condition of technical and industrial education was good, and three State technical scholarships for study in England were granted to students in these provinces. Female education showed a satisfactory advance, a noticeable feature being the increased number of girls at boys' schools. The education of Muhammadans proceeds slowly. The hostel system was improved. The total expenditure on education was £165,052.

Burma. The year under review was one of steady growth, except in the collegiate and high-school branches. An important reform was the admission of officers in the Indian educational service to the special allowances granted in the rest of British India. Two professors were added to the staff of the Rangoon College, and both colleges were inspected by members of the Syndicate of Calcutta University. Little progress is reported in secondary education; the increase of some 2,000 pupils is entirely in the middle stage, and shows no improvement in high schools. Primary education was more satisfactory, schools having increased by 222, scholars by 11,633. The falling off in the number of students attending the Government Normal School, viz., from 75 to 19, is to be accounted for by the introduction of the new rules, which insist on students attending for the whole day. In Burma, female education is not complicated by religious difficulties, and in the year under review, one girl in eleven of school-going age was under instruction. The number of Europeans and Eurasians attending school rose slightly, and there was a great improvement in the results obtained by Muhammadans at the higher English examination. Schools for "special classes," the Karens, Shans, and Talaings, increased from 1,725 to 1,969, and attendance in them rose by 4,500. Private institutions play an important part in Burma; nearly all the pupils are Buddhist, mostly in monasteries. The total number of such

EDUCATION. institutions in 1907-8 was 16,000, with 175,000 pupils. The total expenditure on education was £255,439.

An interesting measure, instituted as an experiment, was the decision to appoint to the Subordinate Civil Service any Burman, otherwise qualified, who obtained the B.A. degree. A school final examination was also established, with a view to serving as a standard of qualification for Government service for those who do not intend to proceed through the matriculation to a university course.

North-West Frontier Province.

In the North-West Frontier Province there was, in spite of the prevailing scarcity, a satisfactory increase in the number of students at almost every stage of instruction. The decrease in the number of private institutions, from 848 to 660, and the increase in the number of public institutions, from 265 to 309, shows a welcome tendency to recognise the benefits of practical instruction in the latter, in contrast to the primitive methods of the former, whose curriculum is practically confined to the teaching of the Koran. The one college of the province, the Second Grade Mission College at Peshawar, has still the same number of pupils, viz., 22. There were still 26 secondary schools, but attendance increased from 5,760 to 5,974. Primary schools rose from 217 to 256. In the only normal school of the province, that at Peshawar, there were 53 students, as compared with 25 in the previous year. Progress in female education is slow, but there are signs that prejudice is gradually giving way. There were altogether 3,204 girls under instruction. The number of Muhammadans reading in schools rose by 350 to 19,198. But the education of this class of the community, which forms over 90 per cent. of the total population, progresses slowly. The proportion of Muhammadans under instruction to those of school-going age, was 11.7 per cent., while similar figures in the case of Hindus and Sikhs were 46 and 29.5 respectively. Education in the Kurram and Tochi Valleys and the Khyber Agency showed satisfactory expansion. The total expenditure was £17,973.

Coorg. The year under review brought no material change to the educational arrangements in Coorg. One public school was closed, owing to a falling off in attendance, but the numbers attending public schools rose slightly to 4,543, the increase being in all stages except upper primary. The educational institutions in the province were one training school and one upper secondary school at Mercara, one lower secondary school at Virajendrapet and 86 primary schools. The number of pupils in private schools was estimated at about 460. The total expenditure on education was £3,412.

Bengal. The year has been marked by considerable activity in educational matters. A training class for English teachers, by which arrangements have been made for training 20 graduate teachers for the degree of Bachelor of Teaching of the Calcutta University, was opened in connection with the Hindu and Hare Schools.

A training class for female teachers was opened at Calcutta under the charge of a Bengali lady, who was specially deputed to England for a course of training. Sanction was also given during the year to the establishment of a training college for female teachers at Bankipore.

The Arts Colleges, 34 in number, were attended by 5,493 students. They have been reorganised and the standards raised to meet the requirements of the new university regulations. This re-organisation necessitates substantial increases to the staffs of the colleges. The foundation stone of the new residential arts college at Ranchi was laid by the Lieutenant-Governor in September 1907. This college will supply a long-felt want in the province, viz., that of a college for the sons of the nobility, the Zamindars and the professional classes. The new university regulations with regard to the residence of students came into force during the year. The control of the residence of students has been assumed by the University.

The number of secondary schools was 1,454. They were attended by 149,013 pupils. A scheme for the improvement of secondary education based upon the recommendations of a conference of administrative and educational officers has been submitted to the Government of India. Steps have been taken with a view to the introduction of a School Final examination for those pupils who do not intend to enter upon a university career.

The number of primary schools was 33,954 and the number of scholars rose during the year by 29,799 to 983,254. Female pupils increased by 9 per cent., and Muhammadan pupils by 14 per cent. A conference of persons interested in Muhammadan education met during the year. Final orders have not yet been passed upon the proposals made.

The total expenditure on public instruction amounted to £830,415, of which £275,852 was contributed from Government revenues.

EDUCATION. The total number of public institutions has increased from 22,135 to 22,520, and the number of pupils from 749,687 to 821,976 during the year; an unparalleled increase. Private institutions have decreased both in number and in the number of pupils. Many have become public institutions.

Hindu pupils form 44.9 per cent. of the total and Muhammadans 51.2 per cent. The corresponding percentages for 1906-7 were 47.3 and 48.6. Further analysis shows, however, that while the number of Hindus at school is 36.1 per cent. of the Hindu population of school-going age, the figure for Muhammadans is only 29 per cent.

The total expenditure on public education rose from £341,605 to £388,569, of which sum £133,668 was received in fees.

With regard to collegiate education, the number of colleges remains at 11. The new Dacca College (with the exception of the Curzon Hall) was completed, and the staffs of that college and of the Rajshahi College were augmented during the year.

Secondary schools have increased from 1,143 to 1,172, and the number of pupils in them from 113,504 to 122,981. Hindu pupils increased by 1,908, Muhammadans by 7,542. During the year an inspection of the 198 recognised high schools was made for the Calcutta University. A mass of useful information was obtained which will serve as a basis for the introduction of reforms. The total number of high schools rose from 212 to 217 and the pupils in them increased from 47,130 to 49,867.

With regard to primary education, further progress was made in allocating the Imperial grants. The establishment of board lower primary schools has been commenced in the transferred districts where the aided institutions have hitherto been the mainstay of primary education. The number of pupils has risen from 560,711 to 612,365. Muhammadans form 56.2 per cent. of the total, and Hindus 39.4. The total expenditure increased from £100,254 to £108,321.

Progress was made with the establishment of the new Training College for English Teachers at Dacca. Owing to the formation of the new province, the scheme has had to be reconsidered in certain respects. Buildings for hostels have been acquired, and steps are to be taken for providing residential quarters for the staff.

Female education has made great progress during the year. The number of pupils has increased by 25.7 per cent. to 89,133. Girls have been encouraged to read in boys' schools, as by this means their education can be spread without the expensive expedient of special schools. A representative standing committee has been constituted to meet from time to time and advise the Government on the whole question of female education.

The political agitation continues to have a harmful effect on the discipline of schools. Among remedial measures the establishment of properly-managed hostels or boarding houses is considered of great importance, and during the year large grants-in-aid have been made for this purpose.

LITERATURE AND THE PRESS.

LITERATURE

The following table exhibits the works published during the year in the different Provinces:—

Province.	English.	Bi-lingual (English and another language).	Sanskrit.	Arabic.	Persian.	Urdu.	Hindi.	Bengali.	Punjabi.	Marathi.	Gujarati.	Tamil.	Telugu.	Burmese.	Kanarese.	Assamese.	Urdu.	Bi-lingual (Oriental) in a Classical and Vernacular Language.
Madras	513	—	153	20	—	—	—	—	—	—	—	421	331	—	64	—	9	Polyglot, 1.
Bombay	77	27	48	5	9	55	29	—	—	179	263	—	—	—	18	—	—	89.
Bengal	241	—	33	—	3	10	106	744	—	—	—	—	—	—	—	85	233	*Total number of Bi-lingual, 324.
Punjab	90	—	6	13	25	491	66	—	328	—	—	—	—	—	—	—	—	*Total number of Bi-lingual, 146.
Burma	6	4	—	—	—	—	—	—	—	—	—	1	—	77	—	—	—	64.
Eastern Bengal and Assam	16	10	1	—	—	—	—	111	—	—	—	—	—	—	—	39	—	—
Central Provinces	—	—	4	—	—	—	9	—	—	31	—	—	—	—	—	—	—	2.
Mysore	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	*Total number of Bi-lingual, 10.
Total number of publications in Oriental languages, 34.																		

Note.—The figures for Madras include 491 periodicals, and those for the Punjab 122 periodicals; in other Provinces books alone are shown.

No detailed figures have been received for the United Provinces; the total number of publications in that province was 1,384.

LITERATURE.

The above table gives concisely the number of publications registered throughout India in English, Eastern classical, and the principal Indian vernacular languages. The number of bi-lingual and polyglot works, however, makes classification difficult. Other languages in which books were published were Latin, French, Italian, Malayalam, Konkani, Tulu, Kodaga, and Sourashtra (in Madras); Javi, Marwadi, and Gurumukhi (in Bombay); Lepcha, Manipuri, Mundari, Musalmāni-Bengali, Nepalese, Oraon, Santali, and Tibetan (in Bengal); Kashmiri, Pushtu, and Balti (in the Punjab); Pali, Sgau-Karen, Talaing, and Kachin (in Burma); Lushai (in Madras and Bengal); and Sindhi (in Bombay and the Punjab).

Madras.

In Madras, the literary activity of the preceding year was fully maintained in 1907, though there were still very few works indicating originality of conception and real intellectual progress. The most noteworthy feature of the year was the increase in the number of political publications, which attained a record figure. The increase is due to the translation of the proceedings of Congress and of the speeches of political leaders, in which the policy of the British Government is criticised. As regards pure literature, the most notable productions were a translation of "King Lear" into Telugu, a historical epic in Sanskrit dealing with the exploits of Achyutaraya, one of the rulers of the Kingdom of Vijayanagar, and a collection of Sanskrit stories and fables. A historical drama, called *Sultana Chand Bi, or the Last Days of Ahmednagar*, also deserves mention. Religious publications as usual preponderated, the chief contribution to this class of literature being a careful and interesting study of Buddhism by P. Lakshmi Narasu. The chief political productions were a poem, *Vande Motaram*, in Telugu, in very popular style, pointing to the degenerate condition of the people and calling on them to rouse themselves; a collection of Bepin Chandra Pal's speeches, and a work on Swadeshi and Boycott by A. Natesa Pillai.

Bombay.

In Bombay there was a diminished literary output and a dearth of serious work, owing to the prevalence of political agitation and discussion among educated men. The first volume of a series of biographies, entitled *Indian Worthies*, contains the lives of Messrs. Ranade, Tata, and Dadabhai Naoroji. The life of Shivaji, by K. A. Keluskar, is well and judiciously written. A Kanarese writer, S. T. Kulkarni, wrote a life of B. G. Tilak, holding him up as a model patriot. There is some dramatic and literary power in a Marathi drama, *The Commandant of the Panalgad Fort*, based on an incident in the life of Shivaji; *Mativikar Natak*, by S. K. Kolatkar, partly prose drama, partly oratorio, shows the misery resulting from the marriage of old men to young girls. Another drama deserving mention is the *Abhadrasingh* of D. M. Nannavare, the plot of which bears some resemblance to that of "Hamlet." Most of the novels of the year were in Gujarati. An interesting feature was the attempt to push the sale of the *Gujarati* and the *Gujarati Punch* by the presentation of novels to subscribers. A translation of Mr. Dutt's *Lake of Palms* into Gujarati was made by two ladies during the year. The book contains an interesting account of Hindu life and expounds Mr. Dutt's views on Indian politics. Among books of travel the chief were the account of the Royal tour in India, issued by the *Times of India* press, and Mirza Ibrahim Beg's description in Persian of the return of a Persian resident in Egypt to his native land. Political publications included a report of the proceedings in the Congress of 1906, a collection of all the resolutions passed in Congress, and an earnest vindication of the British Raj by Saiyid Sirdar Ali Khan of Hyderabad. In the sphere of religion, two more parts of a literal Marathi version of the Mahabharat appeared; and a useful contribution to scientific literature was the second part of Professor Modak's *Organic Chemistry*.

Bengal.

In Bengal, a spirit of nationalism pervaded the whole literature of the year, but did not have the inspiring effect that might be expected. There was little literary merit in drama, fiction, or poetry. The new industrial activity of the province led to the publication of a number of useful hand-books, notably on agriculture. There were a large number of religious biographies, and one interesting secular biography, *Raja Digambar Mitra, C.S.I., His Life and Career*. Babu Kshirad Prasad Vidyavinod wrote a historical drama, *Palasir Prayaschitta* (Atonement for Plassey), round the deposition of Mir Jafar in favour of Mir Kasim, and the subsequent defeat and deposition of the latter. The Company is throughout depicted in an unfavourable light. The social drama *Samaj*, by Babu Manomohan Gosvami, aimed at exposing the evil of the practice of 'bridegrooms' fathers demanding exorbitant dowries. In the course of the play the author denounces the present agitators as mere talkers, who fail to do any substantial work for their country. Most of the readable fiction was historical, but the best work of this kind was *Dhruva Tara*, by Babu Jatindra

LITERATURE.

Mohan Sinha, a realistic writer of ability, which exhibits in striking contrast the simplicity and religiousness of the old family régime of the Hindus and the stress and artificiality of modern Westernised society. The theme of two of the historical novels is reconciliation between Hindus and Muhammadans. There were many books of history, but none of them were more than compilations or translations. The tendency of Bengali writers to follow Western ideals in literature is denounced in *Phalasruti*, by Babu Purna Chandra Basu, who advocates a return to the Pauranic ideal. A striking feature of the year was the anonymous publication of *Varttaman Rananiti* (Science of Modern Warfare), the first book of its kind in Bengali literature. An important accession to philosophical literature was the publication under the auspices of the Asiatic Society of Bengal of Udayana's *Atmatattvaviveka*, a searching examination of the fundamental principles of Buddhism. In politics, there was a certain amount of extremist writing, mainly in periodicals, but the leaders of thought, and especially Babu Rabindra Nath Thakur, reputed to be the greatest Bengali writer living, pointed out the futility of the present political agitation and urged the cultivation of the friendship of the Musalmans and the education and improvement of the moral, material, and social condition of the masses. "England's Administration of India," by Babu Chunder Nath Bose, is a general indictment of British rule, and a condemnation of England's "present self-seeking policy."

There was plenty of literary activity in the United Provinces during the year under report, and much of it was of the right sort; but there was a great deal too much political writing of an uncritical and exaggerated nature. There was a marked decrease in the output of religious literature. The most interesting work in this class was a historical survey of Indian Protestant movements by Pandit Manohar Lal Zutshi, a work full of sound sense, and expressed in good English.

Islamic literature in Urdu contained no book of first-rate merit, but there was a comparative paucity of polemical writing, a general moderation of tone, and an almost entire abstention from politics. In the domain of history, a noteworthy publication was the first volume of *Tarikh-i-Sindh*, by Maulvi Abdul Halim Sharar, a book which displays great erudition and the true historic sense. Some useful books on medicine and law, Bernier's travels, and Herbert Spencer's work on education, were translated into Urdu during the year. The fiction of the year was remarkable only for its ultra-Gallic lubricity; the so-called drama was drama only in name. Philosophy was concerned with little more than the interpretation of ancient texts and established doctrines. A pamphlet on "The Present Crisis in the Theosophical Society" dealt with the succession to the presidency on the death of Colonel Olcott, and protested against the headship of Mrs. Besant. An interesting new English quarterly made its appearance, under the joint editorship of Pandit Ganga Nath Jha and Doctor Thibaut. It is called *Indian Thought*, and its object is to produce translations in readable form of celebrated Sanskrit manuscripts. Great interest was taken in education, and several books appeared on the subject, among which may be mentioned *Notes on the Education that India Needs*, by Pandit Jwala Dutt Joshi. There were some virulent *swadeshi* pamphlets, one containing the cogent argument against the use of imported goods, that foreign sugar was refined with the corpses of lepers. Other political contributions were translations of articles from the *Kesari*, and a life of Lala Lajpat Rai. The case for submission to British rule was argued by Kashi Nath Muttu in *Tuzuk-i-Kaisari*.

In the Punjab, the growth of a new spirit was shown in the tone of religious works, which are no longer contented with mere dogma, but show a tendency to question authority. An example of this is the *Veda Tattva Parkash*, published last year.

The *al Huquq wal-Farā'iz* ("Rights and Duties") of Maulvi Nazir Ahmad was written to meet the new criticisms. There was nothing worthy of note either among biographies or works of history. There were fewer novels than in the previous year, the best being one called *Hanuman ji ka Jivan Charitra*. There was a great deal of verse writing, but little true poetry. A metrical account of the Russo-Japanese war, *Jang-i-Rus wa Japan*, deserves mention. The Punjab Book Society did good service to the cause of Urdu literature by issuing translations of useful European works.

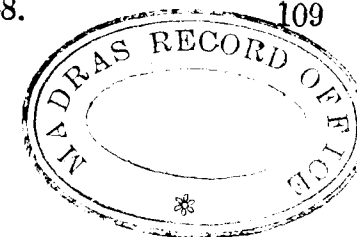
The most notable feature of the year in Burma was the literary output of the Ledi Sayadaw and his following, on moral, religious, and kindred subjects. Their trend appears to be towards emphasising the practical side of Buddhism rather than to throwing a new light upon it. Otherwise, there was little of marked interest, except the morbid sensationalism of the drama. There were only two original works of fiction.

LITERATURE.
Eastern
Bengal and
Assam.

The literary output of the year in Eastern Bengal and Assam was almost double that of the previous year, but there was little of real value. The chief feature was an outpouring of political writings, in which the Anglophobe tone was prominent. A large number of the publications were school books, a great proportion of which were "keys." There were very few books of practical value, and purely literary work was very rare. The 39 political works were essays, accounts of meetings, periodicals, and songs and poems. Nothing is so remarkable as the absence of the moderate point of view, which is expressed only in a few organs of the press.

Other
Provinces.

