

EAST INDIA (PROGRESS AND CONDITION)

STATEMENT

EXHIBITING THE

MORAL AND MATERIAL PROGRESS AND CONDITION

OF

INDIA

DURING THE YEAR 1906-07.

FORTY-THIRD NUMBER.

(PRESENTED PURSUANT TO ACT 21 & 22 VICT. c. 106, s. 53.)

India Office,
18 May 1908.

ARTHUR GODLEY,
Under Secretary of State for India

Ordered, by The House of Commons, to be Printed,
18 May 1908.

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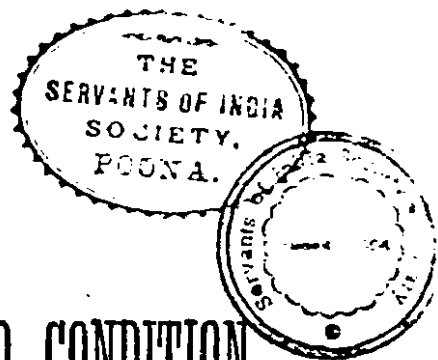
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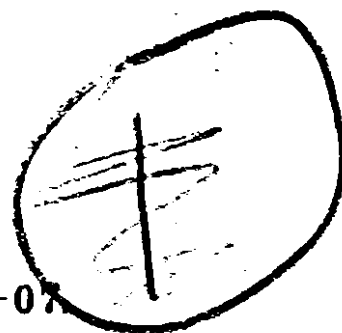


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NOTE.

THE Statement exhibiting the Moral and Material Progress and Condition of India is presented to Parliament in each year in accordance with the requirements of the 53rd section of the Act for the better Government of India (21 and 22 Vict., cap. 106), which provides as follows:—"The Secretary of State in Council shall, within the first fourteen days during which Parliament may be sitting next after the first day of May in every year, lay before both Houses of Parliament an account for the Financial Year preceding that last completed of the Annual Produce of the Revenues of India . . . and such account shall be accompanied by a Statement prepared from detailed reports from each Presidency and District in India, in such form as shall best exhibit the Moral and Material Progress and Condition of India in each such Presidency."

The Statement is prepared in the India Office from a large number of annual reports received from India. Many of these reports are compiled from information furnished by District and Political Officers, and are submitted to the Governments of the respective Provinces and to the Government of India for consideration and review before transmission to England; and some of them, which deal with the operations of important departments and require the careful consideration of the authorities in India, are not received at the India Office till about a year after the date of the period to which they refer.

It is, therefore, seldom possible to present the Statement to Parliament earlier than the date mentioned in the Statute, *i.e.*, about thirteen and a half months after the close of the official year.

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CHAPTER I.

ADMINISTRATION AND LEGISLATION.

ADMINISTRATION.

LIST of the holders in 1906-07 of the more important appointments connected with the administration of India, those appointed during the year being shown in *italics*. ADMINISTRATION.

OFFICE.		Date of Appointment or Assumption of Charge of Office.	REMARKS.
Secretary of State	The Right Hon. John Morley, O.M., M.P.	12 December 1905	
Permanent Under Secretary of State.	Sir Arthur Godley, K.C.B.	30 September 1883	
Parliamentary Under Secretary of State.	The Right Hon. J. E. Ellis, P.C., M.P.	12 December 1905	Resigned 1 February 1907.
	<i>C. E. H. Hobhouse, M.P.</i>	1 February 1907	
Members of the Council of India	General Sir J. J. H. Gordon, K.C.B.	1 January 1897	In succession to Sir O. T. Burne, Retired 31 December 1906.
	Sir Dennis Fitzpatrick, K.C.S.I.	24 April 1897	In succession to Sir J. Strachey.
	Sir J. L. Mackay, G.C.M.G., K.C.I.E.	27 April 1897	In succession to Robert Hardie.
	Sir John Edge, K.C.	30 March 1898	In succession to Sir C. Turner.
	Sir Philip P. Hutchins, K.C.S.I.	1 August 1898	In succession to Sir A. J. Arbuthnot.
	General Sir A. B. Badcock, K.C.B., C.S.I.	26 March 1901	In succession to Sir D. M. Stewart. Died 23 March 1907.
	Sir William Loc-Warner, K.C.S.I.	12 November 1902	In succession to Sir J. Peile.
	J. F. Finlay, C.S.I.	10 May 1903	In succession to Sir J. Westland. Appointed Member of Governor-General's Council, 1 January 1907.
	Sir H. S. Barnes, K.C.S.I., K.C.V.O.	9 May 1905	In succession to Sir A. P. Macdonnell.
	Lieut.-Col. Sir D. W. K. Barr, K.C.S.I.	16 August 1905	In succession to Sir Charles E. T. Crosthwaite.
Governor-General	<i>Sir F. Schuster</i>	26 April 1906	In succession to F. C. Le Marchant.
	<i>T. Morison</i>	19 December 1906	
	<i>General Sir C. C. Egerton, G.C.B., D.S.O.</i>	5 February 1907	In succession to General Sir J. J. H. Gordon.
	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	
	Sir A. T. Arundel, K.C.S.I.	18 May 1901	Resigned 15 October 1906.
	Sir D. J. Ibbetson, K.C.S.I.	5 March 1902	Resigned 5 March 1907.
	H. Erie Richards	18 April 1904	
	Sir J. P. Hewett, K.C.S.I., C.I.E.	23 December 1904	Lieut.-Governor United Provinces, 1 January 1907.
	E. N. Baker, C.S.I.	10 January 1905	
Members of Council	Major-General C. H. Scott, C.B.	18 November 1905	
	<i>Sir C. L. Tupper, K.C.I.E., C.S.I.</i>	2 April 1906	Temporary, to 28 September 1906.
	<i>Sir H. Adamson, C.S.I.</i>	15 October 1906	
	<i>J. F. Finlay, C.S.I.</i>	1 January 1907	
	<i>J. O. Miller, C.S.I.</i>	6 March 1907	
Lieutenant-Governor of Bengal-	Sir A. H. Leith Fraser, K.C.S.I.	2 November 1903	
Lieutenant-Governor of Eastern Bengal and Assam.	Sir J. B. Fuller, K.C.S.I., C.I.E.	16 October 1905	Resigned 20 August 1906.
	<i>Sir L. Hare, K.C.S.I., C.I.E.</i>	20 August 1906	

STATEMENT EXHIBITING THE MORAL AND MATERIAL

ADMINISTRATION.	OFFICE.		Date of Appointment or Assumption of Charge of Office.	REMARKS.
	Lieutenant-Governor of the United Provinces of Agra and Oudh	Sir J. J. D. La Touche, K.C.S.I.	14 November 1901	Resigned 31 December 1906.
		Sir J. P. Hewett, K.C.S.I., C.I.E.	1 January 1907	
	Lieutenant-Governor of the Punjab.	Sir Charles M. Rivas, K.C.S.I.	6 March 1902	Resigned 6 March 1907.
		Sir D. C. J. Ibbetson, K.C.S.I.	6 March 1907	
	Lieutenant-Governor of Burma -	Sir H. T. White, K.C.I.E.	9 May 1905	
	Chief Commissioner of the Central Provinces.	J. O. Miller, C.S.I.	4 May 1905	Member of Governor-General's Council, 6 March 1907.
		R. H. Craddock, C.S.I.	26 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 - -	O. 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 - -	Lieut.-Colonel T. C. Pears-	21 March 1905	Retired 27 June 1906.
		Major Sir F. E. Young-Ausband, K.C.I.E.	27 June 1906	
	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	Officiating from 25 April 1904.
	Governor of Madras - - -	Hon. Sir A. Lawley, G.C.I.E., K.C.M.G.	28 March 1906	
	Members of Council - - -	Sir J. Thomson, K.C.S.I.	9 May 1901	Retired 4 August 1906.
		G. Stokes, C.S.I.	9 November 1905	
		G. S. Forbes, C.S.I.	12 June 1906	
	Governor of Bombay - - -	Lord Lamington, G.C.M.G., G.C.I.E.	12 December 1903	
	Members of Council - - -	E. McQ. H. Fulton, C.S.I.	24 April 1902	
		J. W. P. Muir Mackenzie, C.S.I.	6 August 1905	
	Political Resident, Aden - -	Major-General H. M. Mason Major-General E. de Brath, C.B., C.I.E.	28 June 1904 14 November 1906	Retired 14 November 1906.

LEGISLATION.

LEGISLATION.

Between the 1st April 1906 and the 31st March 1907, the Governor-General gave his assent to the following enactments:—Six Acts passed by the Council of the Governor-General for making Laws and Regulations; two by the Legislative Council of Madras; two by that of Bombay; one by that of Bengal; two by that of Eastern Bengal and Assam; three by that of the United Provinces of Agra and Oudh; three by that of the Punjab; one by that of Burma, and two Regulations 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.

Excise (Amendment) Act, 1906.

Act VII. of 1906 imposes restrictions on the sale of cocaine in the United Provinces, the Punjab, the North-West Frontier Province, the Central Provinces, Burma, Coorg, and Ajmer.

Act VIII. of 1906 gives to Local Governments wider discretion in the matter of agricultural advances.

LEGISLATION.

Land Improvement and Agriculturists' Loans (Amendment) Act, 1906.

Act I. of 1907 relaxed certain restrictions on the powers under which the Presidency banks transact their banking business. For instance, it gave permission to these banks to deal in the securities of State-aided Railways and District Boards, and to the Ceylon branch of the Bank of Madras to deal in the securities of the Government of Ceylon. The limit to the amount to which customers might overdraw was enlarged, and the period for which loans and advances might be granted was extended in some cases.

Presidency Banks (Amendment) Act, 1907.

Act II. of 1907 provided for the periodical inspection of steam-boilers and prime-movers and for their management by competent engineers in the Central Provinces.

Central Provinces Boiler Inspection Act, 1907.

Act III. of 1907 was intended generally to reproduce the main features of the English law of bankruptcy in a greatly simplified form. It extended the scope of the law of insolvency, providing greater security for the rights of creditors and affording more adequate relief to honest debtors.

Provincial Insolvency Act, 1907.

Act IV. of 1907 repealed certain enactments imposing certain provincial rates and cesses which had already been abolished by executive orders.

Repealing and Amending (Rates and Cesses) Act, 1907.

Act I. of 1907 regulates the use of motor vehicles in the Madras Presidency.

MADRAS. Madras Motor Vehicles Act, 1907.

The principal provisions of Act II. of 1907, which is applicable, at present, to the municipalities of Ootacamund, Coonoor, and Kodaikanal alone, relate to the enhancement of taxation, the better regulation of building, and improved supervision over articles of food and drink.

Madras Hill Municipalities Act, 1907.

Act I. of 1906 was framed with a view to strengthening both the final appellate court for Sind and also the district and sessions court at Karachi, the present establishment proving inadequate in view of the great increase of population in Sind, and especially in Karachi, and the noteworthy progress in wealth, commerce, and education made by that town.

BOMBAY. Sind Courts Amendment Act, 1906.

Act II. of 1906 limits the jurisdiction of Mámlatdárs' courts to the case of *agricultural* lands or premises; it saves former owners or part-owners, and their representatives, from liability to the ejection jurisdiction on determination of a tenancy or other right; and, in cases where tenants are liable to eviction, but in expectation of a renewal of their tenancy have sown crops on the land, it provides the Mámlatdár with a power to deal equitably with growing or standing crops, so as to defer delivery of possession, either until compensation has been paid to the tenant or until the crop has been removed by him.

Mámlatdárs' Courts Act, 1906.

Act IV. of 1906 brings the law relating to the civil courts in the district of Sambalpur into conformity with that in force elsewhere in the territory included within the Bengal division of the Presidency of Fort William. Previously this district alone of all those subject to the jurisdiction of the Calcutta High Court was governed by a special law (*viz.*, the Central Provinces Courts Act, 1904), an obvious inconvenience.