There were no publications in Coorg; those in the Central Provinces and Mysore need no special notice.



CHAPTER XV.

LOCAL SELF-GOVERNMENT.

GENERAL.
MUNICIPALITIES.

DISTRICT AND LOCAL BOARDS.
PORT TRUSTS.

GENERAL.

GENERAL.

Local self-government, municipal and rural, in its present form is essentially a product of British rule. Beginning in the Presidency towns, the principle made little progress until 1870, when it was expressly recognised by Lord Mayo's Government that "local interest, supervision, and care are necessary to success in the management of funds devoted to education, sanitation, medical charity, and local public works." The result was a gradual advance in local self-government, leading up to the action taken by Lord Ripon's Government in 1882-84, and to various provincial Acts passed about that time, which greatly altered the constitution, powers and functions of municipal bodies—especially by widely extending the elective system—and which still form the basis of the provincial systems in force. At the same time the resources and financial responsibility of municipalities were increased. Municipal committees now exist in most towns of any importance. In the rural districts local and district boards were established by Acts of 1883-5. The local boards are under the control of a general district board, or send delegates to a district council. The systems vary in different provinces, as a large discretion is left to the provincial governments. The elective principle has been adopted in varying degrees. There is also a smaller number of non-elective local bodies discharging similar duties in towns other than constituted municipalities and in cantonments. In the chief ports trustees have charge of harbour works, port approaches, and pilotage.

MUNICIPALITIES.

MUNI-
CIPALITIES.

(For further details see *Statistical Abstract for British India, Tables 101 to 103.*)

The municipal bodies exist, raise funds, and exercise powers under enactments which provide separately for the special requirements of each province and of the three presidency capitals, Bombay, Calcutta, and Madras. In the municipalities as a whole about half of the members are elected by the townsfolk under legal rules; in every town some, and in a few minor towns all, of the members are appointed by the Government. In almost every municipal body one or more Government officials sit as members. The number of Indian and non-official members, however, in every province largely exceeds the number of Europeans and officials. The municipal bodies are subject to Government control in so far that no new tax can be imposed, no loan can be raised, no work costing more than a prescribed sum can be undertaken, and no serious departure from the sanctioned budget for the year can be made, without the previous sanction of the Government; and no rules or bye-laws can be enforced without similar sanction and full publication.

There were 746 municipalities at the end of 1907-8, containing within their limits over 16 million people, or 7 per cent. of the total population. Generally speaking, the income of municipalities is small. In 1907-8 their aggregate income amounted to £3,910,000, excluding loans, sales of securities, and other extraordinary receipts. About 40 per cent. of the total is provided by Calcutta, Bombay, Madras, and Rangoon. Loans are incurred for water supply and drainage schemes, the cost of which is too large to be defrayed from ordinary revenues. Borrowings are largely from Government. The sources of municipal revenue, apart from loans and Government contributions, fall mainly under the two heads, "Taxation" and "Municipal Property and Powers apart from Taxation." Of the taxes the most important are octroi duties, levied in the United Provinces, the Punjab, the North-West Frontier Province, the Central Provinces and Berar, and Bombay, and the tax on houses and lands, which holds the chief place in the other provinces, as well as in Bombay city, and also contributes a considerable share of the receipts in the provinces named above. These two taxes each yield over one-fifth of the total income of municipalities. There are also water, conservancy and lighting rates, tolls on roads and ferries, taxes on animals and vehicles, and in some parts a tax on professions and trades. The other sources of income include cattle-pound receipts, rents of municipal property, such as

MUNI-
CIPALITIES.

markets and slaughter-houses (an important item in Burma), and fees of various kinds. The objects on which municipal funds are spent are, mainly, water supply, hospitals, vaccination, conservancy, drainage, lighting, fairs and markets, and education.

The interest in municipal elections, and in municipal affairs generally, is not usually keen, save in a few cities and large towns; but, as education and knowledge advance, interest in the management of local affairs gradually increases. In most provinces municipal work is fairly well done, and municipal responsibilities are, on the whole, faithfully discharged, though occasional shortcomings and failures occur. The tendency of local bodies, especially in the smaller towns, is to be slow in imposing additional taxes, in adopting sanitary reforms, and in incurring new expenditure. Many members of municipal bodies are diligent in their attendance, whether at meetings for business or on benches for the decision of petty criminal cases.

The following table exhibits the constitution of the municipal committees in 1907-8 :—

	Number of Muni- cipalities.	Total Number of Members.	By Qualification.			By Employment.		By Race.	
			Ex-officio.	Nominated.	Elected.	Officials.	Non- Officials.	Europeans.	Indians.
<i>Presidency Towns, &c. :—</i>									
Calcutta	1	50	—	25	25	Return not available.			
Bombay	1	72	—	16	56	9	63	19	53
Madras	1	37	1	16	20	10	27	14	23
Rangoon	1	25	—	9	16	3	22	11	14
<i>District Municipalities :—</i>									
Bengal	128	1,744	135	707	902	256	1,488	243	1,501
Bombay (including Karachi)	159	2,209	173	1,161	875	594	1,622	190	2,026
Madras	60	938	70	407	461	200	738	143	795
United Provinces	89	1,224	141	147	936	264	960	212	1,012
Punjab	137	1,473	219	501	723	295	1,178	112	1,361
North-West Frontier Province	10	161	49	112	—	49	112	21	137
Central Provinces and Berar	57	752	22	277	453	179	573	79	675
Eastern Bengal and Assam	50	652	66	257	329	135	517	71	581
Burma	43	540	168	309	63	192	348	146	394

BENGAL.
Calcutta.

The Calcutta Corporation consists, under the Act of 1899, of 25 elected commissioners and 25 appointed—four by the Bengal Chamber of Commerce, four by the Calcutta Trades Association, two by the Port Commissioners, and 15 by the Local Government. There is a General Committee, with executive powers, consisting of a chairman and 12 members, who are selected from among the commissioners. Important changes have been introduced in the rules for municipal elections, which will largely increase the number of voters. Progress was made in 1907-8 with great schemes of water supply and drainage (referred to in Chapter XVI. under "Sanitation"). Owing to heavy expenditure and increasing loan charges, inquiries were made into establishment charges with a view to retrenchments, and some economies were effected. It was found that the decentralisation scheme of 1901 had resulted not in reduced, but in enhanced, expenditure, though it has been justified by improved efficiency and convenience to the ratepayers. With the growth of prosperity the valuation of the city has increased by 43 per cent. in ten years to £2,034,000, and the revenue shows great elasticity. It amounted to £495,180 in 1907-8, while the expenditure was £511,110. The dearness of coal and compensation to employees for high prices of food-grains more than account for the excess of expenditure. Of the income 74 per cent. was derived from the consolidated rate, and 12 per cent. from licences; of the expenditure 35 per cent. was for loan charges. The debt at the close of the year amounted to £2,740,000. Progress in the improvement of bustees was well maintained. A scheme for clearing congested areas and making street improvements, to be spread over 20 years and to cost £5,500,000, is now under consideration.

Interior of
Bengal.

General elections were held in six municipalities, and the number of voters ranged from 69·6 to 38·4 per cent. The attendance of members at the meetings was fairly satisfactory. The average incidence of municipal taxation for the whole province was 1s. 11d., showing an increase of 1d. per head over that of 1906-7. The incidence varied between 13s. 2d. at Darjeeling and 4d. at Dehhatta in the Khulna district. There were revisions of assessments in 84 municipalities. That at Howrah yielded an

MUNI-
CIPALITIES.

increase in revenue of £14,788. The total receipts amounted to £308,150, and the expenditure to £306,320. Thirty-six municipalities were in debt at the close of the year to a net amount of £259,800, more than half of which was on account of the municipality of Howrah, which adjoins Calcutta.

In the United Provinces there were 89 municipalities and 28 notified areas (an increase of 11) at the close of 1907-8. Polls were held in 49 municipalities, and 50 per cent. of the electors voted. Reforms in election procedure are under consideration. The income of the municipalities, £440,470, was chiefly derived from octroi duties. In spite of famine the gross octroi income expanded by 5 per cent. in 1907-8. The incidence of taxation as a whole increased to about 2s. 2d. per head of the population in municipal areas. The expenditure amounted to £494,366. During the year there were improvements in conservancy and in lighting. The financial position of most of the large municipalities is not very satisfactory, owing partly to large expenditure on sanitary improvements, partly to lax finance. The whole scheme of municipal administration is at present under consideration, and the general question of taxation is being examined by a special committee. Sound finance is very important in view of the extending responsibilities of municipalities. There are signs of increasing interest in municipal affairs, and no fault can be found with the boards regarding sanitation, water-supply, and education, improvements in which have been aided by the relief given from charges for police and for plague preventive measures.

United
Provinces.

There were in the Punjab 137 municipalities, besides 57 notified areas, with an average income of only £133 each, which have a modified form of municipal government. It was decided during the year to abolish a large number of petty municipalities, whose income and population appeared too insignificant to deserve the municipal status, and to convert them into notified areas, in which cheapness and simplicity of administration are the chief requisites. The only important change in constitution was the abolition of the method of election in Simla municipality, where it has been unsuccessful. The system by which each religious community elects its own representatives has been extended, as, by removing a frequent cause of friction and securing the representation of minorities, it has proved popular and successful. In the great majority of the contested elections the poll was very small, the municipal franchise not being highly appreciated in the Punjab as a whole. The work of some committees has been paralysed by faction. The total income of the year amounted to £367,750, and the total expenditure to £367,840. Octroi accounts for 89 per cent. of the income of the municipalities from rates and taxes. The octroi receipts increased as a result of the revision of the schedules, and an improvement in the methods of collection. Octroi schedules have been shortened and simplified, only main staples of consumption being entered, and care is taken to avoid taxing articles of through trade and raw materials of local industries. With regard to the campaign against octroi initiated by the Punjab Trades Association, the Government recognise the objections to the impost, but consider the objections to direct duties, such as a house tax, still stronger. Inquiries are being made into cases in which it is alleged that octroi is levied on through trade. The policy of excluding agricultural land from octroi limits is being steadily pursued. The average incidence of taxation was 2s. 7d. per head of the municipal population. The aggregate amount of loans outstanding was £351,000; but the financial condition of each indebted municipality was satisfactory.

Punjab.

In the Frontier Province there were 10 municipalities and four notified areas, with an income of £38,000, chiefly derived from octroi duties. The expenditure was mainly on public health. The elective system is not in force in this province, and members are nominated for three years.

North-West
Frontier
Province.

The revenue of the Rangoon municipality, excluding loans and advances, increased to £233,270. There was large expenditure on water supply and drainage and on plague measures. The condition of the markets and bazaars has been improved. The improvement of the milk supply has been taken in hand, and an experimental model cow-keeper's village is to be established. The housing question and the improvement of the streets require urgent attention, but rigid economy is found to be necessary. The work of reclamation is being continued, and 30 acres of land were reclaimed in Lanmadaw alone. Fresh taxes were imposed on dogs and bullock carts. The problem of taxing the large floating coolie population, who are a source of difficulty and expense, still awaits solution. The incidence per head of direct taxation was 15s. 9d. The outstanding loans at the end of the year amounted to £859,000, including the reclamation works loan of £120,000.

BURMA.
Rangoon.

MUNI-
CIPALITIES.
Interior of
Burma.

Plague had again a serious effect on the finances of the municipalities, and many sanitary improvement schemes had to be postponed. A contribution of £20,000, which is to be a recurring one, was granted from imperial revenues, to meet special plague expenditure in the province. Municipalities have been generally administered with efficiency, and most of the members take an interest in the affairs of the towns. Specially good work has been done by the Moulmein Committee in reducing their finances to order and reforming administration. The average incidence of taxation rose to 2s. 8d. per head of population. The income of the municipalities, excluding debt heads, was £222,500, of which £90,720 came from taxation and tolls, and £86,830 from markets and slaughter-houses. There are no octroi duties. The municipal incomes are mostly small.

Central
Provinces
and Berar.

In the Central Provinces and Berar 57 towns had municipal committees in 1907-8, and there were six notified areas. In the larger towns many gentlemen devote time and labour to the details of municipal administration, but the general lack of interest in municipal elections does not encourage the further extension in Berar of the elective principle. Any contest that has occurred has been due to the importation of political issues. Under these conditions it has not been found possible to adopt the policy which obtains generally in the Central Provinces of placing the chairmanship in non-official hands. New rules as to electoral qualifications have been framed for Nagpur, and their application to all the larger and wealthier municipalities is proposed. The total income of the municipalities was £138,750, over two-thirds of which was derived from rates and taxes. The average incidence of taxation was about 2s. 2d. per head. Measures are being taken to prevent the levy of octroi from interfering with through trade in the Central Provinces. Octroi is not levied in Berar, where, however, the light direct taxes are found to be inelastic. Of the 44 municipalities in the Central Provinces proper, no less than 19 subsisted during 1907-8 on revenues smaller—in most cases considerably smaller—than £700. In Berar municipal taxation is especially low, the incidence being only 1s. 3d. per head. The total indebtedness of the municipalities was £73,600, half of which was owed by Nagpur and Jubbulpore. The financial position of the borrowing municipalities is sound.

Eastern
Bengal and
Assam.

Eastern Bengal and Assam in 1907-8 contained 50 municipalities. Muhammadans are still insufficiently represented in the towns of Eastern Bengal, Hindus holding 13 seats to every 7 held by Muhammadans. The total income of the municipalities was £97,730, and the average incidence of taxation was 1s. 11d. per head. The administration of the year generally showed marked progress, but in four towns of Eastern Bengal municipal affairs were inefficiently managed.

MADRAS.
Madras City.

The number of commissioners in the Madras Corporation under the Act of 1904 is 36 (besides the chairman) of whom 20 are elected and the remainder appointed by Government and by various commercial bodies. The income in 1907-8, excluding loans and advances, amounted to £173,320, including grants of £36,900 from Government, most of which was for the improvement of the water supply and drainage. The average incidence of taxation was about 3s. 8d. per head. The principal taxes are one of 10 per cent. on the annual value of buildings and lands, a water and drainage tax levied on the same basis of 6½ per cent., and a lighting tax of 1¼ per cent., besides taxes on animals and vehicles, &c. There are no octroi duties. The total expenditure came to £126,460. The outstanding debt of the municipality on 31st March 1908 was £457,000, against which must be set a sinking fund of £145,500.

Interior of
Madras.

The number of municipal councils in the interior of Madras was 60, in 58 of which the elective system was in force, the percentage of the population entitled to vote being 2·1. Of 150 seats filled by election in 1907-8 only 78 were contested, and 67·6 per cent. of the registered voters polled. Six councils consisted entirely of Indian members. The income increased to £270,140 and the average incidence of taxation was nearly 1s. 8d. per head. There are no octroi duties. More than a quarter of the whole expenditure, which exceeded the income, was devoted to public works. The outstanding debts at the end of the year amounted to £165,760, against which there is a sinking fund, amounting to 6·2 per cent. of the total debt. A comparatively high standard of efficiency was maintained in some municipalities, but in six (including Tanjore and Trichinopoly) the administration left much to be desired.

BOMBAY. The municipality of Bombay is administered by a corporation consisting of 72 Bombay City councillors, of whom 16 are nominated by the Government, 36 are elected by the

MUNI-
CIPALITIES.

ratepayers, 16 by the justices, 2 by the Chamber of Commerce, and 2 by the University. The income in 1907-8 was £659,288 and the expenditure £679,280. In spite of a reduction in the general and water rates there was a further large increase of receipts, resulting from the general expansion of the city and the rise in values of rateable properties. There was, however, a deficit in the year's working of about £20,000 owing to items of extraordinary and non-recurring expenditure. A large increase in expenditure is foreshadowed for drainage, housing, education, medical relief, &c. The average incidence of taxation per head of the population was 11s. 6d. At the end of the year the outstanding debt was £3,385,500, and the invested sinking fund £509,900. The expenditure on plague preventive measures since the outbreak of the epidemic in 1896, to the end of March 1908, amounted to £453,800, of which £96,700 was received from the Government, and the remainder met partly by special plague loans, partly out of other loan funds, and, in the last three years, out of the revenues of the municipality.

The capital expenditure of the Bombay City Improvement Trust, which is engaged in reclaiming land, clearing slum areas, laying out new streets, erecting chawls, &c., amounted to £176,000, the number of properties acquired being 153. Since operations began in 1898 the total capital expenditure has been £1,783,450. A further loan of £100,000 was raised in 1907-8, the amount of the loans being thus brought up to £1,900,000. The year's revenue, derived from the municipal contribution and receipts from investments, rents and other property, amounted to £96,900, and the expenditure, exclusive of capital charges, to £105,100.

The municipalities in the interior of Bombay and Sind numbered 159, including 14 city and 4 temporary corporations. There were 43 municipalities composed entirely of nominated members. Though faction continued to impede business in many cases, the working of the larger municipalities at any rate was generally satisfactory, and Government have decided to relax the existing official control over these bodies by increasing the number of elected members. The aggregate income rose to £438,580, the increase being due to greater commercial and industrial activity, which led to improved octroi receipts everywhere except in Sind. The aggregate expenditure increased to £492,100, and was devoted mainly to sanitary and other improvements and education. The total indebtedness of the municipalities at the end of the year was £328,460.

Interior of
Bombay.

DISTRICT AND LOCAL BOARDS.

DISTRICT
BOARDS.

(For further details see Statistical Abstract for British India, Table 104.)

The local boards contain a varying proportion of elected members in all provinces except Madras, where the elective system is only applied to members of district boards. Elected members form a large proportion of the boards in the United Provinces and the Central Provinces and Berar. On all boards the great majority of members are Indians. The latter are in all provinces generally chosen, either by election or by appointment, from the ranks of the local board members. The total number of district boards is 194, and of local boards 518. There are no boards in Burma. The following table shows the general constitution of the boards in each province, the figures in italics relating to local boards, the others to district boards:—

Province.	Number of Boards.	Total Number of Members.	By Appointment.			By Employment.		By Race.	
			Ex-officio.	Nominated.	Elected.	Officials.	Non-Officials.	Europeans.	Indians.
Madras	23 82*	700 1,171	109 84	273 1,087	318 —	278 350	422 821	130 86	570 1,085
Bombay	25 211	3,633	25	1,987	1,621	†	†	†	†
Bengal	29 78*	591 946	160 65	184 623	247 258	197 122	394 824	194 97	397 849
United Provinces	48 29	911 1,104	55 239	222 520	634 345	244 258	667 846	102 74	809 1,030
Punjab	20 5	407 215	20 49	126 166	261 —	20 49	387 166	3 26	404 189
N.-W. Frontier Province	21	471	2	118	351	78	393	19	452
Central Provinces and Berar.	75	1,185	13	304	868	119	1,066	8	1,177
Eastern Bengal and Assam.	14 52*	283 684	75 97	107 291	101 296	95 140	188 544	51 156	232 528

* Besides 334 union panchayats (with 3,636 members, of whom only 47 are Europeans) in Madras, 50 in Bengal, and 9 in Eastern Bengal and Assam.
† Particulars not available.

DISTRICT
BOARDS.

The funds of district and local boards are mainly derived from local rates or cesses levied upon agricultural land over and above the land revenue. Up to 31st March 1908 the proceeds of these rates were included in the general revenues, and assignments from them were made to the boards. By a change announced in March 1906, certain petty appropriations which had hitherto been made from the boards' funds for various provincial purposes, such as the district post, normal schools, and the like, were discontinued; and as, at the same time, the local rates were relieved of charges hitherto levied for village revenue establishments, a close approach was made to the principle that cesses on the land should be strictly limited to the amounts required by district boards for expenditure on genuinely local objects. From April 1908 the accounts of district boards have been excluded from the general provincial accounts, and their funds treated independently, as municipal funds are at present, thus following the practice in the United Kingdom, where the income and expenditure of local authorities are kept entirely separate from the public accounts. The new system will remedy certain practical inconveniences and will give the boards freedom of reappropriation. The Government of India now make a grant-in-aid of the funds of all boards equal approximately to one-fourth of their income from rates or cesses imposed upon the land. The chief object is to enable the boards to provide improved roads and other local needs. The boards have also other sources of income, such as cattle pound receipts (except in Madras), educational receipts, medical receipts, tolls from ferries and bridges, and contributions for specific purposes from the provincial funds. Their aggregate income (excluding debt items) in 1907-8 was £3,140,000. The expenditure of the boards is chiefly for roads and bridges, hospitals, vaccination, drainage, water supply, primary education, markets, and resthouses.

Bengal.

In Bengal, in addition to the district and local boards, the latter of which have charge of village roads and various duties deputed to them in respect of pounds, ferries, primary education, and other matters, there were 50 union committees entrusted with minor duties and having an aggregate income of only £1,128. The question of infusing new life into these committees and extending their sphere of usefulness in regard to village sanitation and water-supply is being taken up in connection with the amendment of the Bengal Local Self-Government Act. The income of the district boards, excluding loans, deposits, and advances, was £422,670. The receipts from provincial rates were larger, while those from civil works declined. The expenditure, excluding debt, was £470,400, of which £78,000 was spent on education and £304,600 on civil works, chiefly roads and bridges. It is reported that, on the whole, district boards did well, considerable interest being taken by the members in the various branches of their work, but that the working of the local boards was in many cases unsatisfactory. The question of improving the status of these bodies was under consideration. Four light railways constructed under the guarantee of district boards are now in successful working; several similar schemes are in contemplation. Considerable progress was again made with the construction of feeder roads to railways.

United
Provinces.

The importance of the work of the district boards increases yearly, especially in the sphere of education. The increased power and responsibilities conferred on the boards as the result of the Local and Rural Police Rates Act and the District Boards Act have given the members a keener interest in their work. Under these Acts district committees are no longer distinct from district boards; and local boards have been abolished, power being given instead to district boards to appoint, when necessary, local committees for the sub-divisions of districts. The elected board funds become, from 1st April 1908, excluded local funds, will increase the freedom of the boards in dealing with the money at their disposal and simplify local accounts. The staff of the boards is said to be inadequate generally, and in financial matters the boards have been urged both to make full use of their resources and to keep expenditure within income. The funds at their disposal were augmented during the year chiefly by larger provincial contributions, which amounted to £159,000. The total income in 1907-8 increased to £364,600, excluding provincial grants. The receipts from education fees showed a large increase. The expenditure amounted to £497,750. There was an increase under education, due partly to ordinary additions to the boards' budgets, partly to the decision that grants-in-aid to secondary schools should be borne wholly instead of in part by them. Medical charges increased owing to larger expenditure on dispensaries, vaccination, &c. There was a smaller expenditure on public works, though a good deal was done to improve roads.

DISTRICT
BOARDS.
Punjab.

Local boards were abolished in the Hoshiarpur district. The system of election is as unpopular as ever. Appointment is reported to be thought a greater honour than election. In Delhi, however, over one-third of the vacant seats were contested. There are signs among members of the boards of growing interest in their duties. The year's income of the boards, apart from loans and advances, came to £304,000, of which the chief item was £167,000 from provincial rates. The expenditure was £318,300, of which the chief items were civil works £152,300, education £76,000, and medical charges £39,300. Great progress has been made in constructing schools and hospitals and in improving roads.

North-West
Frontier
Province.

There is no elective system in this province. The year's income of the boards was £21,100 and their expenditure £19,500. Most of the income was derived from provincial rates. Of the expenditure 28 per cent. was on education. The working of the boards was generally satisfactory.

Central
Provinces
and Berar.

On the whole the year's record was satisfactory. Complaints, however, are made of the apathy of many members of the boards. The transfer of village markets from district councils to local boards in November 1907 will, it is hoped, lend more interest to the work of the latter. The income of the district funds increased to £156,290 excluding debt heads, while the expenditure was £166,770. The chief source of income, as in other provinces, is the provincial rates, but receipts from cattle pounds constitute an exceptionally large proportion of the total. Of the expenditure 41 per cent. was on civil works, including roads and schools and other buildings, and 31 per cent. on education. Overgrown balances have been reduced, more money being spent on useful objects, such as improvement of communications and provision of school buildings. Measures are being taken to improve the public works staff.

Eastern
Bengal and
Assam.

In Eastern Bengal there were 14 district boards, 33 sub-divisional local boards, and 9 union committees. In Assam there were 19 local boards, constituted under executive rules. The latter boards generally resemble district boards in their functions and responsibilities, and a special feature of their membership is the large proportion of Europeans, who represent the planting community. In Eastern Bengal, where the Muhammadan community includes two-thirds of the population, that community had less than 36 per cent. of the membership of the boards; there is difficulty in finding suitable Muhammadan gentlemen willing to serve. Of the income of the boards, £313,544, nearly one half accrued from provincial rates, and nearly one-third from Government contributions for education and roads. Their expenditure amounted to £301,720, of which £91,100 was devoted to education and £168,850 to civil works.

Madras.

There were in Madras 23 district boards, 82 taluk boards, and 384 village unions. The taluk or sub-divisional boards are not elective, the members being appointed by the Government, but some of them elect their vice-presidents. The village union *panchayats* or councils have each not less than five members; they deal chiefly with sanitation, and the making and repair of roads, and in some cases they have the management of choultries, markets, and other local institutions entrusted to them by the taluk boards. On the whole the working of the local bodies was satisfactory, though they tend too much to accumulate balances, which should be spent on public improvements. The income of the boards and unions, excluding debt heads and contributions from one district board to another, increased to £913,730, and the expenditure rose to £811,850. The chief source of income is the land cess, which is levied at rates varying from one to two annas per rupee of the land revenue assessment and yielded £376,600. The income included also grants from provincial revenues amounting to £189,500, chiefly for roads and bridges and for education. About 47 per cent. of the expenditure was devoted to public works, and 29 per cent. to the repair of roads, while the outlay on education was 15 per cent. The Maya-veram-Mutupet Railway, which belongs to the Tanjore District Board, brought in a net profit of 6.1 per cent. on the capital outlay. The Bezwada-Masulipatam Railway, constructed by the Kistna District Board, was opened in February 1908.

Bombay.

New boards were constituted in six districts. The income of all boards, in 1907-8, excluding debt heads, was £425,800, a rise, as compared with 1906-7, due to the recovery of past arrears, to an enhancement of the local cess by revision settlement, and to more liberal Government grants in Sind. The total expenditure of the boards rose by 15 per cent. to £417,466, most of the increase being for water supply and other civil works and education. The chief items were £133,300 for education, and £225,630 for roads, buildings, and water supply. Roads absorbed 60 per cent. of the outlay on civil works.

DISTRICT
BOARDS.
Burma.

There are no local boards in Burma. Their place is taken by the district funds under the control of Government officers. These numbered 36, and had an income of £263,340 and an expenditure of £202,300 in 1907-8. Those in Lower Burma, known as "District Cess Funds," are the largest, as they include the proceeds of a 10 per cent. cess on the land revenue, and account for £162,500 of the expenditure, of which nearly £20,000 was on education and nearly £100,000 on public works.

PORT TRUSTS.

(For further details, see *Statistical Abstract for British India*, Table 178.)

General.

The administration of the larger ports is placed by various Acts in the hands of Port Commissioners, who are charged with the provision of suitable dock accommodation and other services necessary to shipping. They have wide powers, but are more subject than municipal bodies to Government control. Members of these Port Trusts are for the most part appointed by the Local Governments, and are largely representative of the local commercial communities. Except in Calcutta the elected members are fewer than the nominated members. Port trustees are empowered, subject to the control of the Government, to levy dues on shipping and goods, to charge fees for services rendered, to contract loans for port improvements, to maintain the harbour and its approaches, and to erect warehouses, jetties, and docks for the convenience of traders and shipping. The chief ports, which deal with by far the largest proportion of the trade of India, are alone dealt with here. There are smaller ports, especially in Madras and Burma, where sums are raised yearly for expenditure on improvements. For the trade of the principal ports see page 61.

Calcutta.

The receipts of the Port Trust increased by 10 per cent. to £730,500 in 1907-8, the highest figure on record, while the expenditure was £719,000. Receipts have nearly doubled in the last 10 years owing to the enormous expansion in the trade of the port. The expenditure during the year upon capital works amounted to £223,700. The more important works completed or in progress were the extension of docks and jetties, the erection of warehouses, and the provision of seven ferry steamers, which have met an urgent public need. The capital debt of the Trust on 31st March 1908 was £4,167,000, of which about two millions are Government loans, and the rest debenture loans. The latter were increased by the issue of debentures to the value of £717,000 in 1907-8. Against this total debt may be set the value of properties, £5,599,000, besides valuable foreshore lands, sinking funds amounting to £455,000, and a Revenue Reserve Fund of £202,000. Lands and buildings and the railway are a growing source of income. The dry docks yield a good return, but there is a loss on the working of the wet docks. In connection with the scheme for the extension of the Kidderpore Docks and the general improvement of the port, large areas of land are being acquired in Garden Reach and the vicinity.

Bombay.

The trade of the port was well maintained during 1907-8. The result to the Bombay Port Trust was a rise in their income to the record figure of £523,500, while the expenditure amounted to £441,400. Owing to the prosperous state of the finances a temporary rebate was made on certain port dues and pilotage charges, amounting to £50,000; nevertheless, there was a surplus of £32,000 on the year's working, which raises the Trustees' Reserve Fund to £367,000. The capital expenditure during the year amounted to £334,700, including £211,000 spent on the new dock works, the completion of which is being expedited as much as possible. A debenture loan of £293,300 was issued. The debt of the Trust amounted at the end of the year to £4,741,000, of which about two millions is owed to Government, while the remainder consists of foreshore securities and debenture loans. The cost price of the properties vested in the Trust was £4,983,700, and various depreciation, reserve, and sinking funds amounted in the aggregate to £702,500. Work on the new docks made good progress. Government has sanctioned an estimated expenditure of £872,000 for the Mazagon-Sewri reclamation scheme, the area involved being 518 acres.

Rangoon.

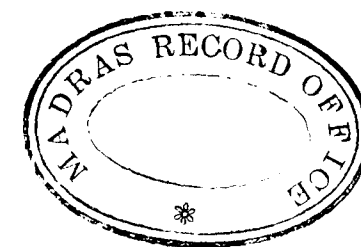
Although in 1907-8 there was a slight decrease in the tonnage of the shipping which entered the port the ordinary revenue increased by £23,000 to £159,000, largely owing to the imposition of a river due of 1½d. a ton on imports and exports, a measure that has been seriously considered for several years. The revenue expenditure was £152,750. Loans amounting to £158,800 were raised. The capital expenditure of the year was £150,500, and the total debt amounted to £881,000. Sub-

PORT
TRUSTS.

tial progress was made with the construction of up-to-date extensions of wharves in connection with the scheme for the new port works, which was sanctioned in 1901 and is now nearly completed. Since the commencement of the works, £550,000 has been expended out of sanctioned estimates of £695,750. The erection of a general warehouse and go-downs was sanctioned, and a project for improving the channel across the Hastings shoal was approved. The condition of the Rangoon river has given rise to grave anxiety for some time past, and the question of the works to be undertaken for training the river again occupied the attention of the Commissioners, and it was hoped that a complete project might be sanctioned at an early date.

The year 1907-8 was very prosperous, and the receipts of the Madras Port Trust amounted to £71,000. Progress was made in improving the harbour and in furnishing better facilities for handling cargo. The harbour was provided with a new north sheltering arm and a new entrance, and new berths and moorings. The capital outlay on extensions was £65,800. The expenditure, £50,200, was larger owing to heavy items for dredging and interest on the Government loan. The debt outstanding was £356,000.

The year 1907-8 was satisfactory for the Karachi Port Trust. The revenue receipts increased by 9 per cent. to £208,000, while the expenditure was £171,000. The expenditure on engineering works reached £185,200. The total liabilities of the Trust at the end of the year stood at £631,000, of which £88,000 is due to Government. It is proposed to empower the Trust to raise loans under their own Act. Great improvements are under consideration.



CHAPTER XVI.

CONDITION OF THE PEOPLE.

VITAL STATISTICS.
PLAGUE.
SANITATION.
HOSPITALS, DISPENSARIES, AND
ASYLUMS.

FAMINE.
EMIGRATION AND MIGRATION.
PRICES.
WAGES.
GENERAL REMARKS.

VITAL
STATISTICS.
General
population.

VITAL STATISTICS.

(Detailed information on Vital Statistics, Sanitation, &c. is contained in the annual Report on Sanitary Measures in India, which is published as a Parliamentary Paper, and in the Statistical Abstract for British India, Tables 102-3 and 193 to 200.)

Registration.

As the date of the census of 1901 recedes, the birth and death rates calculated upon the census returns necessarily become unduly high. Although improvement in registration is being steadily effected, there are still serious defects in some areas. The facts are nearly everywhere collected by an illiterate agency (usually by village watchmen in rural areas), and accurate figures, especially of the causes of death, are unobtainable. It is more difficult, especially in towns, to obtain information about births than about deaths. The actuarial reviews of the returns of the last three censuses show that the registered birth and death rates are understated, and as registration improves the registered rates must tend to approximate to the calculated rates. An increase in the registered death-rates cannot, therefore, be regarded as proving the impoverishment of the masses. The high Indian birth-rate is due, not to exceptional fertility, but to the large proportion of married women. The high infantile death-rate is partly due to the weakness of the children of immature and ignorant parents, but to some extent it is only apparent, being calculated on imperfect returns of births.

Birth-rates
and death-
rates.

The population of the areas in which births and deaths were registered was 225,921,260 according to the census of 1901, and the number of births registered in 1907 was 8,505,563.

Province.	BIRTH-RATES.		DEATH-RATES.					
	1906.	1907.	1906.			1907.		
			Rural.	Urban.	Total.	Rural.	Urban.	Total.
Bengal	37.3	37.7	36.1	35.0	36.1	37.8	36.2	37.7
Eastern Bengal and Assam.	37.4	37.0	31.8	24.1	31.7	29.5	22.7	29.3
United Provinces	40.2	41.2	38.3	49.1	39.0	42.6	55.1	43.5
Punjab	43.7	40.8	36.1	44.7	37.0	62.9	54.7	62.1
North-West Frontier Province	38.6	32.5	33.5	36.3	33.7	35.0	36.0	35.1
Central Provinces and Berar.	51.7	52.5	42.7	50.0	43.5	41.3	45.1	41.7
Madras	30.9	30.8	26.6	33.4	27.4	23.7	28.5	24.3
Coorg	26.1	23.8	28.6	36.6	29.3	34.3	44.0	35.2
Bombay	33.8	33.0	32.2	53.8	35.1	31.5	38.2	32.8
Burma { Lower	32.3	32.7	24.9	42.6	27.1	24.6	42.2	26.8
Upper	34.2	33.1	23.4	50.4	26.2	24.4	39.7	26.1
Ajmere-Merwara	28.9	31.2	27.7	44.2	32.2	25.5	40.8	29.6

exceeded the birth-rate by 21.3 per mille, mainly as a result of the persistence of plague and the unusual prevalence of other epidemics. In the Central Provinces

The provincial rates are given in the marginal table. The calculated birth-rate in 1907 was 37.65 per mille, compared with 37.8 in 1906 and 39.23 the average of the five years to 1906. In most provinces the birth-rates exceeded the death-rates, the most considerable excesses being 10.76 per mille in the Central Provinces, 7.71 in Eastern Bengal, and 7.01 in Upper Burma. In the Punjab the death-rate

VITAL
STATISTICS.

the birth-rate per mille of population was again exceptionally high, while a very low rate was again recorded in Madras. The mean percentage of male to female births was, as usual, 106.8, the percentages ranging from 120.4 in the North West Frontier Province to 104.0 in Eastern Bengal and Assam.

The number of deaths registered during 1907 was 8,399,623, compared with 7,852,330 in 1906, and the death-rate rose from 34.73 per thousand in 1906 to 37.18, the increase being chiefly due to the exceptional mortality from plague. The mean mortality per thousand for the quinquennium ending 1906 was 33.96. The rise in the death-rate was most marked in the more populous provinces of Northern India, and especially in the Punjab, where the rate increased from 37.0 to 62.1 per mille. The lowest death-rate was in Madras, where cholera was less prevalent than in 1906. Except in the Bengal provinces and the Punjab, the urban mortality exceeded the rural; but it must be remembered that registration is, as a rule, more complete in urban districts.

The greatest mortality occurred in April, December, and March. In most provinces the male death-rates were higher than the female death-rates, but in the Northern Provinces the latter were higher. Male and female infants under one year died at the rate of 221.7 and 209.3 per thousand born, compared with rates of 228.3 and 217.5 in 1906. Infantile mortality was very high in the Central Provinces, and lowest in Eastern Bengal and Assam and Madras.