BENGAL. Sambalpur Civil Courts Act, 1906.

Act I. of 1907 adopts in Eastern Bengal and Assam the changes in the maintenance of registers which were introduced into Bengal by Bengal Act II. of 1906.

EASTERN BENGAL AND ASSAM. Eastern Bengal and Assam Land Legislation (Amendment) Act, 1907.

LEGISLA
TION.
Eastern
Bengal and
Assam Dis-
orderly
Houses Act,
1907.

Act II. of 1907 provides for the removal of brothels from the neighbourhood of educational institutions and cantonments, and their restriction to certain localities.

UNITED
PROVINCES.
United Pro-
vinces Local
and Rural
Police Rates
Act, 1906.

Act II. of 1906 unified the law relating to the imposition, collection, and disposal of local rates, which were previously governed by separate Acts for the two provinces, and at the same time simplified and improved the existing body of law on this subject.

United Pro-
vinces Dis-
trict Boards
Law, 1906.

Act III. of 1906 organised and regulated the system of local government in the United Provinces by district boards, the functions of which had been greatly extended since the Act of 1883.

Act to re-
peal the
North-
Western
Provinces
and Oudh
Kanungos
and Patwaris
Act of 1889.

Act IV. of 1906 was rendered necessary by the decision of the Government of India to abolish the *patwari* cess levied in the United Provinces under the Act of 1889.

PUNJAB.
Punjab
Tenancy
Act, 1887,
Amendment
Act, 1906.

Act I. of 1906, amongst other provisions, prescribes a penalty which is intended to deter landlords from attempting to collect rents of which payment has been remitted or suspended.

Punjab
District
Boards Act
Amendment
Act, 1906.

Act II. of 1906 discontinues the old cess of two pies per rupee, which was originally intended for famine purposes, and consequently reduces the maximum limit of the local rate from one anna to ten pies per rupee.

Punjab
Alienation
of Land
(Amend-
ment) Act,
1907.

Act I. of 1907 aims primarily at the abolition of the statutory agriculturist, who is in many cases not an agriculturist at all, but a member of the *bania* class, whose acquisition of the lands of agricultural tribesmen it is the primary and avowed object of the Punjab Alienation of Land Act, 1900, to prevent.

BURMA.
Burma
Forest Act
(1902)
Amendment
Act, 1906.

Act IV. of 1906 amends the Burma Forest Act, 1902, in respect of certain provisions for punishments for injuring trees.

REGULATIONS.

Upper
Burma and
Arakan Hills
Frontier
Crossing and
Disturbed
Districts
Regulation,
1907.

This Regulation, published under a notification in the Legislative Department of the Government of India, No. 3, dated the 1st January 1907, is designed to check traders from crossing into the Shandu country to fell the rubber trees there.

North-West
Frontier
Province
Pre-emption
Regulation,
1906.

This Regulation, published under a notification in the Legislative Department of the Government of India, No. 14, dated the 3rd October 1906, applies the provisions of the Punjab Pre-emption Act, 1905, to the North-West Frontier Province, where the previous law was found to be out of date, out of harmony with the feelings of the people, and the cause of much dishonest and speculative litigation.

CHAPTER II.

LOCAL SELF-GOVERNMENT.

Local self-government, municipal and rural, in the form in which it now prevails in India, 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 the various provincial Acts passed about that time, which form the basis of the provincial systems at present in force. Municipal committees now exist in most places having any pretension to importance, and have charge of municipal business generally, including the care and superintendence of streets, roads, fairs and markets, open spaces, water supply, drainage, education, hospitals, and the like. The number of such committees in each province is given in a table in this chapter. Local and district boards have charge of local roads, sanitary works, education, hospitals, and dispensaries in rural districts. A large proportion of their income is provided by provincial rates. Bodies of port trustees have charge of harbour works, port approaches, and pilotage. There is also a smaller number of non-elective local bodies discharging similar duties in towns other than constituted municipalities, and in cantonments. The importance of the work of local administration performed by these various authorities is best shown by a statement of the funds at their disposal. The income of the municipalities for 1906-07, apart from loans, sale of securities, and such-like extraordinary receipts, was £3,705,660. The sources of this income are shown in the table at the end of the volume (Appendix B.). Of the revenue classed as "local," amounting to £2,334,044, excluding deposits and advances, the rates levied on land, for expenditure on roads, schools, hospitals, and general purposes, account for over 77 per cent. ; and among other sources of income belonging to the local boards are tolls on ferries and roads, school fees, and receipts from corporate property. The balance consists of grants by the Government for educational and other purposes.

GENERAL.

The income of the port funds, exclusive of loans, deposits, and advances, amounted in 1906-07 to £1,852,916.

The revenue of cantonment funds amounted to £238,471 ; that of town and bazaar funds came to £95,492 ; and other miscellaneous funds had a revenue amounting to £151,960.

Thus, the revenue managed by all the various local bodies amounted in 1906-07 to about £8,378,543, besides large sums proceeding from loans and sale proceeds of investments.

MUNICIPALITIES.

MUNI-
CIPALITIES
General.

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 majority of towns, most of the commissioners or members of the committees are elected by the townsfolk under legal rules, but in every town some, and in a few minor towns all, the members are appointed by the Government.

MUNI-
CIPALITIES.

In almost every municipal body one or more Government officials sit as members; the number of Indian and non-official members, however, everywhere largely exceeds the number of Europeans and officials. The municipal bodies are subject to the control of the Government 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.

The sources of municipal revenue, apart from loans and Government contributions, are usually classified 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 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. There are also water rates and conservancy rates, tolls on roads and bridges, and taxes on animals and vehicles, and in some places a tax on professions and trades, while in many Bengal municipalities there is a tax on persons according to their circumstances and property. The other sources of income include cattle-pound receipts, rents of municipal property, such as markets and slaughter-houses, and fees of various kinds.