There are three main classes of fatal disease: specific fevers, diseases affecting the abdominal organs, and lung diseases. Intestinal and skin parasites, ulcers and other indications of scurvy, widely prevail. Much of the sickness and mortality is due

Chief
diseases.

Years.	Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhoea.	Plague.	Respiratory Diseases.	All causes.
1905	441,786 1.96	70,962 0.31	4,417,655 19.57	264,124 1.17	940,821 4.17	194,714 0.86	8,117,771 35.96
1906	690,519 3.05	109,583 0.48	4,452,842 19.69	298,117 1.32	300,355 1.33	201,307 1.00	7,852,330 34.73
1907	408,102 1.81	103,988 0.46	4,464,881 19.76	282,191 1.25	1,116,223 5.16	226,419 1.00	8,399,623 37.18

to deficient powers of resistance and to insanitary habits and surroundings. The marginal table shows the number of deaths, and the death-rates per 1,000 from each of the principal diseases recorded during the three years from 1905 to 1907. With

respect to special diseases, no province escaped the visitation of cholera, which was very prevalent in Bengal, Eastern Bengal, and Madras, where the death-rates were 4.07, 2.58, and 2.2 per mille respectively. Small-pox was less widespread than in 1906, and the death-rates were upwards of 0.5 per 1,000 in only four provinces. Plague forms the subject of a separate section. When reference is made to fever in India, malarial fever is generally understood, but many causes of death and many diseases much more fatal than malarial fever are included under the heading. The fever death-rate was highest in the United Provinces, viz., 28.3, as against 27.6 per 1,000 in 1906. It is probable that cases of plague are sometimes returned as fever.

The following table gives the ratio of deaths per mille in cities of British India whose population exceeded 150,000 in 1901:—

City.	1907.	1906.	City.	1907.	1906.	City.	1907.	1906.
Calcutta	37.67	35.7	Benares*	60.72	58.47	Ahmedabad*	57.22	52.09
Bombay	39.94	68.98	Delhi	65.20	63.08	Mandalay	45.62	57.1
Madras	40.8	46.9	Lahore	60.38	38.99	Allahabad*	36.73	36.87
Lucknow*	72.76	50.41	Cawnpore*	55.08	81.63	Amritsar	49.99	49.42
Rangoon	45.0	47.6	Agra*	28.20	39.62	Poona*	41.88	103.56

* Excluding cantonment.

The total number of vaccinations performed among the civil population during 1907-8 was 9,169,873, being an increase of 89,570 on the previous year's work. Of primary vaccinations 97.6 per cent., and of re-vaccinations 75.4 per cent., were successful, about 36 per mille of the population having been successfully vaccinated. The number of infants successfully vaccinated was over 4 millions, and of children between one and six years of age, over 3 millions.

PLAGUE.

The present epidemic of plague in India first broke out at Bombay in August 1896, and, as the marginal table shows, it has been responsible for a heavy rate of mortality since that date. In 1906 there was a remarkable decline in mortality, the deaths recorded falling to 356,721, the smallest total since 1901. The great improvement of 1906, however, was not maintained in 1907, when the deaths attained the highest total yet recorded, viz., 1,315,892 for India as a whole, the number in British India alone being 1,166,223, or 5·16 per mille. The epidemic was, as usual, at its height in March, April, and May, in which months 924,716 deaths occurred. The mortality was greatest in the Punjab (608,685 deaths, or 30·3 per mille), the United Provinces (328,862, or 6·9 per mille), Bombay (93,609 or 5·1 per mille), Bengal (83,602), and the Central Provinces and Berar (37,774). The deaths in the Punjab and Bombay Native States numbered 61,231 and 54,186 respectively. In 1908 there was once more a decline in mortality, the preliminary figures showing only 149,938 deaths, or fewer than in any year since 1900. The mortality was highest for the three months, February to April, but amounted to only 81,250 deaths. After reaching its lowest level in July, the epidemic increased gradually until October, when a decline again occurred.

Plague is so local in its visitations that all general and unanalysed statistics are likely to prove misleading. Many parts of India have been almost entirely free from its ravages, and in the greater part of the country the outbreaks cannot be described as having been severe or disastrous. Even in the Punjab in 1907 plague did not appear in two districts. The mortality in Eastern Bengal and Assam has been at no time appreciable, while in the Madras Presidency and in Burma the epidemic has never reached serious dimensions. On the other hand, general statistics tend to conceal the severity of the distress caused by the disease in particular districts. In some parts of the Punjab the mortality in 1907 was so severe as to disorganise the labour market and to affect the level of wages.

In the meantime the efforts of Government to discover and apply the most effective methods of remedial action have not been relaxed. The Advisory Committee on Plague Investigation in England and the Plague Commission in India, whose constitution has been described in former issues of this Report, have continued their investigations, which have already led to most important results. The main facts in regard to the mode of propagation of an epidemic and the life history of the plague bacillus have been ascertained, and rational methods of attack have thus been made possible. An account of the principal conclusions arrived at have been given in special numbers of the *Journal of Hygiene*, and a more popular summary, entitled "The Etiology and Epidemiology of Plague" (price 5d.), was published early in 1908. It is now generally agreed :—

- (1) That bubonic plague is spread by infected rats ;
- (2) That the vehicle of contagion between rat and rat and between rat and man is the rat-flea ; and
- (3) That the life of the plague germ in soil, the floors and walls of houses, and the like, is of short duration.

Some results of the experience acquired by officers engaged in plague administration are described in the Parliamentary Paper (Cd. 3516) entitled "Correspondence regarding Measures for the Prevention of Plague." In the light of the knowledge and experience now acquired it is possible to deal satisfactorily with the disease when effective control can be established over the sanitary conditions ; and in the case of the native army and in limited areas such as jails there has been remarkable success. But attempts to establish such control over large areas would involve too great an interference with the habits, prejudices, and sentiments of the people, and the application of measures of proved utility must depend upon the particular circumstances of each locality and upon the character of its inhabitants. In the face of great practical obstacles, three principal measures for combating plague are now adopted :—

- (1) The temporary evacuation of quarters in which plague is prevalent. This has proved to be the most effective way of removing man from contact with infected rat-fleas. Government is ready to supply money and material to provide temporary dwellings and to alleviate the discomfort and distress

which must accompany evacuation of quarters, a matter, of course, in which no pressure can be exerted, and in regard to which the wishes and even prejudices of the people must be consulted.

- (2) Inoculation with the prophylactic fluid. The great efficacy of this remedy has been placed beyond doubt ; its use has spread rapidly, and the popular prejudice against it is beginning to disappear.
- (3) The systematic destruction of rats, the diminution of the food supply to which they have access, and, in the course of time, such improvement in the structure of houses as shall render them reasonably rat-proof.

SANITATION.

SANITATION.

In 1907-8 the Government of India endeavoured to stimulate the work of sanitary improvement, with special reference to the prevention of plague, by allotting among the different provinces a sum of £200,000. Proposals for reorganising and developing the Sanitary Department by appointing medical officers of health and sanitary inspectors are under consideration. The following paragraphs give some account of the chief sanitary works undertaken in the various provinces during 1907.

In Calcutta steady progress was made towards carrying out two great projects of reform of vital importance to the health and comfort of the citizens. The water-supply is being doubled and the whole system of distribution reconstructed, so that the legal requirement of a continuous supply of filtered water at a pressure of 40 feet may be complied with. The principal feature of the scheme is a great elevated reservoir at Tallah, to contain nine million gallons, into which all the water will be pumped and from which it will be distributed by gravitation. The total estimated cost is £461,000. Another scheme of the first magnitude will complete the sewerage of the city, excepting the drainage of the Fringe Area, at an estimated cost of £200,000.

Overcrowding is a great evil in Calcutta, and a scheme for the improvement of the congested areas, to be carried out by a Board of Trustees, is still under discussion. The expenditure on street improvements and attendant measures is estimated at about £5,500,000 in the course of some twenty years. A portion of this large sum will be recovered in rent from the lands acquired, and the balance will be provided partly from a municipal contribution, partly from certain special taxes, and partly from Government grants.

The 128 municipalities in Bengal (excluding Calcutta) spent 43 per cent. of their income on sanitation. The scheme for extending and improving the distribution of water at Howrah was sanctioned. Schemes for waterworks at Puri, Monghyr, and Gaya were approved. Many other towns took steps to improve their water supply by excavating new tanks and wells and repairing old ones. Drainage schemes had been or were being prepared for almost all the important municipalities. The Government has authorised the employment of six surveyors to draw up schemes of surface drainage for municipalities. Work was commenced on a further portion of the comprehensive Howrah drainage scheme, and on a drainage scheme at Puri. A scheme has been taken up for opening out the rivers in the Barasat division of the 24-Parganas district affecting an area of 70 square miles. The expenditure under the head of conservancy has steadily risen in almost all municipalities. Night-soil is now properly trenched, and trenching grounds are usually cultivated at a profit. Besides the expenditure incurred in combating plague and other epidemic diseases, attempts were made by some of the District Boards, especially in Patna district, to improve the sanitation of several villages by systematically cleansing them.

In the United Provinces a record sum, amounting to over 50 per cent. of their income, was expended by municipalities on conservancy, plague, water-supply, and drainage, but in the large cities sanitary improvements are still urgently needed, especially in respect of congested areas. In several towns the water supply was extended, over £15,000 being spent at Agra. The results of analysis of drinking-water were, on the whole, satisfactory. Progress was made in drainage and sewerage works at Lucknow, Benares, and elsewhere. Experience in Allahabad, Agra, and Bareilly proves that the best method of disposing of night-soil is to use it for fertilising the land.

About 48 per cent. of the income of Punjab municipalities was spent on sanitation in 1907. The drainage works at Rawalpindi and Gujrat were completed during the year ; while works were in progress at Delhi and elsewhere. The Sanitary Engineer insists on the necessity of systematic flushing and cleansing by the municipal bodies.

SANITATION. The Ludhiana waterworks scheme, estimated to cost £28,700, made excellent progress, and an estimate was sanctioned for the improvement of the Lahore waterworks. In rural areas sanitation makes little advance.

North-West Frontier Province. The Peshawar municipality spent about £1,700 in improving the water supply, and in cleaning and repairing wells, &c. The Abbottabad municipality spent nearly 60 per cent. of its income on sanitation.

Burma. In Rangoon the improvement and extension of the Shone and Ault system of sewerage was continued in 1907. The scheme for the distribution of pipe water has progressed. The work of reclamation was carried on steadily. In the Lannadaw quarter alone 30 acres were reclaimed, while equipment was pushed on in the reclaimed areas, especially in East Rangoon. Estimates have been adopted for developing the Hlawga water-supply works, which are not capable of supplying so large a population as was anticipated.

The Burma municipalities spent about 45 per cent. of their income on sanitation. Sanitation in Burma is in a very backward condition, and there is hardly a town or district in which sanitary reform is not a pressing need. Improvement in sanitation and water supply is hampered by lack of funds and the passive opposition of the people. An expenditure of £400 has been sanctioned for the erection of model sanitary works at Insein to serve as object lessons to medical and municipal officers in Burma. In particular, conservancy and water-supply schemes for Mandalay were under consideration. In Akyab work was begun on the gravitation water supply scheme, estimated to cost £20,240. A Sanitary Commissioner has been appointed.

Central Provinces and Berar. The municipalities spent nearly 43 per cent. of their income on sanitation. An important project for the improvement and extension of the water supply of Jubbulpore at an estimated cost of £21,500 was undertaken and made good progress in 1907. There is much room for improvement in municipal sanitation, overcrowding and want of drainage being the chief defects. The work done under the direction of the Sanitary Board consisted, as usual, of the construction or improvement of wells, the repair of roads, drainage, clearing of village sites, &c.

Eastern Bengal and Assam. The expenditure on sanitation amounted to about 42 per cent. of the income of the municipalities. Schemes for extending the water supply and improving the surface drainage of Dacca were under consideration, and progress was made with conservancy reforms. At Chittagong, Narayanganj, and Dinajpur schemes for improving the water supply were in process of completion or under consideration. The smaller municipalities cannot afford costly works for a water supply, which has generally to be provided by the construction of wells and tanks, as funds permit. A special inquiry was made regarding the unhealthy tracts of the Faridpur, Rajshahi, and Rangpur districts. A sanitary engineer for the province has been appointed.

Madras. The new drainage and water-supply works for Madras city were entrusted to a special engineer from England. The lack of proper drainage in a large part of the city and a deficient water supply are the most serious sanitary defects. Good work is being done in filling up disused tanks, wells, &c. The new slaughter-house is approaching completion.

During the year waterworks were completed at Vellore, Gudiyattam, and Nellore, and improvements of the Coconada and Cuddapah waterworks were in hand. A protected water supply now exists in 17 towns, but the people frequently continue to use objectionable sources of drinking water. The Ootacamund drainage works were nearly completed.

Bombay. The works in connection with the scheme for subsoil and surface drainage in Bombay city, commenced in 1903-4, were completed, and the works connected with the Malabar Hill sectional sewerage made good progress.

At Pandharpur, an important place of pilgrimage, an extensive drainage scheme was put in hand, and the improvement of the water supply was considered. Among other projects for water supply improvements were those of Dharwar, Hubli, Ahmednagar, and Hyderabad (Sind). The Shone system of drainage was being extended at Karachi. The Local Government has announced the grant of liberal aid to municipalities and local boards for sanitary works.

Vessels for the Red Sea pilgrim traffic were cleansed and freed from rats under the direction of the Bombay Port Health Officer. The pilgrims, who numbered 21,867, were medically inspected and their clothing and bedding thoroughly disinfected before embarkation.

HOSPITALS, DISPENSARIES AND ASYLUMS.

The civil hospitals and dispensaries in India, which numbered 2,514 in 1907, against 2,464 in 1906, treated 412,425 indoor and 24,469,548 outdoor patients during the year. The great bulk of their income is derived from government and local and municipal funds, and their total expenditure in 1907 was £771,300. In addition there is a large number of special police and other medical institutions, as well as many private institutions which are not State-aided. These numbered 1,471, and provided treatment for 130,574 indoor and 6,227,504 outdoor patients. A satisfactory feature is the increased popularity of the dispensaries among women and children. Bengal had the largest number of indoor patients, followed by the United Provinces and Madras. Madras had by far the largest number of outdoor patients. The principal diseases treated are malarial fevers, diseases of the digestive system, ulcers and other skin diseases, diseases of the eye, and diseases of the respiratory system. Over 1,121,000 surgical operations were performed. In recent years the medical institutions in Calcutta have been greatly extended, and in Bengal, outside Calcutta, 41 new dispensaries have been opened in three years. Comprehensive reforms have been effected in the general management and equipment. In Bombay extensions of several hospitals were in progress; a scheme for a Central Nursing Service for the whole Presidency was nearing completion. New civil hospitals were provided at Karachi, Belgaum, and Larkana. In the United Provinces there has been a great extension of facilities for surgical operations. During the year, 17 new hospitals and dispensaries were opened in Burma. Hospital extensions were made in Madras. There are Pasteur Institutes for anti-rabic treatment at Kasauli and Coonoor (recently opened), and the number of patients treated was 1,349 and 186 respectively.

The treatment of lunatics at asylums prevails on only a small scale in India, where in comparison with European countries insanity appears to be infrequent. The census of 1901 showed a decrease of nearly 11 per cent. in the number of insane since 1891. The decrease occurred in nearly every province, and was ascribed in many of them to the high death-rate of the insane in famine years. The number admitted into asylums in 1907 was 1,533, the average for the five years to 1907 being 1,517. The total asylum population of the year was 7,141. The causes of insanity are not very accurately classified, but the most important alleged cause is the use of hemp drugs. The expenditure of the 24 asylums amounted to £64,600, most of which was borne by the State.

There are many leper asylums, of which may be mentioned the Madras Government Leper Asylum, the Matunga Leper Home, Bombay, the Trivandrum State Leper Asylum, and the Calcutta Leper Asylum, the last three having accommodation among them for about a thousand lepers. There are also many asylums or homes, frequently under some sort of Government supervision, including about 50 asylums of the Mission to Lepers, at which nearly 4,000 persons were reported to have been treated in a recent year. The census of 1901 showed a decline in the number of lepers to 97,340, compared with 126,244 in 1891, and the proportion works out to 48 male and 17 female lepers per 100,000 of the population. Berar had the largest proportion of lepers (2 per mille), followed at some distance by Assam, Bengal, the Central Provinces, Burma, Madras, and Bombay, in that order.

FAMINE.

Owing to the late arrival and untimely close of the monsoon of 1907, the great majority of districts in the United Provinces received only five weeks' rain instead of the normal minimum of twelve. The rains, which were not general till late in July, ceased in most districts before the end of August. Hot winds in September dried the soil and withered the standing crops. A widespread failure of the autumn harvest and a serious reduction in the area and out-turn of the spring crop forced large numbers of the population to resort to the Government for relief. In spite of the fullest extension of irrigation, the autumn and spring harvests yielded only 31 and 60 per cent. of the normal respectively. The lines of famine policy were those laid down in the code which has been based on the experience of former famines and the recommendations of commissions. The executive was faced with the necessity of providing direct measures of famine relief over an area of 66,000 square miles with a population of nearly 30 millions. Famine was declared in the whole or part of 19 districts, and the full measure of relief contemplated by the code was undertaken, including in all cases relief works with relief to dependants. In the rest of the province a moderate amount of gratuitous relief was given, combined in many

FAMINE. districts with aided works and, in a few cases, with civil works and poor-house relief. For the protection of cattle all Government forests were opened for the free cutting and removal of grass, and hay was sent from the forests to districts in need of fodder. Moreover, the forests were opened for the free collection of edible produce.

When the likelihood of distress was seen, orders were given to cut down expenditure in the province as far as possible, and to grant advances to the full extent necessary. Advances were consequently made on an unprecedented scale. The total advances amounted to £1,830,000, of which more than one-half was for seed, nearly one-fourth for wells, and about one-eighth for cattle. The liberal advances put heart into the people by enabling them to face the failure of the autumn harvest and placing them in funds for the sowing and irrigation of the spring crop. Further, 36 per cent. of the land revenue demand for the autumn harvest, and 16 per cent. of that for the spring harvest, in the affected districts were remitted or suspended, the remissions amounting to £517,500 and the suspensions to £603,000.