The objects on which municipal funds can be spent are, mainly, water supply, hospitals and dispensaries, streets and roads, vaccination, drainage, sanitation, and education. The interest in the 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. It is reported from most provinces that municipal work is fairly well done, and municipal responsibilities are, on the whole, faithfully discharged, though occasional shortcomings and failures occur in particular towns. The tendency of these 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 to work, whether at meetings for business or on benches for decision of petty criminal cases.

The following table exhibits the constitution of the municipal committees in 1906-07:—

	Number of Municipalities.	Total Number of Members.	By Qualification.			By Employment.		By Race.	
			Ex-officio.	Nominated.	Elected.	Officials.	Non-Officials.	Europeans.	Natives.
<i>Presidency Towns, &c. :—</i>									
Calcutta	1	50	—	25	25	Return not available.			
Bombay	1	72	—	16	56	Return not available.			
Madras	1	87	1	16	20	10	27	14	23
Bangoon	1	25	—	7	18	3	22	11	14
<i>District Municipalities :—</i>									
Bengal	128	1,737	131	714	892	252	1,485	243	1,494
Bombay (including Karachi).	162	2,209	173	1,161	875	594	1,622	190	2,026
Madras	60	940	69	410	461	197	743	157	783
United Provinces*	89	1,217	136	144	937	266	951	211	1,006
Punjab†	133	1,485	244	517	724	298	1,187	107	1,378
North-West Frontier Province.‡	10	161	49	112	—	49	112	22	139
Central Provinces and Berar.	58	759	22	281	456	184	575	81	678
Eastern Bengal and Assam	50	650	69	259	322	133	517	83	567
Barma	43	537	168	298	71	190	347	145	392

* Fifteen towns were classed as "notified areas," and are not included in the statistics given.
† Excluding 42 "notified areas."
‡ Excluding 3 "notified areas."

The total net indebtedness of municipalities (excluding those in the United Provinces for which figures are not available) amounted at the end of 1905-06 to £7,515,500, of which £2,339,400 was owed by the Calcutta Municipality and £2,942,800 by Bombay City. MUNI-
CIPALITIES.

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, four by the elected and four by the nominated commissioners, and four by the Local Government. BENGAL.
Calcutta.

Reference is made to the Calcutta Improvement Scheme in Chapter IIA. No details of the working of the municipality during the year 1906-07 were available at the time of going to press.

The municipalities in the interior of Bengal numbered 128, as in the previous year, but the number of ratepayers increased by 6,493. General elections were held in 52 municipalities, the majority of which were contested, and there was no indication of a decline of public interest in municipal affairs. The average incidence of municipal taxation for the whole province was Re. 1.5.11, showing an increase of 10 pies per head over that of the previous year. The incidence varied between Rs. 8.15.11 in Darjeeling and As. 4-6 in Debhatta in the district of Khulna. The water-rate was in force in 13, and the lighting-rate in four municipalities. Thirty municipalities were in debt at the close of the year to a net amount of £241,700, more than half of this being owed by the Howrah municipality. Interior of
Bengal.

The towns in the United Provinces which were classed as municipalities numbered 89, as in the previous year. Their income, exclusive of special grants and extraordinary receipts, amounted to £417,000, of which £227,800 was received from octroi duties, levied in 76 towns. In spite of some severe calamities the octroi income has expanded year by year and was higher by 12 per cent. in 1906-07 than in 1903-04. During the year under report, a measure for the relief of the municipal funds from police charges was carried into complete effect. The incidence of taxation as a whole remained stationary at about Rs. 1½ per head of the population in municipal areas. The expenditure rose to £464,400 compared with £454,000 in the same towns in the preceding year, and £436,900 in 1904-05. It is reported that the municipal boards as a whole have discharged their duties with efficiency and success. In the 87 municipalities which enjoy the privilege of electing their members 70,846 persons, or 2·3 per cent. of the total population, were eligible to vote. United
Provinces.

There were in the Punjab 138 municipalities, many of them insignificant in size, besides 52 notified areas, which have a modified form of municipal government. Elected members serve on 108 of the municipal committees, the proportion being generally two elected to one nominated member. The total income of the municipalities, excluding loans and extraordinary receipts, was £360,500, of which £216,600 was raised by octroi duties, in force in 134 towns. The octroi receipts as a whole showed some increase. The revision of the octroi schedules has progressed satisfactorily, almost 50 revised schedules having been notified. A general improvement was also reported regarding the methods of collection; and a system has been introduced of granting refunds of octroi on exports from towns without proof of a previous payment of duty. The average incidence of taxation was Re. 1½ per head of the municipal population. The aggregate amount of loans outstanding was £348,500; but the financial condition of each indebted municipality is reported to have been sound. Punjab.

The question of the abolition of a number of petty municipalities, whose income and population appeared *prima facie* too insignificant to deserve the municipal status, was under consideration, in a number of cases both the local officers of government and the inhabitants of the towns themselves declaring in favour of abolition.

MUNI-
CIPALITIES.
North-West
Frontier
Province.
BURMA.
Rangoon.

In the Frontier Province there were 10 municipalities and three notified areas, with an income of £35,000, chiefly derived from octroi duties. The elective system is not in force in this province, and members are appointed by nomination for a period of three years.

The revenue of the Rangoon municipality, excluding loans and advances, continued to increase, and amounted to £200,000, against £173,800 in 1905-06. The incidence of direct taxation and that of income per head of population were Rs. 8½ and Rs. 13½ respectively, as compared with Rs. 7½ and Rs. 11½ in 1905-06. In 1905-06 the expenditure of the municipality was in excess of its income; this state of affairs was remedied in the year under review by small increases in the municipal tax, the water tax, and the scavenging tax. A four per cent. loan of £60,300 was raised, and the outstanding loans at the end of the year amounted to £816,700, including the reclamation works loan of £120,000; the sinking funds amounted to £50,660. There is still considerable room for increased profitable expenditure. The town as a whole is rich, and the incidence of taxation is not heavy when compared with that in Bombay or Calcutta. The improvement of the sewerage, the water supply, and the roads, and the regulation of the milk supply are all pressing needs.

Interior of
Burma.

The number of other municipalities in Burma at the end of 1906-07 was 43, one having been added during the year. The most noticeable feature of the year was the effect of plague on the finances of the municipalities. Contributions to meet special plague expenditure amounting to £12,000 were granted from provincial revenues. The average incidence of taxation remained at Rs. 1½ per head of population, the highest rate being that of about Rs. 4 at Moulmein, but the total income fell off, on account of the effect of plague on the municipal receipts, from markets and slaughter-houses. The income of the municipalities, excluding debt heads, was £202,800, of which £77,900 came from taxation and ferry tolls, and £86,700 from markets and slaughter-houses. There are no octroi duties in Burma. The municipal incomes are for the most part small, only six, including Rangoon, exceeding £7,500 per annum.

Central
Provinces
and Berar.

In the Central Provinces 46 towns had municipal committees in 1906-07, and 12 in Berar, as in the preceding year. Some changes, however, were in prospect. For the second time in its history the Municipal Committee of Kalmeshwar showed serious incompetence in dealing with an outbreak of plague, which resulted in the death of 13 per cent. of the population; the existing elected committee, whose term of office expired at the close of the year, were therefore replaced by nominated members. At the end of the year, also, the Municipality of Betul was abolished. Of the 46 municipalities in the Central Provinces proper, no less than 19 subsisted during 1906-07 on revenues smaller—in most cases considerably smaller—than Rs. 10,000. With such limited resources much useful expenditure is out of the question; the population is generally poor, and though the burden of taxation appears in many cases very light, no substantial increase would be desirable. In two instances the municipal income is derived almost entirely from the country people in the shape of bazar tax and fees for cattle sales and the use of markets. In Berar municipal taxation is unduly low, the incidence being only 12 annas 6 pies per head, as compared with Rs. 1.12.4 in the Central Provinces, the towns of which are less wealthy than those of Berar. The total indebtedness of the municipalities was £71,000, half of which was owed by Nagpur and Jubbulpore.

Eastern
Bengal and
Assam.

Eastern Bengal and Assam contained 50 towns under some form of municipal government, 44 of them being municipalities proper, and the rest of smaller importance; in 34 the system of election was in force. The total number of ratepayers was 105,866, being 16.9 per cent. of the urban population, and the average incidence of taxation per head of population was Rs. 1.5.11. The net indebtedness of the 15 municipalities, which had outstanding loans at the close of the year, amounted to £14,360, about two-thirds of which represented the debt of the Dacca and Narayanganj Municipalities. The administration of the year may be described generally as one of slow improvement; the arrangements in most towns for the supply of drinking water, for conservancy and for drainage are still inadequate.

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 bodies connected with trade and commerce. The income of the year, excluding loans and advances, amounted to £111,000, including £88,700 from taxation, £23,800 from municipal property and powers apart from taxation, and a grant of £23,600 from Government, the greater part of which was for the improvement of the water supply and drainage. Receipts from taxation showed an increase of £8,700 over those of 1905-06. Taxation fell on the population at the rate of about Rs. 2 $\frac{1}{8}$ per head; the principal tax is one of 10 per cent. on the annual value of buildings and lands, and there was also a water tax levied on the same basis at 6 per cent., and a lighting tax at 1 $\frac{1}{4}$ per cent., besides a tax on professions and trades, and taxes and tolls on animals and vehicles; there are no octroi duties. A loan of £6,700 was raised for the construction of special buildings. The total expenditure came to £131,800, of which £12,900 was spent on capital account, from funds provided by the Government contribution and the loan mentioned above, chiefly on drainage. The new drainage schemes were temporarily suspended during the year, but their execution will be resumed shortly. A scheme for the introduction of a new filtered water supply into the city at a cost of £157,300 has been sanctioned by Government, and was formally accepted by the Corporation in April 1907. The outstanding debt of the municipality amounted on the 31st March 1907 to £456,000, against which must be set the sinking funds, amounting to £137,500.

MUNI-
CIPALITIES.
MADRAS.
Madras City.

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 154 seats filled by election during the year only 63 were contested. The average incidence of taxes and tolls continued to rise slightly, and was nearly 19 annas per head of the municipal population; there are no octroi duties. The expenditure was £261,700, of which £62,500 was spent on conservancy, £24,100 on water and drainage, £24,000 on hospitals, £10,400 on buildings, £23,400 on roads, and £26,800 on education. The expenditure during the year on the scheme for the drainage of Ootacamund, estimated to cost £25,700, was entirely charged to provincial funds. The outstanding debts at the end of the year amounted to £157,300, against which there were some small sinking funds, and closing balances amounting to £75,600.

Interior of
Madras.

The municipality of Bombay is administered by a corporation consisting of 72 councillors, of whom 16 are nominated by the Government, 36 are elected by the ratepayers, 16 by the justices, 2 by the Chamber of Commerce, and 2 by the University. In view of the steady rise in the revenue and the possession of large surplus balances, the general tax was reduced in the financial year 1905-06, from 10 $\frac{1}{2}$ per cent. to 9 per cent., and the rate for water supplied for trade purposes was reduced from 12 annas to 10 annas per 1,000 gallons. These rates were continued during 1906-07. The revenue realised during the year amounted to £643,200, the net receipts being £378,100, including £191,500 from the general tax, and £6,648 from the water revenue, while the net collections of octroi duties were £102,700. The gross revenue exceeded that of the preceding year by £37,000, the principal cause being an increase of £12,400 in the octroi receipts and a continued improvement in the proceeds of the general tax. The incidence of taxation per head of the population in 1901-02 (776,000) was Rs. 6 $\frac{1}{2}$, with the general tax at 10 $\frac{1}{2}$ per cent.; in 1906-07, with the general tax reduced to 9 per cent., it stood at nearly Rs. 8 $\frac{1}{2}$ per head on the then ascertained population (977,800). The expenditure was £634,700, including a contribution of £20,000 to the Improvement Trust, £211,800 for debt services, and £15,100 for plague expenses. The balance at the end of the year was £150,000, compared with £6,700 required by law.

BOMBAY.
Bombay
City.