The situation was faced in time, and the distress was throughout under control. The disorganisation normally characteristic of famine was almost entirely wanting. There were no unusual movements of the people. Test works were found unnecessary until November, and full relief measures were not required till 1st December. By the end of that month 42,398 persons with 11,575 dependants were on relief works in five districts in which famine had been declared, while in nine other districts 25,000 persons were receiving gratuitous relief. The numbers rose steadily till the 14th March, when there were 1,411,576 persons on relief, of whom over a million were on works and 369,000 on gratuitous relief. With the harvesting of the spring crop and a fall in prices the numbers fell off, but on 2nd May there were still 1,187,148 on relief. Early in May the large public works were broken up into groups of small works, most of which were placed under the direction of district officers. Dependants were not relieved on these works, and the dependants on the former large public works were drafted where necessary to gratuitous relief. As a result, the numbers on gratuitous relief increased, the total on 1st August reaching 550,000. Owing to the liberal distribution of gratuitous relief to people unable to work or leave home the use of poor-houses was almost unnecessary. The units thus relieved numbered 87,818,584, at a cost of £362,000. By August nearly all the works were closed, and the workers received their valedictory doles. By the end of August nearly all gratuitous relief had also ceased. The rise in the death-rate was smaller than might have been expected, and was due to the fact that the people, weakened by famine, readily succumbed to malarial fever, cholera, and other prevalent diseases.

The works under the Public Works Department and civil works provided for the relief of over 117 million units at a cost of £942,000. The greatest number relieved on public works at any one time was 620,638 workers, with 280,932 dependants, on 14th March, when 181 works were in progress. The work done included the raising of roads and railway embankments, quarrying, excavation and remodelling of canals, cutting irrigation drains, building field and irrigation embankments, and excavation of tanks. The gross cost per person relieved per day was under 1½d., and the average daily wage of workers rather over 1½d. The development of aided village works was an important feature of the relief operations. The money required for these was advanced by the Government to landholders, who undertook the entire management of the works and agreed to repay a proportion of the loan (usually one half) at 6½ per cent. interest. About 3,000 of such works were undertaken and relieved over 15 million units; £55,000 out of £123,000 advanced is repayable. The responsibility of district officers for the care of orphans was strictly enforced.

Charitable relief was administered by local committees in all districts in connection with a Central Charitable Relief Fund, which had nearly £100,000 at its disposal. Most of it was allotted for the purchase of plough cattle on the outbreak of the rains, and for subsistence until the ripening of the autumn crop. The Maharaja of Balrampur undertook almost the whole cost of the relief operations on his large estates in Gonda and other districts, expending £20,000 on direct relief alone. Much other non-official help was also given.

The expenditure directly incurred by Government on famine relief was £1,385,000, and 219½ million people received relief for one day at a rate of rather over 1½d. per unit. The indirect losses of Government from the scarcity amounted to about £750,000, most of which represents remissions of revenue. The total cost of the famine to Government was, therefore, £2,135,000. The loss to the people was enormous. It is estimated that the loss of food-grains amounted to 7 million tons,

valued at £28,000,000, equal to nine months' food supply; and the loss of other crops (cotton, oilseeds, &c.) to £10,000,000.

The Government of India expressed high appreciation of the promptitude and foresight displayed by the United Provinces Government, under Sir John Hewett, and of the smooth working of the whole organisation.

In Bengal scarcity arose from two causes: (1) disastrous floods in August 1907, due to torrential rains in the Cuttack and Balasore districts; and (2) continuous drought affecting the whole province from August to December. In Cuttack, an area of 510 square miles, with a population of 321,869 persons, remained submerged for over three weeks. The area affected in Balasore was smaller, but a large tract under winter rice was seriously affected. Although in both districts many houses collapsed, the loss of human life and cattle was small. Relief, in the shape of food and *takavi* advances, was promptly and adequately given. As the result of the autumn drought, the winter rice, by far the most important crop in the province, was a total failure, except on low lands and in irrigated areas. Test works were carried on and gratuitous relief was given in five districts, and £14,300 was expended on wages and doles. Agricultural loans were freely granted. After the close of the year four other districts were added to the list, and it was found necessary to declare famine in an area of 2,261 square miles with a population of 237,637 in Ranchi district.

In the autumn of 1907 the premature cessation of the monsoon was followed by a serious failure of the *kharif* crops, especially in the northern districts. A sudden rise of prices to famine level caused much distress, not only in those districts but also in the towns of less affected tracts, and the weavers of Nagpur and Burhanpur especially suffered. Early in 1908, it became necessary to relieve the people at Burhanpur, and a small amount of famine relief was granted in the northern and central districts. The cold weather of 1907-8, however, brought ample rain, and, with an unexpectedly good *rabi* harvest, there was no great extension of famine relief up to the end of March 1908, though prices continued at famine rates. Mortality remained very low, and the most affected districts were fortunate in escaping epidemic disease. The people for the most part showed a remarkable power of resistance to the calamity. Agriculturists were aided by liberal suspensions and remissions of revenue. The small amount of surplus labour was provided for by an extension of ordinary public works and by the distribution of loans for works of agricultural improvement which were usefully spent. The set-back was only temporary, and a speedy return of prosperity was anticipated.

Owing to the drought there was great agricultural depression. Test works, however, which were opened at Rohtak, attracted very few workers, while on a famine work opened in Gurgaon from January to July the maximum number of persons on relief was only 1,758.

EMIGRATION AND MIGRATION.

(For further details see *Statistical Abstract for British India, Tables 191 and 192.*)

Emigration from India, so far as it is brought under the cognizance of Government, is mainly regulated by Act XXI. of 1883 and the Rules issued under its provisions. Emigration to Ceylon, to the Straits Settlements, and for employment under Government in East and Central Africa, is, however, excepted from the restrictions of the Act. By Section 8 of this Act, natives of India are permitted to emigrate, under contract to labour for hire, only to such countries as have satisfied the Government of India that sufficient provision is made in them for the protection of Indian immigrants. A similar protection was extended by Act N. of 1902 to natives of India engaged to emigrate, individually or in small parties, to work as artisans, for the purposes of an entertainment or exhibition, or for service in restaurants or other places of public resort. The Local Government is now empowered, before permitting such emigration, to impose such terms and conditions as it considers necessary in each case. Emigration, otherwise than under contract to labour or work in one of the above capacities, is not controlled by legislation.

No important administrative measures were adopted during the year under review.

Orders were issued by the Government of India during 1906 for measures to be taken to diminish mortality from cerebro-spinal meningitis in emigration depôts and on emigration ships. A rule was also made under the Act of 1883 to provide for the detention of lunatic emigrants in separate compartments on board ship.

There were seven emigration agencies at work during the year at Calcutta, six representing British colonies and one the Dutch colony of Surinam. The total

number of labourers requisitioned fell from 13,276 in 1906 to 8,414 in 1907. The number supplied during the year was 6,894. There was no alteration in the terms offered to intending emigrants. The number of recruiting licences granted was 566, as compared with 768 in 1906, and of these 35, or 6.18 per cent., were subsequently cancelled. The total number of emigrants registered during the year was 13,160, giving an average of 23 emigrants per recruiter, as against 28 in the preceding year. This number was contributed by the different provinces in the following proportions:—United Provinces, 85.12 per cent.; Bihar, 6.34 per cent.; Bengal, 5.61 per cent.; Punjab, 2.12 per cent.; Central Provinces, 0.72 per cent.; Ajmere, 0.07 per cent.

The number of emigrants admitted to the Calcutta depôts was 10,214, or 9,200 less than in 1906. Of the remainder, 2,278 were rejected subsequently to registration as unfit to emigrate. The percentage of deaths in the depôts was 0.74, as compared with 0.68 in the preceding year, and the percentage of rejections increased from 9.4 to 12.65. The percentage of desertions decreased from 2.54 to 1.79. After deducting casualties of all kinds, there remained 8,290 emigrants available for despatch to the colonies, of whom 7,178 actually embarked during the year, as against 14,035 in the previous year. They were distributed as follows:—Trinidad, 1,868; Demerara, 1,830; Surinam, 1,053; Fiji, 758; Jamaica, 606; Natal, 476. The total number shipped included 1,871 women and 284 returned emigrants who re-emigrated. The death-rate on the ships carrying emigrants was 0.75 per cent., 2 out of the 54 deaths that occurred being due to cerebro-spinal fever, 31 to measles, and the rest to chest affections and other diseases. There were no deaths from cholera.

The number of emigrants who returned from the several colonies was 4,212, and their ascertained aggregate savings amounted to upwards of £50,000. The average savings per head varied from about £19 in Fiji to about 3s. 6d. in Mauritius; but 650 adults—15.43 per cent. of the total number of returned emigrants—brought back no savings.

There was a slight increase in the average amount remitted by resident immigrants in Mauritius, Fiji, and Jamaica, and some decrease as regards Natal, Demerara, and Trinidad. The average was again highest in the case of Natal (about £1), and Fiji was again the only other colony where the average remittance exceeded one rupee.

Madras. The numbers of emigrants embarking from Madras for Natal and Fiji respectively were 5,963 and 796, the corresponding figures for 1906 being 7,994 and 879. More than half the emigrants to Natal were from Madras, Chingleput, and North Arcot districts. Madras, North Arcot, and Tanjore districts supplied more than half the number for Fiji. No emigrants went to Trinidad, Mauritius, or the Seychelles. Two thousand four hundred and twenty-one emigrants returned from Natal with savings amounting to £15,240, 159 from Mauritius with £143, and 205 from Réunion with £188.

As regards non-regulated emigration, the number of emigrants to the Straits Settlements increased from 52,306 to 62,537, of whom 55,511 started from ports in the Tanjore district. The considerable decrease in the number of passengers to Burma and Ceylon was due, in the former case, partly to increased steamer fares and plague at Rangoon; in the latter case, partly to a better season in the Tanjore and Madura districts and partly to the decreased demand for labour in the island.

Bombay. The number of emigrants shipped from the port of Bombay rose from 52 to 254. Of these, 206 were bound for Mombasa for service on the Uganda Railway; 229 of them were Punjabis. From Karachi 177 emigrants left for service on the Uganda Railway and 76 for Persian Gulf ports; 123 were from the Punjab and 82 from Sind. The number of emigrants who returned to Bombay was 152, and to Karachi 70. From Broach 374, and from Surat 720, persons emigrated to South Africa. The decrease in the latter case (the number was 2,000 last year) was due to the recent restrictive legislation.

MIGRATION. Assam. The conditions regulating the recruitment of the labour force for the tea-gardens, oil-refinery, coal mines, and saw mills of Assam were substantially altered during the year under review, by the orders of the Government of India, issued on the recommendations of the Labour Inquiry Committee, referred to in last year's Report. Control over contractors has been tightened, recruitment by unlicensed contractors has been abolished, and recruiters may only be licensed in their own districts. In order to stimulate *sardari* recruitment, the whole of the United Provinces and the Patna and Bhagalpur districts of Bengal have been closed to contractors, and new areas have been thrown open to garden *sardars* in Madras. Sections 118-121 of

Act VI. of 1901 have been withdrawn, and in consequence a coolie who comes to Assam as a free emigrant can no longer be placed under contract under that Act on arrival. A contract must in future be entered into with the intending emigrant when he is in his own country and among his own friends, and when he can appear before a magistrate who knows his own language. This has led to a decrease of 11,580 contracts in the labour districts. Also, by the withdrawal of sections 195-6, the right of private arrest has been abolished.

The total labour population at the end of June 1908 was 739,795, the increase of 55,587 on the figures for the preceding year being due mainly to famine or scarcity in some of the recruiting areas. The number of "Act" labourers, practically all of whom were employed in the Assam valley, was 61,430, as compared with 69,841 in 1906-7. The number of immigrants increased by 38,891 to 84,824, of whom the largest numbers came from the United Provinces and Bengal, though Madras and the Central Provinces showed the largest relative increase. Of the 13,312 adults imported under the Act, 4,890 were recruited by *sardars* and 8,422 by contractors; the corresponding figures for 1906-7 being 6,009, 3,060, and 2,949. There was a large increase in mortality during transit, owing to outbreaks of cholera, the number of deaths rising from 96 to 713. The number of complaints of fraudulent recruitment decreased from 89 to 72; fraud or irregularity was proved in 27 cases. As regards wages, in the case of "Act" labourers the average rate for both men and women showed a small decrease; in the case of "non-Act" labourers, the wages of men decreased, but the wages of women and children improved.

The registered rate of mortality rose, owing to cholera, from 24.12 per mille in 1906-7 to 32.27 per mille in 1907-8, being highest in the case of coolies imported from Madras and the Central Provinces. Only one complaint of ill-treatment was lodged by a coolie against a manager, and it was dismissed. Miscellaneous complaints filed by coolies declined from 157 to 71, and 513 applications for discharge certificates were made, certificates being granted in 294 cases. Cases in which managers were the complainants in criminal proceedings decreased from 14 to 6. Desertions increased from 2,525 to 2,730. The relations between planters and villagers were generally good.

The returns for Rangoon for 1907 show a decrease of 52,040 immigrants and 20,002 emigrants, as compared with the previous year's figures, but the figures are higher than in any year preceding 1906. The total net increase to the population of the province by immigration amounted to only 3,520, as compared with 40,718 in the previous year.

Madras. The number of passengers, excluding indentured emigrants, who arrived at the several ports of the Madras Presidency during the year was 284,431, against 294,919 in 1906. Of this total, 93,792 came from Burma and 142,948 from Ceylon, the decrease in the former case being due to increase in steamer fares.

Bombay. Practically no movement of the population occurred in Bombay during the year under report, beyond the usual seasonal emigration in search of employment.

PRICES.

PRICES.

(For further details see Statistical Abstract for British India, Tables 204 to 210.)

General. The rise in the prices of commodities in India during recent years has been the subject of much discussion. The marginal table of prices during the ten years to 1907 has been compiled from Government returns showing the index numbers of the

Year.	Index Number for Articles imported.	Index Number for Articles consumed or exported.	Index Number for Food-grains (Retail Prices).
1873	100	100	100
1898	80	102	139
1899	87	103	137
1900	97	124	192
1901	96	116	157
1902	86	113	141
1903	88	103	126
1904	93	104	117
1905	96	117	147
1906	105	141	179
1907	116	148	180

prices of: (a) 11 articles imported; (b) 28 articles consumed in India or exported; (c) food-grains. The prices under (a) and (b) are wholesale, and under (c) retail. The index number of each year represents a simple average of the separate price ratios of the selected articles. In showing the variations the prices of 1873 are taken as 100.

In spite of fluctuations the general tendency of prices has been upward, the rise in the prices of articles produced in India being especially noteworthy. It was very marked in rice, barley, and the various millets. It is necessary to observe that 1900 was a year of

PRICES. severe famine, and that for several years subsequent thereto the tendency of prices for articles of Indian produce was downward. The course of prices of imported articles was steadily upward after 1902, while a sharp and rapid rise in the prices of articles of Indian produce began in 1905. Many causes may have contributed. There has been a rise in gold prices in the world generally. Increased facilities of transport in India have steadied prices and probably raised their general level. Exports of produce may in some cases have raised the home prices of the same or similar produce. Abnormal prices realised for exported jute brought extraordinary gains to the Bengal jute districts. The influx of capital for the development of the country, industrially and commercially, has tended to raise prices. In 1907-8 the widespread failure of crops raised prices, particularly in Northern India. Landholders whose land revenue assessments have been settled for long periods, and cultivators who hold land at fixed rentals, reap an advantage from high prices. It is probable that the trading classes have benefited by the rise in prices, and there is reason to believe that owing to the enhanced demand for labour, due to industrial activity, the advance in wages has kept pace with the rise in prices in great industrial centres. But where wage rates are more or less customary, or where incomes are more or less fixed, as in the case of pensioners, public and private employees, and the professional classes, the increased cost of living is a serious matter. Extra allowances, known as grain compensation allowances, have been made to Government servants to cover the cost of dearer food.

The following paragraphs relating to prices in 1907-8 are based on statements contained in agricultural and other reports.

Bengal. The prices of food-grains, which had attained an unusually high level in 1906-7, continued to rise generally. This was mainly attributed to the small outturn of crops following a series of bad harvests. It is believed that the abnormally high prices received by cultivators for jute in recent years has enabled them to increase their own consumption of food, and also to withhold their produce from the market.

United Provinces. Prices, which had been generally at a high level since 1905, rose still further during 1907-8, owing to the existence of famine, and from November to February wheat was at 7 to 8 seers per rupee, the normal being about 15 seers. The prices of the coarser grains, on account of the scarcity of food, approximated more closely than usual to that of wheat. There was a shortage of gram, and towards the end of the year it was dearer than wheat. Barley was for some months the cheapest grain over a wide area. The price of *gur* (coarse, unrefined native sugar) was abnormally high in spite of the competition of cheaper imported sugars.

Punjab. Prices were slightly above normal at the beginning of 1907-8, and rose rapidly with the failure of the monsoon and the active demand for grain for the United Provinces. The *rabi* crop being short, a very high level of prices continued till the close of the year. As regards particular crops, the price of rice was 86 per cent., of wheat, 77 per cent., of barley and jowar, 96 per cent., of bajra, 84 per cent., and of gram, 114 per cent. above normal.

North-West Frontier Province. Owing to drought, which injured the out-turn of spring crops, and to the prevalence of famine conditions in parts of Upper India, the prices of all food-grains remained high throughout the year.

Central Provinces and Berar. In the first part of the year prices of food-grains were high, and cultivators who had enjoyed good harvests in the previous year benefited greatly by the conditions of the market. The failure of the autumn harvest, however, raised prices to famine rates.

Burma. The price of paddy in 1907-8 was much above normal in most districts, and in Lower Burma exceptionally high prices were paid for paddy required for export. In Upper Burma the high prices were largely due to extensive crop failures in unirrigated areas. The average price of paddy in Lower Burma was Rs. 2.4.0 per maund, while in Upper Burma it varied from Rs. 1.11.0 to Rs. 2.11.0.

Eastern Bengal and Assam. The rise of prices, so marked in the previous year, was more than maintained. The prices of all food-grains were extraordinarily high, and at one period common rice was selling at five seers to the rupee at the headquarters stations in all districts of the Dacca Division and in Chittagong. Special causes of the high range of prices were the shortage of the previous year's rice crop, the extended area placed under jute, and the increased purchasing powers of those who profited by the recent boom in jute. The price of jute fell heavily during 1907-8.

Madras. There was a further general advance in prices during the year. Rice, ragi, and cumbu rose in almost every district.

PRICES. After the partial check in 1906-7 prices universally resumed their upward tendency, though the rise was less marked in the Karnatak and Konkan. It extended to all the principal food-grains. Low stocks, a poor season, and a large demand from Upper India were among the causes of the high prices.

WAGES.

WAGES.

(For further details see Statistical Abstract for British India, Tables 201 to 203.)

The upward tendency of wages was maintained during the year, the increase being specially marked in the vicinity of Calcutta. This is due partly to the growing demand for labour resulting from the opening of new mills, collieries, brickfields, and railways, partly to the high prices of food-grains. In some districts it is ascribed to the emigration of the labouring classes to Assam and elsewhere. The Bengal Government has arranged for a quinquennial wage census.

The position of the labouring classes has been much strengthened in recent years by a general rise in wages in both urban and rural areas. During 1907-8, in spite of famine conditions, labourers were able to find a large amount of work at good wages, owing to the large demand in factories and elsewhere. The increased emigration from the eastern districts and from Oudh to Bengal, Assam, and Burma has rendered the population less dependent on agriculture, as the emigrants remit substantial sums to their relatives.

In August 1906, a wage census was taken in the province with the view of ascertaining the standard rates of wages in each district or homogeneous tract. In the centres of industry the wages of unskilled labour are usually 3d. to 4d. a day, while masons receive from 5d. to 10d. a day. As regards more skilled workmen, there are great variations: blacksmiths, 16s. to 2l. a month; firemen, 10s. 8d. to 24s. a month; fitters, 1l. to 3l. a month; and carpenters, 16s. to 33s. 4d. a month. Wages of carpenters and blacksmiths vary with the degree of skill required, and are highest in the largest centres. Masons get the best pay in the large cities, where the building trade is generally brisk. In rural areas the cash wages of labourers are often supplemented by allowances of parched gram or tobacco valued at ½d. a day. In the north-west districts the cash wage of an ordinary agricultural labourer employed in his village averages about 3d. a day, while in the west and west central districts the rate is about 2½d., but tending up to 3d. a day. In the northern hill-tracts the rates are 2d. to 2½d., and in the Bundelkhand and Mirzapur districts, 1½d. to 2d. Where grain wages are given their value (if converted into cash at normal grain prices) is slightly lower than the prevailing cash rate. In the east central districts the average grain wage is 2 lbs. of grain, which at normal prices represents about 2d. a day. In this tract grain wages have survived to a greater extent than in the west. In the eastern districts, the grain wage is equivalent to 1½d. to 2d. a day, with a tendency to rise higher. Railway station coolies receive a good deal more than agricultural labourers in the same districts. In the rural areas carpenters and blacksmiths (who relatively are not numerous) earn from 4d. to 6d. a day. The wages of ploughmen ordinarily fall below those of coolies, but the limits are wide. The wages of grooms (*sais*) also vary greatly.

Although the agricultural wages above described are very low, the village labourer has certain advantages which make him disinclined to move, and which go to explain the short supply of labour in towns. His food in ordinary years is cheap. He pays no rent and finds his fuel in the fields and in the jungle. There are perquisites at harvest and other times. His wages are supplemented by the earnings of his wife and children, for the whole household works. He may keep a goat or a cow, and sometimes he works a garden plot or a field on his own account.

In spite of the bad season, work was readily obtainable at high wages. Labour becomes more mobile every year and labourers move of their own accord to places where remunerative employment exists. There is a considerable scarcity of labour, due to the heavy mortality from plague in recent years and to the demand arising from canal works and extensions of cultivation. Hence wages tend steadily upwards in most districts. Wages in factories are usually higher than agricultural wages.

Wages of labourers rose during the year in Hazara, which suffered much from the drought. The demand for unskilled labour is increasing for canal and other works, while plague has reduced the supply. Wages have risen all round, and in many places landowners find it difficult to secure field-labour at the old rates.

WAGES.
Central
Provinces
and Berar.

Wages have risen in greater proportion than prices. Labour is being attracted from the villages to towns, where sufficient labourers cannot be obtained, although the rates of wages have greatly advanced during recent years. In factories there is a particularly strong tendency for the wages of skilled labour to rise, as there is a difficulty in obtaining trained operatives.

Burma.

In Lower Burma the rates of wages were much the same as in the previous year. The condition of the factory operatives is good, and unskilled labourers are said to be generally better off in factories than in paddy fields.

Eastern
Bengal and
Assam.

Throughout the greater part of the province wages for all kinds of labour were high. Except in the Surma Valley the wages of labourers rose with the increase in the price of food-grains and generally stood at a high level. In the Surma Valley wages were in some parts stationary, while in others they declined, owing to a lessened demand for labour.

Madras.

The emigration of the best coolies is tending to make labour scarce in some districts, and the same wages have to be paid for inferior labourers. The increased cultivation of the ground-nut has caused a greater demand for hand labour in certain parts, and in the harvest season they receive as much as 8d. per day. Rice factories, using hand-millers, have become more numerous, and they provide well-paid work for a large number of coolies. Wages of coolies engaged by the day have risen more than those of coolies engaged by the month or year, the latter being often paid by a share of the crop. In almost all parts there was a good demand for labour throughout most of the year.

Bombay.

The commercial and industrial expansion of cities like Bombay, Karachi, and Ahmedabad, the growth of mining, and the construction of public works offer a wider field every year for skilled and unskilled labour. With the increased demand wages tend upward. The high prices of food have also necessitated higher wages. There is a shortage in the supply of agricultural labourers, who are therefore able to command relatively high wages.

GENERAL
REMARKS.

GENERAL REMARKS.

The following general notes on the condition of the people during the year are based on observations recorded by the Provincial Governments.

Bengal.

During 1907-8 the rainfall was generally deficient and ill-distributed. In some parts rain was for a time excessive, and Orissa suffered severely from floods, but the early cessation of the monsoon caused scarcity of water in tanks and wells and wide-spread failure of the winter rice crop. All classes were seriously affected. Famine relief works had to be opened in several districts, and loans were made by Government to agriculturists. (See also page 125.) The lower middle and labouring classes, whose incomes were received in cash, suffered from the high prices of food-stuffs, consequent on the bad harvests. The rise in prices was attended by a general increase in the wages of labourers in the larger industries, such as railway construction and coal mines. There are many signs of economic progress. High wages earned in mills and factories in the Burdwan division have enabled many people to maintain a high standard of comfort. In the Presidency division the weavers have benefited by the *swadeshi* movement, and most classes indulge to a greater extent in luxuries. In the province generally the standard of living appears to be rising, especially in the towns, as shown by the demand for better clothing, and for cigarettes, tea, and imported sugar.

United Pro-
vinces.

After a succession of bad seasons the United Provinces enjoyed fair prosperity in 1906-7. The year 1907-8 began well, but the premature cessation of the monsoon of 1907 involved the most complete failure of the autumn harvest on record and a serious reduction in the area and out-turn of the spring harvest, followed by great hardships for all classes of the population. The people suffered severely from malarial fever, which seriously delayed the reaping of the autumn harvest and the sowing of the spring crop, and thus contributed to maintain high food prices for a longer period. All persons, especially those in towns who live on small fixed incomes, were severely affected by the high prices of food-grains. (See also page 123.)

Punjab.

In the Punjab the rainfall was untimely and ill-distributed everywhere. The monsoon arrived late, and ceased prematurely; the winter rains were late and inadequate, and drought prevailed in February and March. One-third of the total

sowings failed, and the province thereby suffered an enormous loss. Owing to the scarcity and to the export of grain to the famine-stricken United Provinces, prices rose to a very high level. On irrigated lands owners were compensated for reduced outturns by high prices. But for everyone else the year was one of trial, though the people stood the strain well. Agricultural depression was met by liberal suspensions and remissions of land revenue. Relief works were opened in Rohtak and Gurgaon, but were not much required.

A period of drought, lasting from October till January, and coinciding with an outbreak of malarial fever, had an injurious effect on both the autumn and the spring harvests. All food-grains were dear, but stocks were generally sufficient, except in Hazara, where the people felt the pinch of scarcity, even after the *rabi* grain had been harvested.

The premature cessation of the monsoon of 1907 led to a serious failure of *khari* crops, and brought distress, especially in the northern districts. A sudden rise of prices to famine level caused distress in the towns as well as in the rural areas of the districts where crops failed. Good rain in the cold weather ensured a satisfactory *rabi* harvest, though prices continued at famine rates. (See also page 125.)

In Lower Burma agricultural conditions were on the whole favourable during 1907-8, and the rice crop was above normal. Good crops and high prices for produce brought increased prosperity to the agriculturist. But in the dry zone of Upper Burma, except in Magwe, the season was exceptionally poor, short crops prevailed, and there was scarcity in several districts. Agriculturists felt the pinch of poverty, and sales of cattle to supplement incomes were more numerous than usual. Agricultural advances were made in seed and money. There was a satisfactory decline in cattle disease.

The year was not unfavourable to agriculturists, who form the bulk of the population. Although heavy rainfall with floods, followed by dry, cold weather, adversely affected the rice and jute crops, the high prices of the produce more than made up for the poor out-turn. The increase of jute cultivation and the great demand for food-grains, with improved communications, have materially altered, during recent years, the economic conditions under which the ordinary raiyat lives, and he now tends to accumulate money instead of merely storing food-grains for his family's consumption. The middle classes, who depend on fixed incomes, landless labourers, and beggars, have suffered from high prices, and relief operations were undertaken during the year. There were considerable losses from cattle disease in the Assam Valley. Some improvement in the weaving industry has occurred, and steps are being taken to reform the inefficient methods of production.

The year to 30th June 1908 was an average one. The south-west monsoon was deficient and ill-distributed, but the north-east monsoon was favourable. The general condition of the agriculturists is increasingly prosperous, except in parts of Bellary and Kurnool, which have suffered from bad seasons. The delta districts are especially prosperous. Coolies are doing well by taking up patches of land for the cultivation of ground-nuts and sugar-cane in certain districts. The rise in the price of food-grains continued.

In 1907-8 the monsoon was unfavourable and the harvests generally unsatisfactory. For a time famine seemed probable in some districts. But liberal remissions and suspensions of land revenue left all but the poorest agriculturists with enough for present needs. Agriculture suffered from a shortage of cattle, due partly to rinderpest. There was ample employment in non-agricultural work.

GENERAL
REMARKS.

North-West
Frontier Pro-
vince.

Central Pro-
vinces and
Berar.

Burma.

Eastern
Bengal and
Assam.

Madras.

Bombay and
Sind.

CHAPTER XVII.

ARMY AND MARINE.

(For further details see Statistical Abstract for British India, Tables 70 and 180 to 190.)

ARMY.

RMV. The sanctioned establishment of the army in India for 1907-8 and its actual strength on 1st April 1908 were as follows:—

	Sanctioned Strength.	Actual Strength.
British troops	74,405	73,947
Native troops	158,062	149,950
British Officers of Native troops	2,844	2,726
Staff officers, &c. (British)	861	1,091
Total, 1907-8	236,172	227,714
„ 1906-7	236,339	228,434

During 1907-8, as in the previous year, four battalions of Native infantry, not reckoned as part of the Indian establishment, were employed in the colonies, and two battalions from the Indian establishment were absent in China.

The sanctioned establishment of the Native army reserve was 35,736, and its actual strength on 1st April 1908 was 34,816, as against 32,944 on 1st April 1907.

The number of Volunteers in the whole of India on 1st April was as under:—

	1907.	1908.
Enrolled strength	33,606	34,962
Efficients	31,556	33,348
Reservists	1,747	2,086

The net expenditure on the army (exclusive of Special Defence Works) in 1906-7 and 1907-8 was as follows:—

	1906-7.	1907-8.
Effective charges	£ 15,462,027	£ 14,628,955
Non-effective charges	2,978,249	2,996,099
Total	18,440,276	17,625,054

Progress was made during 1907-8 in various ways with the working out of the details of Lord Kitchener's scheme of reorganisation.

The following changes affecting the Indian army came into effect during the year. Arrangements were made for disbanding two Moplah battalions and for raising in their place two battalions of Gurkhas, making up a total of ten regiments of Gurkhas, each of two battalions.

The pension rules of the Native army were revised and improved, the principal changes being the substitution of 18 for 21 years as the period of service qualifying for the ordinary pension (Rs. 4 a month in the lowest grades), and the general introduction of invalid pensions, in place of gratuities, for soldiers invalided after periods of between 15 and 18 years' service. The object in view in the changes made was to prolong the colour service of efficient soldiers and to facilitate the discharge of the inefficient.

The punishment of flogging in the Native army in time of peace was abolished, except for offences for which that punishment is permissible in civil life.

The method of selecting officers for promotion above the rank of Lieut.-Colonel was altered; the system of selection to fill appointments giving place to a system of selection to fill vacancies on an establishment. This change was consequent upon a similar change made in the rules for officers of the British Service. Some increase was made in the rates of unemployed pay of General Officers of the Indian army, and of officers of lower rank who entered the Indian army on or after 1st July 1881.

It was decided that civil accountants should be introduced into the Military Accounts Department. The Supply and Transport Corps was reorganised. Until 1905 it had been entirely under the management of the Government of India. In that year it was divided into two branches, one under the Government of India and one under

the Commander-in-Chief. During the year under review it was brought entirely under the direct control of the Commander-in-Chief.

The period of probation during which officers on trial for departmental service are eligible for reversion to regimental duty was reduced to three years for all departments.

The only active military operations during the year took place towards the end of it, when it was found necessary to punish the Zakka Khel for a series of raids, and a brief punitive expedition into the Bazar Valley was successfully carried out under the command of Major-General Sir James Willcocks.

Health of the British and Native Armies.—The year 1907 was not an unhealthy one, and in the British Army the rates of admission to hospital, of constantly sick, of mortality, and of invaliding were all much lower than in 1906, and than in the antecedent quinquennium, as appears from the table below. There was a decrease in sickness, due chiefly to fewer admissions on account of venereal diseases and ague, which, as usual, were the chief causes of sickness. The admission rate for ague was 152 per 1,000, or 20 per cent. of the total sickness, and the rate for all venereal diseases in 1907 was 90 per mille of strength, which compares favourably with 117 in 1906 and still more with 486 in 1897. The marked decline in venereal diseases is attributed to the encouragement of healthy pastimes, to education and a better moral tone, and to the growth of temperance, as well as to improvement in the methods and the longer duration of treatment. The chief causes of death were, as usual, enteric fever and abscess of the liver, the mortality from the former being 2.77 and from the latter 1.01 per mille; these two causes alone accounted for 46 per cent. of all deaths. The mortality from enteric fever was the lowest since 1885.

The health of the Native troops was also excellent; the constantly sick rate, the invaliding rate, and the death-rate being the lowest on record. The chief cause of sickness was, as usual, ague, but the admission rate for 1907 fell to 220.5 per mille, or 35 per cent. of all cases of sickness, as against 261.8 in 1906. Pneumonia, which, as usual, was the chief cause of mortality, accounted for 32 per cent. of all deaths. Despite the continued and severe prevalence of plague among the civil population in 1907, the disease did not appear in epidemic form among the Native troops, and there were only 56 deaths from this cause during the year.

The following table shows that the admission rate among British troops during 1907 was nearly 1½ times as high as that among Native troops, that the constantly sick rate was more than twice as high, and the invaliding rate more than four times as high:—

	Ratio per Mille of Strength.					
	British Troops.			Native Troops.		
	Average 1901-5.	1906.	1907.	Average 1901-5.	1906.	1907.
Admissions into hospital	983.7	870.8	756.4	683.6	683.5	628.9
Constantly sick	60.7	51.4	46.4	25.8	23.0	21.7
Deaths	12.11	10.43	8.18	9.69	6.57	6.27
Invalids	32.09	28.36	25.50	11.49	7.05	5.76

MILITARY WORKS.

The expenditure on military works in 1907-8 amounted to £1,109,675. There was also an expenditure of £116,287 on Special Defence Works. The corresponding figures for 1906-7 were £1,070,516 and £138,358.

MARINE.

The net expenditure on marine services amounted to £397,338 in 1907-8, as against £482,324 in 1906-7. In this amount are included the cost of the Royal Indian Marine, the contribution towards the expenses of His Majesty's ships employed in the Indian seas, and charges for pilot establishments and vessels, coast lights, and other smaller items.

On the 1st April 1908 the Royal Indian Marine consisted of ten sea-going vessels, including the new troopship "Northbrook," four inland and harbour vessels, a submarine mining flotilla, and a number of small steamers, launches, &c. There was an establishment of 102 executive officers, 81 engineer officers, and 75 warrant officers (including 12 assistant surgeons of the Indian Subordinate Medical Department); and the native crews of the vessels (seamen, artificers, and others) numbered, in all, 1,853.

CHAPTER XVIII.

FRONTIERS AND NATIVE STATES.

FRONTIER STATES.

Baluchistan :
Native States and Frontier.

Drought and bad harvests, together with the high rates of food-grains in India, caused a serious rise in the price of food throughout the Quetta-Pishin, Sibi, and Chagai districts, thereby giving rise to some local distress. The other districts of the province enjoyed better harvests and were less affected by high prices. The public health was good throughout the province, and there was an absence of plague and epidemic diseases. There were no cases of fanatical outrage in any part of Baluchistan during the year under review. The record of police work was satisfactory. The provincial receipts for the year amounted to £227,400, and the expenditure to £227,400, as against £198,700 and £220,800 in the preceding year. The grant for civil works for the year amounted to £39,500. Further progress was made with the work of land survey and settlement. The province is still in a backward stage as regards education, but the progress initiated in recent years was maintained. The conduct of the tribes within the province is reported to have been generally satisfactory. A large number of disputes were settled by the customary jirgas. In the matter of the Phailawagh land dispute between the Marri and Bugti tribes, referred to in last year's Statement, some trouble was caused by the attitude of the Marri Nawab; but he ultimately accepted the decision of Government, and a settlement was arrived at. With the exception of some raiding by Sherani and Sulamankhel outlaws in the Zhob district, peace on the Afghan and Persian borders of the province was undisturbed during the year. The returns of trade along the Nushki-Seistan trade route show that there was a considerable increase in the value of trade with both Persia and Afghanistan during the year under review. There was a serious increase in the illicit arms traffic between the Persian Gulf and Afghanistan, and large quantities of rifles and ammunition were landed on the Persian coast, in spite of the efforts that were made by sea to watch the dhows engaged in this traffic. Measures were taken to prevent these consignments passing through British territory, but, owing to the difficulty of dealing with caravans in Persian territory, the imports into Afghanistan, and thence to the tribes on the British border, could not be prevented.