During the year no loan was raised and £7,000 was repaid, the outstanding debt at the end of the year being £3,307,000, and the invested sinking fund £453,000. The plague expenditure since the commencement of the epidemic amounted to £440,800 at the end of March 1907, of which

MUNI-
CIPALITIES.

£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 in the year amounted to £143,100, the number of properties acquired being 70. Since the commencement of operations in 1898 the total capital expenditure has been £1,607,600, the number of properties acquired being 1,258 at a cost of £1,173,200. A further loan of £13,300 at 4 per cent. was raised during the year, the amount of the loans taken from the public being thus brought up to 1½ millions sterling. The year's revenue of the Trust amounted to £92,800, and the expenditure, exclusive of capital charges, to £96,500. The revenue consisted of the municipal contribution of £20,000 mentioned above, and receipts from investments, rents and other property.

Interior of
Bombay.

The municipalities in the interior of Bombay numbered 162, including 14 city and 4 temporary corporations. There were 44 municipalities composed entirely of nominated members. The Bassein Municipality remained under suspension. Their aggregate income declined from £505,500 to £433,800, the decrease being mainly due to the fall in receipts from octroi, which is attributed to the prevalence of plague and famine. The aggregate expenditure fell from £538,500 to £451,700; in the Central Division, however, the expenditure exceeded that of the previous year, and in Sind the figures show practically no change, large decreases under the head of Public Health being counterbalanced by increases under other heads. The incidence of taxation per head of population was as usual highest in Karachi (Rs. 7.14.1) and lowest in Ashta (Re. 0.0.7). The total liabilities of the municipalities on account of loans stood at £293,000, compared with £335,000 in 1905-06.

DISTRICT
BOARDS.
General.

DISTRICT BOARDS.

The constitution of district boards with precise powers and responsibilities under the law took place more recently than the creation of municipalities; in most provinces district committees had, for many years, given assistance or exercised control in the administration of local roads, local hospitals, and local schools, but before 1870 there was no organised attempt to introduce rural self-government. The present system is based on the principles laid down by the Government of Lord Ripon in 1882. In all the more advanced provinces district boards are constituted under different enactments. The funds of the boards are supplied for the most part from the yield of specific imposts, known as provincial rates, made over to them by the local governments. By a change announced in the Financial Statement of March 1906, certain petty appropriations which had hitherto been made from the funds of district and local boards for various provincial purposes, such as the district post, normal schools, and the like, were discontinued; and as, at the same time, various cesses for village establishments, &c., were abolished, a close approach has now been made to the ideal held up by the Government of India, that cesses on the land should be exclusively such as are levied by or on behalf of the local authorities for expenditure on genuinely local objects. 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. The Government of India announced in the Financial Statement for 1905-06 a decision to make a grant-in-aid of the funds of all district and local boards throughout India, equal approximately to one-fourth of their income from rates or cesses imposed upon the land. From April 1908 the accounts of district boards are to be excluded from the general provincial accounts, and their funds will be treated independently, as municipal funds are at present, thus following the practice in the United Kingdom, where the income and expenditure of county councils are kept entirely separate from the public accounts. The former system, which dated from a period before local authorities possessed the financial and administrative powers with which they are now invested, compelled these bodies to frame their budgets at a much earlier date than would otherwise be necessary, and deprived them of the freedom of re-appropriation, which municipal authorities enjoy; it also

tended to subordinate their requirements to those of provincial finance and even occasionally to those of other local bodies. In most provinces the district boards delegate much of their detailed work to sub-divisional or "local" boards, which are constituted under the law, and are responsible for sub-divisions or parts of a district. The local boards contain a proportion of elected members, varying from three-quarters to a half of the whole number, in all provinces excepting Madras, where the elective system is only applied to members of district boards. The latter are in all provinces generally chosen, either by election or appointment, from the ranks of the local board members. The following table shows the general constitution of the boards in each province, the figures in italics relating to the local boards, the others to the district boards :—

DISTRICT
BOARDS.

—	Number of Boards.	Total Number of Members.	By Appointment.			By Employment.		By Race.	
			Ex-officio.	Nominated.	Elected.	Officials.	Non-Officials.	Europeans.	Native.
Madras - {	23 <i>82*</i>	710 <i>1,208</i>	109 <i>84</i>	279 <i>1,124</i>	322 —	291 <i>367</i>	419 <i>841</i>	137 <i>91</i>	573 <i>1,117</i>
Bombay - {	25 <i>211</i>	3,624	40	1,966	1,618	†	†	†	†
Bengal - {	29 <i>78</i>	593 <i>946</i>	160 <i>63</i>	185 <i>622</i>	248 <i>201</i>	192 <i>121</i>	401 <i>825</i>	189 <i>101</i>	404 <i>845</i>
United Provinces.	48	956	30	298	628	†	†	†	†
Punjab - {	29 <i>20</i>	1,102 <i>407</i>	235 <i>20</i>	488 <i>126</i>	879 <i>261</i>	256 <i>20</i>	846 <i>387</i>	74 <i>3</i>	1,028 <i>404</i>
N.-W. Frontier Province.	5	216	49	167	—	49	167	26	190
Central Provinces and Berar. {	20 <i>75</i>	464 <i>1,196</i>	2 <i>14</i>	114 <i>310</i>	348 <i>872</i>	77 <i>122</i>	387 <i>1,074</i>	18 <i>4</i>	446 <i>1,192</i>
Eastern Bengal and Assam. {	14 <i>51</i>	283 <i>684</i>	75 <i>97</i>	107 <i>284</i>	101 <i>303</i>	98 <i>137</i>	185 <i>547</i>	55 <i>151</i>	228 <i>533</i>

* Besides 882 union panchayats, with 3,626 members.

† Particulars not available.