In the Kalat State the seasons were unfavourable to the crops, and the price of food-grains was high. The area of land under cultivation was on the increase owing to improvements in the security of the country. The administration of the State was satisfactory. In the Las Bela State the people enjoyed a peaceful year, and the administration was satisfactory.

North-West Frontier Province. In the North-West Frontier Province the year was marked by almost constant trouble along the frontier. In the Peshawur and Kohat districts organised gangs of Zakha Khel tribesmen committed a series of daring raids. The lawless acts of this section of the Afridi tribe and their defiance of authority rendered punitive measures necessary. A military force under the command of Major-General Sir James Willcocks entered the Bazar valley on the 15th February 1908. Severe punishment was inflicted on the tribesmen, who speedily came to terms. A satisfactory settlement was effected on the 28th of February, and the troops left the valley on the following day. Papers on the subject have been presented to Parliament.*

Subsequently the Mohmands began to give serious trouble, and in May 1908, after the close of the year under review, it was found necessary to use military force against certain sections of the tribe. The conduct of the operations was entrusted to Major-General Sir J. Willcocks. The Mohmand country was entered on the 15th of May, and by the 28th of that month the tribesmen had submitted. Fines were exacted and paid, and the military force was withdrawn on the 30th May. Papers on the subject were presented to Parliament.* On the western border of the Kohat district there were constant plundering raids by gangs of outlaws from Khattak on the Afghan side of the border. Relations with the Mahsuds were strained and unsatisfactory, and murderous outrages instigated by the notorious Mulla Powindah were rife. In these

* See East India (North-West Frontier). Cd. 4201. 1908.

FRONTIER STATES.

outrages the outlaws residing in Afghan territory across the border took a leading part.

In the Upper Swat country there was constant faction fighting, but the satisfactory relations of Government with these tribes were not disturbed. In Lower Swat the conduct of the people was excellent, and reflected great credit on the working of the tribal jirgas. In Dir the strife between the Khan and his brother continued for a time, but a truce of six months was concluded, and was respected by both parties up to the close of the year under review.

The condition of the Frontier Militia was satisfactory, though cases of desertion occurred in the Southern Waziristan Militia. The Khyber Rifles distinguished themselves during the Bazar Valley operations, and good work was done by the Samana Rifles in connection with the depredations of the Khattak outlaws.

Surveys in connection with the Loi-Shilman railway project were proceeded with.

Both the autumn and spring harvests were adversely affected by a period of drought, which lasted from October 1907 until the second week in January 1908. This absence of rain and prevalence of famine conditions in parts of Upper India had the effect of raising prices of food-grains throughout the year under review. An outbreak of plague, the first appearance of the disease in the province in an epidemic form, was used by agitators as a means of discrediting the British Government.

Kashmir.

The finances of the Kashmir State continued to be satisfactory. The revised budget estimates for 1907-8 showed the estimated receipts at £660,000 against an actual total of £712,600 for 1906-7. The estimated figure for expenditure was £760,000, against £724,000 for the previous year. The total budget grant under public works was £169,500, and the expenditure amounted to £152,500. The estimates included capital expenditure of £96,000 on the Jhelum Power project and £37,000 on the dredging scheme. Special repairs and improvements to the Jhelum valley of Kashmir was got out and surveys completed. In the Jammu Province a cantilever bridge was built at Rajouri over the Tawi river. A large suspension bridge at Kharal, which was washed away by floods in 1906, was rebuilt. The iron suspension bridge at Vailoo on the Leh Treaty Road was completed. The work on the Ranbir canal was pushed on as far as funds would permit. A complete project for the dredging and drainage of the valley of Kashmir was got out and surveys completed.

The working of the Sericulture Department was satisfactory. The rearing season was most successful, yielding a crop of 28,422 maunds of cocoons, a large increase on the previous record. The total production of the Srinagar factory rose from 190,736 lbs. of silk in 1906-7 to 230,939 lbs. in 1907-8, an increase of 21 per cent. Owing to the dulness of the market the stock of silk in hand at the close of the year was unusually large. A Director of Sericulture for Jammu was appointed during the year.

The public health was not altogether good. Cholera broke out in an epidemic form, and caused a high mortality (9,575 deaths). Plague also reappeared in the Jammu Province, causing 142 deaths from 1st June 1907 to end of May 1908.

Ten new primary schools were opened during the year, and a college was established at Jammu. One primary school was also raised to the status of a middle school. The revised estimate of expenditure for the Education Department for the year 1907-8 was £11,600, as against £13,700 in the preceding year.

Relations with the Nepal State continued to be cordial. The successful visit paid by the Prime Minister to England in the summer of 1908 does not fall within the scope of the present review. A charitable hospital was opened at Bhimphedi on the main road from India to Katmandu for the benefit of travellers and the growing population of Bhimphedi. The Durbar also undertook the construction of a reservoir at Pharphing for the purpose of utilising water power to provide electric lighting to the town of Katmandu and drive the machinery in their factories. Other works of public utility were the construction of bridges over five different rivers and the supply of pipe-water to Hoksai and Kirtipur. The total value of trade with British India for the year 1907-8 amounted to £3,411,000; the imports from Nepal being £2,363,500, and the exports to Nepal, £1,047,500.

Sikkim and Bhutan. The rainfall in Sikkim was normal, but the staple crop, maize, was a little below the average. Good prices were, however, obtained. The area under rice cultivation continues to increase, but the rice being of a coarse quality, the better qualities are imported. The price of food-grains continued high. The finances of the State were sound. The gross total revenue during the year was £21,500, and the expenditure amounted to £17,600.

FRONTIER STATES.

The relations of the Government of India with Bhutan continued very friendly during the year under review. The Political Officer in Sikkim, on the invitation of the Tongsa Penlop, attended the ceremony of his installation as hereditary Maharaja of Bhutan which took place on the 17th December 1907. He was cordially received by the Tongsa Penlop and the leading nobles and officials of Bhutan.

Frontier Tribes of Eastern Bengal and Assam.

The tribes on the Northern border were generally well-behaved. The blockades instituted against two sections of the Misluni tribe in 1905-6 were maintained during the year under review. In the Naga Hills on the Eastern border considerable trouble was caused by the lawless tribes across the Tiza and Dikhu rivers. In the Lushai Hills the village of Zongling was subjected to a fine, which was duly paid, on account of the two outrages referred to in last year's Statement. Measures were at the same time concerted between the Superintendent of the Lushai Hills and the Superintendent of the North Arakan Hill tracts for the delimitation of the southern boundary of the Lushai Hills, and for the administration of the tract lying between that boundary and the Arakan Hill tracts in which the village of Zongling is situated.

A demarcation of a boundary between the Chittagong Hill tracts and the district of Akyab in Burma was carried out, by the adoption of a line following the watershed of the Myothit river. In May 1907 two raids were committed by a gang of Maghs living within the jurisdiction of the Ruma police station, Chittagong Hill tracts. In the first raid a head constable and a constable were murdered; in the second, another head constable lost his life and two constables were wounded, and a quantity of valuable property was looted. The offenders were subsequently arrested. In the case of the first outrage two of the accused were sentenced to death and three were transported for life. In the case of the second outrage 20 persons were convicted, and sentenced—5 to transportation for life and 15 to various terms of rigorous imprisonment.

There were numerous boundary disputes between the small States in the Khasi and Jaintia Hills district, but the year was on the whole a quiet one.

Information as to the Manipur State is given on page 141.

BURMA. The Chin Hills.

The feud between the Shandus and Kons in the unadministered territory between the Chin Hills and Northern Arakan, mentioned in last year's Statement, was satisfactorily settled during the year under review. The orders of Government were accepted by both parties. The Kon Chief was removed to Akyab, where he is being kept in confinement, and compensation amounting to £200 payable by the Kons was awarded to the Shandus. The chiefs of the tribes inhabiting the territory which borders on the Pakokku Hill tracts maintained cordial relations with the Superintendent of the Chin Hills, and in the tract situated on the west of the Upper Chindwin district the tribes were quiet and well behaved. Within the administrative borders the conduct of the Chin tribes was good, and their relations with the Burmans of the plains and the tribes of the Lushai Hills and Manipur continued to be satisfactory. Crime was light, and the policy of withdrawing unlicensed guns from the northern tribes gave good results. The condition of the people showed signs of advancing prosperity. Wheat, barley, maize, and irrigated rice were successfully cultivated, and trade with the plains showed a steady improvement. The peace of the Arakan Hill tracts was not disturbed throughout the year.

The Kachin Hills.

Relations with the Chinese Shan States on the Kachin Hills border were generally satisfactory. The customary frontier meeting with Chinese officials was held in January 1908, and a settlement was arrived at in a considerable number of outstanding cases. On the Myitkyina border several incursions into British territory were made by Kachins from the unadministered tracts to the north. The most serious raid was committed by the Sana Kachins, who made an unsuccessful attack on the Military Police Post at Auche in the previous year. In this raid four unoffending persons were murdered. The conduct of the internal administration of the Kachin Hills during the year was satisfactory. Tribute was collected without difficulty, and ordinary crime was very light.

Northern Shan States.

The principal event of the year was the visit of the Viceroy and Governor-General in November 1907 to Lashio, where the chiefs of the Northern Shan States were received in Durbar and also at separate interviews with His Excellency. The principal chiefs of the other Shan and Karenni States were present at a Durbar held by His Excellency in Mandalay.

Friendly relations were maintained with the Chinese officials on the border. The five States which form the charge of the Superintendent of the Northern Division

enjoyed a prosperous year. The crops were good, especially rice and tea, and the trade returns showed a satisfactory increase in the value of both exports and imports. The financial position of the several States was satisfactory, with the exception of the Hsipaw State, the treasury of which it was found necessary to place under Government control. The States generally made liberal allowances for public works, the greater part of which was spent on roads and communications. Attention continued to be paid to the working of mineral resources of the States, and special arrangements were made for policing the mining and railway camps. The Burma Mines Company continued the construction of their railway towards the Bawdwin mines, but the progress made during the year was slow, owing to difficulties connected with labour and engineering.

The Lashio school for the sons of local officials made good progress during the year under review.

Friendly relations with the Chinese, French, and Siamese authorities on the frontier were maintained during the year under review. There were no border cases of any kind on the Siam frontier, but two cases of dakaiti involving the death of four Kengtung traders and the loss of property valued at £2,000, occurred in Siamese territory. The condition of the 38 States which form the charge of the Superintendent of the Southern Division was generally satisfactory. Improvement in administration was marked in Yawnglwe, Kengtung, and Laikha. The rainfall was above the average. The crops were better than in the preceding year, but there was no fall in the price of food-stuffs. The public health was generally good, and the cattle were free from rinderpest except in the eastern parts of the Kengtung State. There was an absence of serious crime during the year. A serious fire occurred at Yawnglwe on the 6th of March 1908. A large number of houses and five monasteries were destroyed. The chief's loss in personal property was very great. Another serious fire took place in Mawmai on the 20th April, when many houses were burnt.

In the more important States due attention was paid to public works, and special activity was shown even by the smaller States in the improvement and maintenance of communications.

Questions relating to the protection of the valuable timber-producing areas engaged the attention of Government. Two forest reserves were notified during the year under review. The total area of these reserves was 257 square miles. Some progress was made in the development of the mineral resources of the States, both in the matter of working mines and prospecting. The trade returns for the year showed a slight increase in the value of exports, and a decrease in the value of imports; the falling-off in the latter being due to a decrease in imports of silver. The school for the sons of Shan chiefs at Taunggyi continued to be well administered.

The seasons in Karenni were favourable to agriculture, but trade in lac and cutch was slack, and the price of timber fell heavily. The public health was good. Friendly relations with the transfrontier officials in Siam were maintained.

Hkun Nan, who succeeded Sawlawi, the late Sawbwa of the Kantarawadi State, took charge of the administration in January 1908. Hkun U, chief of the Kyebogyi State, died on the 27th of January 1908, and was succeeded by his cousin, Hkun Saw. Some of the Karenni chiefs attended the Viceregal Durbar at Mandalay in January 1908.

NATIVE STATES.

NATIVE STATES.

The latest information available as to the administration of the Hyderabad State is for the calendar year 1907.

The prospects of the season were very unfavourable in the autumn, and preparations were made to meet a failure of the rabi crops. Subsequently, with a change of weather, conditions improved, and all fear of famine disappeared.

The Hyderabad city was free from plague, which, though it had in the past visited considerable tracts in the State, was during 1907 confined to a small outlying area. Active mining operations continued to be carried on; 414,221 tons of coal were produced at the Singareni collieries during the year 1907, as compared with 467,923 tons during the preceding year. The output of minerals, other than coal and gems, amounted to nearly £50,900 in value, as compared with £53,300 in the previous year. A Civil Engineering College was opened at Hyderabad, in which natives of Hyderabad are trained for employment in the State Public Works Department.

The boundary dispute between Mallavalli, in the Hyderabad State, and Mirzapuram, in the Krishna district of the Madras Presidency, was settled. The Nizam's

FRONTIER STATES.

Southern Shan States.

Karenni.

Hyderabad.

NATIVE
STATES.

Government accepted the decision of the Government of India, and ordered a settlement officer to be present at the rectification of the boundary. The survey of the proposed railway extension from Tadwala to Latur was commenced during the year 1907.

The Hyderabad mint turned out large quantities of copper coin during the year, and the rate of exchange between British and Hali-Sicca rupees was kept at about par. The estimated revenue for the year was £3,158,800, and the expenditure £2,971,300, giving a net surplus of £187,500.

Mysore.

The rainfall in the Mysore State during the year was not on the whole either seasonable or evenly distributed, and the outturn of the crops fell below the average, with a consequent rise in the price of some of the staple food-grains. The total area cropped during the year (including the area cropped more than once) was 6,155,248 acres, which was 40,406 less than in the previous year. The decrease was chiefly due to the unfavourable rainfall. The public health was not as satisfactory as in the previous year. There was a considerable plague mortality, deaths amounting to 12,423 as against 2,960 during the year 1906-7. For the efficient sanitary administration of the State, a department of public health was constituted during the year. The general condition of cattle was very unsatisfactory, owing to the prevalence of several epidemic diseases such as rinderpest, anthrax, and murrain. A civil veterinary department was organised during the year.

The Mysore Representative Assembly held its twenty-fourth session on the 19th October 1907, when 151 members attended out of 275 delegated to attend the sessions. During the year under report five meetings of the Mysore Legislative Council were held. No Acts of any special importance were passed.

Mining and prospecting work was carried on actively in many parts of the State. The total quantity of gold produced during the year in all the working mines of the State was 527,101 ozs., estimated at £2,045,000, against 534,371 ozs., estimated at £2,071,000, during the year 1906-7, showing a falling-off of 7,270 ozs. The royalty due on the gold obtained was approximately £102,000, against £103,000 for 1906-7. There was an appreciable abatement in the demand for manganese lands. The only licences on which operations were satisfactorily carried on were those belonging to the New Mysore Manganese Company. The following statement shows the approximate quantities of ore obtained and sold, and the royalty realised thereon :—

—					Ore obtained.	Ore sold.	Royalty.
					Tons.	Tons.	£
1906-7	-	-	-	-	63,181	50,247	1,340
1907-8	-	-	-	-	74,650	70,242	1,720
Increase					11,469	19,695	380

A considerable amount of work in chrome was done in the blocks in the Hassan district, and ore of fairly good quality was extracted from blocks near Kadakola in the Mysore district, but a fall in the price of the ore checked progress. Investigations were made in regard to the supplies of iron ore available in Mysore, but it will be some time before trustworthy results are available for publication. The corundum industry attracted some attention during the year, and a revision of the rules is under contemplation to facilitate the exploitation of this mineral.

The total outlay on public works was £359,000, being £45,000 more than in the preceding year. This difference was mainly due to the large expenditure on the third installation of the Cauvery Power scheme.

Several measures were adopted for the improvement of education. Among these may be mentioned the development of the scheme for introducing manual training and kindergarten instruction in the curricula of school studies. The number of public schools in the State rose from 2,279 to 2,366, and of pupils from 98,209 to 101,614. The total expenditure on public instruction amounted to £97,600, against £96,200 in 1906-7.

The cost of the police administration was £65,200, as against £65,800 in the preceding year. There was a slight increase in the number of robberies, &c., but a considerable decrease in minor offences against property.

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The total revenue of the year from all sources, excluding the opening balance, amounted to £2,012,000, against £2,020,900 in 1906-7. The expenditure was £1,947,400, against £2,020,500 during the preceding year. The cash balance at the commencement of the year under report was £660,600, against 660,000 in 1906-7.

The annual report of the Baroda Durbar for 1907-8 had not been received when the present Statement was prepared. The information below relates mainly to the year ending 31st July 1907. Since the close of the year under report, the Gaekwar has formed a Legislative Council composed partly of the principal officers of the State and partly of elected and nominated members.

His Highness the Maharajah, with Her Highness the Maharani, returned from Europe to Baroda on the 19th November 1906. The celebration of the Silver Jubilee of the Gaekwar's accession to power was the most important domestic event of the year.

The Council of Administration which was formed by His Highness the Gaekwar to carry on the administration during his absence continued to carry on business after his return under His Highness's orders.

The rainfall during the year under report was above the average of the last five years over the greater part of the State. The average yield of staple crops in the various districts compared favourably with that of the previous year. The policy of making liberal advances to the cultivators for sinking new wells, as well as the purchase of plough bullock and seeds and other similar necessities, was continued, and a sum of about £4,666 was distributed for these purposes among the cultivators. In 1906-7, 20,169 bighas of land were relinquished by cultivators, and 181,982 bighas of new lands were brought under cultivation. The figures for the preceding year were 19,525 and 152,261 bighas respectively. The land-revenue collections show an increase of approximately £20,000 as compared with the previous year.

The report on the working of the Early Marriage Prevention Act indicates that the benefits of the measure are generally appreciated, though there is a tendency to show indulgence in the treatment of applications for exemption under the Act.