In Bengal there were 29 district boards and 78 local boards, the latter having charge of village roads and various duties deputed to them in respect of pounds, ferries, primary education, and other matters; and there were also 49 union committees entrusted with minor duties and having an aggregate income of only £1,240. The provisions, inserted in the Bill to amend the Bengal Local Self-Government Act, enabling district boards to levy a special cess to meet charges of debt raised for tramways and light railways, were withdrawn by the Select Committee of the Bengal Legislative Council, in view of the decided disapproval expressed by the public bodies and associations consulted. Four light railways constructed under the guarantee of district boards are now in existence in Bengal, and worked successfully during the year; several similar schemes are in contemplation. Considerable progress was made during the year with the construction of feeder roads to railways. The income of the district boards, apart from the head of deposits and advances, was £428,300; this was slightly below the figure of the previous year, but was still much in excess of the income of earlier years, owing to the large contributions made by Government for civil works, amounting in all to £60,000. The expenditure, including debt headings, was £502,900, of which £76,300 was spent on education and £291,800 on civil works, chiefly roads. The closing balances, exclusive of deposits, rose to £186,600. The boards spent more on medical and sanitary work than before, owing to the Government assistance given for this object. They also do something for industrial development, and attempts were still being made to introduce an improved fly-shuttle loom, although

Bengal.

DISTRICT BOARDS. efforts in this direction have hitherto met with little success. It is reported that, on the whole, district boards did well during the year and showed considerable interest in the various branches of their work, but that the working of the local boards was unsatisfactory. The question of improving the status of these bodies was under consideration.

United Provinces. The number of district boards in the United Provinces was the same as before, viz., one for each of the 48 districts. There was a slight improvement both in the number of meetings held and in the average attendance, but this attendance is still less than half the membership. By a new provision of law there must be not less than 12 elected members on each board. By the passing of the Local and Rural Police Rates Act and of the District Boards Act, the system of local self-government will, it is hoped, receive a fresh impetus, wider scope having been given to the duties and powers of district boards. 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 system of account also has been much simplified by the abolition of the Local Rates Fund, in which the rates used to merge before distribution, and by the credit direct to district boards of their share of the receipts. The total income of the boards during 1906-07 was £480,500, including large provincial grants, to the total amount of £123,000, chiefly for education and civil works. The receipts from rates showed, as usual, a steady increase. The expansion of educational and medical receipts was the satisfactory result of the opening of new schools and dispensaries. The expenditure amounted to £470,600, of which about £170,000 was spent on education, £50,000 on the equipment and maintenance of hospitals and dispensaries, and £226,000 on civil works, chiefly roads and new buildings required for medical or educational purposes.

Punjab. The number of district boards in the Punjab was 29, including the Simla board, the powers of which are exercised by the Deputy Commissioner. The local boards numbered 20, those in the Ferozepore district having been abolished during the course of the year. Local boards now exist in only five districts. The district boards in 12 districts are composed entirely of nominated or ex-officio members, and elsewhere the elections generally awaken little interest. Fresh Government contributions of £43,300 in aid of the finances of these bodies, together with the stoppage of the district dāk cess from the beginning of the financial year, have afforded the boards increased opportunities for useful work in extending arboricultural operations and in the construction and maintenance of the district roads. The year's income of the district boards, apart from loans and advances, came to £282,700, of which the chief items were £174,000 from local rates and £31,900 from civil works. Both these items showed a considerable increase as compared with 1905-06. The expenditure of the year was £259,300, of which the chief items were education £64,000, medical and sanitary charges £35,900, and roads and other public works £111,300.

Central Provinces. In the Central Provinces and Berar, in consequence of the redistribution of territory in the Chhattisgarh Division, the number of district councils rose to 21 and that of local boards to 75. The powers of the local boards are small, and the authority delegated to them by district councils in the past has been largely nominal; but it is hoped that steps will now be taken to place definite funds at their disposal and to give them wider powers of control. The income of the district funds amounted to £154,400 excluding debt heads, while the expenditure, also excluding repayment of loans, &c., was £143,700. 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. The receipts were swollen by contributions of £26,000 from the Government of India's grants for communications and for education. The expenditure included £55,300 on education and £47,700 on public works. The total balances amounted to £105,600, of which no less than £76,400, or more than a year's revenue, was held by the Berar boards; this large accumulated balance is regarded as an unsatisfactory feature, but certain restrictions on the spending capacity of the councils have now been removed.

In Eastern Bengal there were 14 district boards, 33 sub-divisional local boards, and 10 union committees. In Assam there were 19 local boards, constituted under executive rules. The latter boards generally resemble district boards rather than the ordinary local boards in their functions and responsibilities, and a special feature of their constitution is the presence among their members of a large proportion of Europeans, who represent the planting community. The attendance at meetings indicates that local board members in Assam take a much greater interest in local affairs than members of district and local boards in Eastern Bengal. One of the reasons for this lack of interest in the latter districts seems to be that few of the members are well acquainted with the circumstances or needs of the interior. The reluctance to stand for election on the part of the *mofussul* gentry, whose knowledge would be of real assistance, is one of the principal causes of the stagnation which seems to characterise local self-government institutions in these parts. In Eastern Bengal, where the Muhammadan community includes two-thirds of the population, steps have been taken to give that community a share in public representation more in accordance with their numbers, and at the end of the year they had about one-third of the membership of the district and local boards; the difficulty of finding suitable Muhammadan gentlemen willing to serve is referred to by all Commissioners. More than half of the income of the boards accrued from provincial rates, and a quarter from Government contributions for education and roads. Their expenditure amounted to £296,300, of which £80,700 was devoted to education and £176,000 to civil works. As a result of the Imperial grants for the improvement of communications and the extension of primary education, considerable progress was made in most districts under these heads.

DISTRICT
BOARDS.
Eastern
Bengal and
Assam.

There were in Madras 23 district boards, 82 taluk boards, and 382 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 local sanitation, though in some cases they have the management of elementary schools, markets, and other local institutions entrusted to them by the taluk boards. The income of the boards and unions, excluding debt heads and contributions from one district board to another, increased from £353,300 to £870,500, and the expenditure fell from £776,400 to £760,600. 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 £362,900. The average incidence of local fund taxation, including tolls, was As. 3-7 per head of population. The income included also grants from provincial revenues amounting to £183,600, chiefly for roads and bridges and for education. The chief items of expenditure were £347,400 on public works, £94,300 on medical institutions, sanitation and plague, and £117,700 on education. The Mayaveram-Mutupet Railway, which belongs to the Tanjore District Board, brought in a net profit of 5.6 per cent. on the capital outlay.