Satisfactory progress was made in all branches of education—collegiate, technical, secondary, and primary. Primary education has been made compulsory throughout the State. The number of schools increased from 688 to 1,267, and the number of pupils in the vernacular schools rose from 64,467 to 99,768. At the close of the year there were 600 Government compulsory schools, with 31,592 pupils. The increase in expenditure amounted to over £6,000.

The total expenditure on public works, including the amount expended on contribution and other heads, came to about £130,000, which is about 10·25 per cent. of the gross income of the State.

The income and expenditure of the State for 1906-7 were £1,264,000 and £1,029,000 respectively, as compared with £1,175,000 and £1,047,000 respectively for the preceding year.

The following information regarding the Native States in Central India is for the year 1906-7, and is in continuation of the information furnished in last year's Statement. The annual reports for the year 1907-8 had not been received when the present Statement was prepared.

At the opening of the year 1906-7, the northern portion of Gwalior and part of the Bundelkhand Agency were suffering from famine. The affected area extended to about 10,000 square miles, with a population of about 1½ millions. The number of working units relieved was nearly 17½ millions, while the number of units to whom gratuitous relief was given exceeded 4½ millions, the total under both heads being slightly in excess of 22 millions. The cost of direct relief was a little under £160,000. The relief measures were on the whole successfully conducted, and it is noticeable that, so far as is known, there were absolutely no deaths from actual starvation, though the mortality among live stock was exceedingly high. The Maharaja Scindhia remitted £213,000 of land revenue and advanced £73,000 in *takavi* to the cultivators of the affected area. In Bundelkhand remissions were granted to the extent of over £120,000, £43,000 were suspended, and the *takavi* grants amounted to £33,000. The situation over the whole affected area was relieved by excellent rains in July.

The monsoon of 1906 was distinctly favourable throughout the Agency. The rainfall was, almost everywhere, above the average. A noticeable feature in the agricultural history of Central India is the increased cultivation of wheat and cotton, the figures for the year being : wheat, 2,896 acres ; cotton, 1,177 acres.

Almost every part of Central India was visited by plague during the year under review, and the outbreak was severe in Indore City and the Residency Bazar. The total deaths from plague during the year under review were 18,761. The deaths from this cause in the calendar year 1906 exceeded 12,000, or about 1·39 of the population. Except for the visitation of plague, the general health was, on the whole, fairly good, though there were sporadic outbreaks of cholera, while in the autumn of 1906 fever was prevalent in the area which had suffered from famine.

The working of the Central India Agency Police was satisfactory. In spite of famine in a large portion of the Agency, there was scarcely any appreciable increase in crime. The total number of cases of dakaiti in 1906 was returned as 90, against 98 in 1905. There was a serious outbreak of dakaiti in Bundelkhand, in connection with which it became necessary to employ troops. There was an appreciable decrease in offences committed by "criminal" tribes.

The main feature of the year in the Public Works Department was the appointment of a separate Superintending Engineer and Public Works Department Secretary for Central India. The total outlay on Imperial public works amounted to £40,600, as against £36,800 for the previous year; £4,000 was spent on "Protective Irrigation Works," £13,000 on "Communications." The examination of irrigation possibilities in Central India was continued by the Consulting Engineer specially deputed for this purpose. As to railways, the traffic receipts of the Gwalior light railways improved from £4,800 in the half year ending 30th June 1906 to £7,000 in the succeeding half year. Work on the Sabalgarh-Sheopur extension was in progress. The construction of the Nagda-Muttra Railway made steady progress. The survey for the Narbada Valley Railway route was completed during the year under review, and a preliminary survey was carried out for a line from Bhopal to a point in the neighbourhood of Bir on the Great Indian Peninsula line.

An Excise Commissioner for Central India was appointed during the year under review. Arrangements for an improved system of excise administration were considered by him in consultation with the Durbars of the principal States.

Good progress was made with the new buildings in the Daly College, which was attended during the year by the full number of boys (54) for whom accommodation was available. In Gwalior the expenditure on education for the year ending June 1906 exceeded £23,000. A new school was under construction in the Residency Bazar at Indore.

There was some activity in commercial enterprise. The Scindhia paper mills were re-opened in Gwalior; important improvements were introduced in the mills at Bhind and Morena; and a large cotton ginning, weaving, and spinning factory was to be constructed at Lashkar by a company with a considerable capital. The number of cotton mills, presses, and gins was 73 in the year 1906 as against 57 in the preceding year. The average number of persons employed daily was 8,914, as against 5,095 in 1905.

His Highness Nawab Iftikhar Ali Khan of Jaora and His Highness the Nawab of Baoni were invested with ruling powers in April and August 1906, respectively.

Rajputana.

The latest information available as to the Native States of Rajputana is for the year 1906-7, and is in continuation of the information furnished in last year's Statement. The annual reports for the year 1907-8 had not been received when the present Statement was prepared.

The seasonal conditions during 1906-7 were generally favourable to agriculture, except in Karauli, where the land revenue suffered both from the excessive rain in the winter months and the untimely cessation of the autumn monsoon. In Bikaner the cultivated area rose from 1,013,707 bighas in 1905-6 to 1,457,459 bighas in 1906-7, and the land-revenue collections amounted to £60,300, representing about 63½ per cent. of the total demand, against 61 per cent. for the preceding twelve months. There was a great expansion of the acreage, both of wet and dry crops, in the Marwar (Jodhpur) State. The collection of land revenue in Sirohi rose to more than £9,400, against £12,000 in the nineteen months' period of 1905-6, or £6,666 on an average of the previous two years. In Dungarpur about 13,000 acres of land were brought under cultivation in excess of the area cultivated during the preceding year. The Durbar realised the full land revenue and also £700 of arrears. The land revenue collected by the Kishangarh State amounted to £18,000, against the normal average of £16,600. The Alwar Durbar realised the full land-revenue demand of £160,700, and more than £36,000 of arrears and takavi in addition. The total receipts of the State from all sources exceeded the expenditure by £19,000, and the year closed with a balance of

£31,000, against £12,400 for the previous year. In Dholpur the cropped area was 579,350 bighas, against 283,287 in the previous year. Out of a total demand of £54,200, a sum of £53,300 was recovered on account of land revenue. The prosperity of the season enabled the Marwar, Jaisalmer, Tonk and Bundi States to make considerable reductions in their debts.

The year was on the whole a healthy one, except that plague was prevalent in parts of Marwar and in Mewar.

The total outlay on public works in the Native States was £307,800, against £440,700 for the preceding year. The total Imperial outlay on public works in Rajputana for the year 1906-7 amounted to £39,000, against £26,000 in the previous year.

The following railways were under construction :—

Newai-Sawai-Madhupur section of the Jaipur State Railway	-	41 miles.
Dholpur-Bari Railway (by the Dholpur Durbar)	-	19 "
Nagda-Muttra Railway (by the Government of India)	-	355 "

The number of primary schools in Dholpur rose from 5 to 22, and of scholars from 457 to 1,036, in the year under report. In Jaipur the number of primary schools increased from 136 to 153. The Jaipur College maintains its high reputation. Two new schools—one for boys and the other for girls—were opened in Jhalawar, and five new primary schools were opened in Bharatpur.

In Kota good progress was made in settlement operations. The assessments were very well received.

Their Highnesses the Maharajas of Alwar and Bikaner visited Europe during the year.

The rainfall in the Cooch Behar State was badly distributed, and the outturn of Bengal.

The rainfall in the Cooch Behar State was badly distributed, and the outturn of rice and jute was not up to the average. Owing to the unsteady state of the jute market there was a considerable contraction of the area under jute cultivation. The condition of the land-owning and cultivating classes continued to be prosperous, but the high price of food-grains affected the poorer classes. The public health was normal, and crime was light. The revenue returns showed an improvement, and there was a closing cash balance of £79,500, as against £76,000 in the preceding year. Negotiations for the conversion of the Cooch Behar State Railway into metre gauge were completed, and the working of the line by the Eastern Bengal State Railway was sanctioned by the Government of India. The number of primary and secondary schools rose from 305 to 318, and the number of pupils attending them rose from 11,102 to 11,658.

In the two Native States in the Chota Nagpur Division the seasons were unfavourable to agriculture, but the material condition of the people was generally good. The Seraikela State was in charge of its chief, but the Kharsawan State continued under Government management owing to the minority of the chief.

In the Orissa tributary Mahals the crops were damaged by heavy floods, and the year was not prosperous for agriculturists; there was, however, no actual scarcity, and the public health was generally good. The States of Pal Lahera, Baramba, and Narsingpur were released from Government management, and their administration was entrusted to the chiefs under suitable conditions as to the exercise of their powers. The land-revenue administration of the States generally was satisfactory. Collections were on the whole prompt and punctual. Settlement operations were in progress in the Patna, Sonpur, Gangpur, and Boad States. There was a considerable increase in expenditure on public works, which amounted to about £51,000. The increase was most marked in the Keonjhar State. Dispensaries worked satisfactorily and due attention was paid to vaccination. The useful Leper Asylum at Moharbhaj was enlarged.

In the Manipur State the rainfall in the year was below the average, but it was well distributed. A good rice crop was secured, and food stuffs were plentiful and cheap. The expenditure amounted to £37,500, as against £36,000 in the preceding year. The increase is attributable to expenses connected with the installation of the Raja, which took place, as reported in last year's Statement, on the 15th May 1907. Measures for the disarmament of the hill tribes were continued, with good results.

In Hill Tippera, although the rainfall in the year was badly distributed, the seasons were more favourable to agriculture than in the preceding year. The rice crops were fair on the whole, and cotton did well. The price of food stuffs fell, and there was no distress in any part of the State. Cholera and small-pox appeared in epidemic forms in various places, but the mortality does not appear to have been great. The

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Victoria Memorial Hospital at Agartala maintained its popularity. There was a considerable increase in migration into the State during the year. An arrangement whereby the revenue officers of the State were entirely relieved of their police duties took effect during the year under review.

United Provinces of Agra and Oudh.

In the Rampur State the year ended 30th September 1907 was a fairly prosperous one, and the outturn of the crops was only a little below the average. The subsequent season was very unfavourable, owing to a failure of the monsoon, with the result that at the close of the year under review famine conditions prevailed throughout Rohilkhand. The Rampur State, however, fared better than the adjacent districts owing to better irrigation facilities. There was no acute distress in the State, and the necessary measures were taken by the Durbar to relieve the wants of the people. Apart from epidemics of small-pox and plague, the year was a fairly healthy one. The Lalkua-Kashipur section of the Rohilkhand and Kumaun Railway (36½ miles) was opened during the year. The line runs along the northern border of the State.

In the Tehri State the year was one of scarcity. There was a failure of crops towards the close of the year, and the State took measures to meet an impending condition of famine. The financial position of the State was sound, and the administration continued to be satisfactory.

Punjab.

The rainfall in the Punjab during the year under review was scanty, and agricultural conditions in the States generally were unsatisfactory. In some of the States there were serious outbreaks of plague. In this respect Patiala, Jind, Maler Kotla, and Kapurthala suffered severely. The total mortality during the year in Kapurthala amounted to 19,984. The high death-rate in this State is attributed chiefly to plague, but fever and small-pox were also prevalent. The reduction of the duty on salt, with effect from the 21st March 1907, had an appreciable effect in the Mandi State. The quantity of salt excavated from the State mines was 113,800 maunds, as compared with 95,140 maunds in the preceding year, the value being £6,400, as against £5,900.

The Raja of Kapurthala visited Europe for six months during the year under review. During the absence of His Highness the administration was, as usual, conducted by the State Council. The affairs of the Faridkot State were successfully conducted by the State Council, in which the management is vested during the minority of the chief.

In the Suket State the administration of the chief was not satisfactory. In the Simla Hill States, Tika Kishen Singh, the chief of the Ghund State, died in September 1907, and was succeeded by Tika Ranjit Singh. The administration of the Keonthal State was unsatisfactory owing to financial mismanagement by the chief. In the Mailog State, the chief of which is a minor, dissensions among the members of the council became so acute that it was dissolved and a manager appointed.

The administration of the other small Hill States was generally satisfactory.

Central Provinces.

There was no change during the year under review in the form of administration of any of the fifteen Feudatory States of the Central Provinces. Nine States were under the rule of their own chiefs, and six, viz., Bastar, Sarangarh, Kawardha, Chhuikadan, Nandgaon, and Udaipur, the chiefs being minors, remained under the management of superintendents appointed by Government. The year was one of quiet, and the relations between the chiefs and the officers of Government continued to be cordial. Plague broke out at Nandgaon, and there was a partial failure of the autumn crops in many of the States, but some were able to export considerable quantities of food-grains to the tracts that suffered, and even in those where the crop failure was serious, it was not found necessary to start measures of famine relief.

Except for an epidemic of small-pox in Sirguja and plague at Nandgaon, the public health was good. Attention was paid to excise reform and education. The expenditure on public works was satisfactory.

The remote Chota Nagpur States are generally less developed than those of Chhattisgarh, but their administration was as efficient as their resources would admit.

Bombay.

In the Native States under the political supervision of the Government of Bombay the seasons in 1907-8 were less favourable to agriculture than in the preceding year. The rainfall, though generally sufficient, was untimely and ill-distributed. The crops suffered practically everywhere, except in parts of South Gujarat and the Southern Maratha Country States, and prices of food-grains were high. There was, however, no distress which called for exceptional relief measures. The effect of the unfavourable

conditions was apparent in the diminished revenues of Palanpur and the Rewa Kantha States and Satara Jaghirs, and in reduced recoveries of Government loans in Kathiawar.

The outlay by the States generally on public works showed a decrease, but there was an increase of expenditure on medical relief and on education.

The vital statistics furnished by the States showed a general rise in the birth-rate and an increase in the death-rate, but, as noted in last year's Statement, no great reliance can at present be placed on these returns. The increase in the death-rate was due almost entirely to the effect of plague, which was more widespread and fatal than in the preceding year. In Kathiawar 6,227 deaths from this cause were recorded, and in the Southern Maratha Country States 15,699. The death-rate in Kolhapur from all causes was exceptionally high, the figures being 48,580 as against 36,013 in the preceding year. Information as to the number of deaths from plague in this State is not available.

In the South Gujarat Division some trouble was caused by a riot which occurred at Ahwa in the Dangs, in which the son of one of the Dang Rajas was implicated. With this exception, no disturbance of the public peace of any importance occurred during the year.

There was a marked rise in the value of sea-borne trade in the States on the coast, except in the case of Cutch, where an increase in the value of the exports did not compensate for a rather heavy decline in the import trade. The following are the figures:—

	Value of Exports.		Value of Imports.	
	1906-7.	1907-8.	1906-7.	1907-8.
	₹	₹	₹	₹
Kathiawar	1,567,000	2,143,000	1,436,000	1,574,000
Cutch	104,000	128,000	607,000	558,000

In the Cambay State a spinning and weaving mill was established for the first time.

The deaths of the following chiefs were recorded during the year. In Kathiawar, the Thakor Sahet of Limbdi, and the Thakors of Chuda and Malia; in the Mahi Kantha Agency, the Thakors of Khadal, Amliyara and Vadagam; and in Rewa Kantha, the Chief of Baria.

In Kathiawar the installation of the following chiefs took place:—Kumar Shri Jorawarsinhji as Thakor of Chuda, Khan Saheb Fatehdinkhan as Chief of Mandawadar, and Lakhaji Raj as Thakor Sahab of Rajkot.

Their Highnesses the Jam of Nawanagar, the Nawab of Janjira, and the Nawab of Radhanpur paid visits to England during the year under review.

The State year in Travancore and Cochin closes on the 15th of August in each year. The information that follows covers the year ended the 15th August 1907.

In Travancore the seasons were generally favourable for agriculture, and good crops were secured, but the price of food-grains remained high. Cholera in an epidemic form prevailed throughout the year, and the ratio of deaths from all causes was about 15 per mille.

The total revenue of the State, excluding debt heads, amounted to £678,000, and the expenditure to £992,000, as against £633,000 and £694,000 respectively in the preceding year. The expenditure included an outlay of £24,000 on the Kodayar irrigation project. The total expenditure on public works under all heads amounted to £123,000, as against £143,000 in the year ended 15th August 1906. The total value of the external trade of the State was £2,140,000, as against £3,011,000 in the preceding year. The fluctuation is attributed to imperfect registration of non-dutiable articles. There was a large increase in the sales of salt, but the gross receipts fell from £90,000 to £80,000, consequent on the reduction of the duty. The total expenditure by the State on education amounted to £37,000, as against £36,000 in the previous year.

In Cochin the rainfall was above the average, and the harvests were not as good as usual. Both malarial fever and cholera were prevalent during the year; the latter disease caused 2,672 deaths. The total receipts and disbursements under Service

heads amounted to £229,000 and £235,000 respectively, as against £222,000 and £226,000 in the preceding year. The expenditure included an outlay of about £39,000 on the Forest Tramway. This important project was practically completed during the year, and the heavy drain on the State's finances caused by its construction has since come to an end. The total expenditure on public works amounted to £18,000, as against £20,000 in the preceding year. There was a considerable increase in the number of cases of grave crime, and detection was poor. The Durbar had under consideration a proposal to remove the Central jail from Ernakulam to Trichur for sanitary reasons. The total expenditure on education amounted to £9,000, as against £8,000 in the preceding year.

The report from the Pudukkotta State is for the year ended 30th June 1908. His Highness the Raja visited Europe for reasons of health during the period under review. Climatic conditions were unfavourable to agriculture, and the crops were generally poor. A reorganisation of the police force was carried out during the year. The receipts of the year amounted to £99,000 and the expenditure to £83,000, leaving a closing balance of £101,000, as against an opening balance of £84,800. The outlay on public works amounted to £13,700, a sum which fell short of the budget allotment by about £4,000. The administration of the public works and forests was not entirely satisfactory. The total expenditure by the State on education amounted to £3,000, as against £2,600 in the preceding year.

The Banganapalle State continued to be under the administration of an Assistant Political Agent appointed by Government. The Nawab took an active part in the judicial and administrative work of the State. The seasons were on the whole favourable to agriculture, but prices of food-stuffs were high. Public health was normal.

The Sandur State continued to be administered by the Diwan under the control of the Political Agent, owing to the minority of the chief. The seasons were favourable and the outturn of the crops was fair. Progress was made with the working of the manganese mines, and two further mining leases were granted to the General Sandur Mining Company.

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