Madras.

In Bombay and Sind there were 25 district and 211 taluk (or sub-divisional) boards, nearly all of which are partly elective. The income of the local boards, excluding debt heads, was £423,700, compared with £379,000 in the previous year and £292,100 in 1904-05, the rise being due partly to the recovery of past arrears and partly to the special grants from Government for primary education, and the improvement of communications and village water supply. The total expenditure of the boards was £360,200, including £127,500 on education, £19,600 on medical relief, and £180,100 on roads, buildings and water supply. The balances at credit of the boards rose from £139,800 to £203,500.

Bombay.

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 £237,700 and an expenditure of £222,800 in the year under report. 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 £183,900 of the expenditure, of which £18,600 was on education and £89,200 on public works.

Burma.

PORT
TRUSTS.

PORT TRUSTS.

The custody of the harbours and the administration of harbour and shore affairs in the more important ports are placed by various legislative Acts in the hands of Port Commissioners. Members of these Port Trusts are for the most part appointed by the Local Governments, and are usually representative of the various Indian and commercial interests of the place. Port trustees are empowered, subject to the control of the Government, to levy dues, to contract loans for port improvements, to do all that may be needed for the maintenance of the harbour and its approaches, and to erect warehouses, jetties, and docks for the convenience of traders and shipping. The Local Governments and, so far as can be judged, the public are well satisfied with the work done by the various Port Trusts. The Commissioners of Port Trusts receive a small fee for each attendance at meetings for business.

Bombay.

The trade as a whole was slightly greater than in 1905-06, when the figures of all previous years were exceeded. The imports of building materials have continually increased on account of the great activity which has been displayed in the erection of new buildings throughout the city of Bombay. There were decreases in the trade in grains and in oil. The net result to the Bombay Port Trust was a rise in their income to £487,100, a record figure, the revenue having shown a steady growth of about £20,000 a year since 1900. The receipts for wharfage fees and dock dues on goods were £225,800, the other principal items being ground and warehouse rents, which together yielded £123,000. The expenditure amounted to £417,700, including £188,800 for interest and sinking fund charges, £12,200 for depreciation, and £18,900 for municipal taxes. The capital expenditure during the year amounted to £220,400, of which £150,400 were spent on the new dock works. Two debenture loans aggregating £140,000, of which the Trustees took up £40,000, were issued during the year. The debt of the Trust amounted at the end of the year to £4,448,700, of which about two millions is owed to Government, and the remainder consists of foreshore securities and debenture loans. The cost price of the properties vested in the Board was £4,517,800, and various depreciation, reserve, and sinking funds (including the year's surplus of £69,500) amounted in the aggregate to £736,000. The number of steamships entering the port in the year was 2,634, of a total tonnage of 3,358,000 tons, or 115,000 tons more than in 1905-06.

Calcutta.

There was a notable increase of 65,000 tons in the jute shipments at the docks and of 10,000 tons in tea. A new feature in the traffic was the shipment of 25,000 tons of manganese ore. The quantity of coal shipped was 3,000,181 tons as compared with 2,558,502 tons in the previous year, and was the highest on record. The exports over the dock quays aggregated 3,796,404 tons, against 3,348,802 tons in the previous year; the imports were 186,815 tons, against an average of 54,826 tons during the past five years. The receipts of the Port Trust amounted to £667,000, as compared with £597,000 in 1905-06, which was the highest figure on record up to that time; the expenditure was £659,400, including the Kidderpore Dock Account and payments for interest and sinking funds. The surplus brought up the accumulated balances to £197,300, out of which a sum of £174,900 has been set aside as a Revenue Reserve Fund. The expenditure during the year upon capital works amounted to £695,800. The capital debt of the Trust on 31st March 1907 was £3,980,000, of which rather more than two millions are Government loans, and the rest debenture loans. The latter were increased by the issue of debentures to the value of £400,000 in 1906. Against this total debt may be set value of properties, &c., £5,375,000, besides valuable foreshore lands, and sinking funds amounting to £391,400. The jetties yielded a net revenue of £35,600, and the petroleum wharf £11,600. The receipts from the Kidderpore wet docks were £162,100; the working expenses were £184,000, showing a net loss, apart from interest charges, of £21,900. The number of vessels berthed in the port in 1905-06 was 1,595, with a gross tonnage of 6,186,751 tons; these figures are above any previously recorded.

The record of the Port of Rangoon for the year 1906-07 was one of continued prosperity, the tonnage of the shipping which visited the port increasing by nearly 10 per cent. The ordinary revenue was £135,500, and the ordinary expenditure £132,300. The capital expenditure of the year amounted to £391,400, and 4 per cent. loans for £310,000 were raised. The total debt at the close of the year amounted to £725,000. The net tonnage of sea-going vessels entering the port was 2½ million tons, and consisted almost entirely of steamers, the number of which was 1,431. Substantial progress was made with the scheme for the new port works, which was sanctioned in 1901 and is now nearly completed; since the commencement of the works £440,300 has been expended out of sanctioned estimates of £593,300. A scheme for enlarging the accommodation of the port for inland steamers by the acquisition of 2,000 feet of river frontage with land behind, at the eastern end of the harbour, was carried into effect during the year. The condition of the Rangoon river has given rise to grave anxiety for some time past. The question of the works to be undertaken for the draining of the river occupied the attention of the Commissioners throughout the year, and it was hoped that a complete project might be sanctioned at an early date. The report for 1905-06 contained a review of the history of the port during the five years 1901 to 1906, in which it was shown that very rapid progress had been made, both in the trade of the port and in the works which were needed for its proper equipment.

The ordinary expenditure of the Madras Port Trust in the year 1906-07 was £35,900, and its receipts were £64,600. Out of the balance £2,900 of debt were repaid, and £24,100 devoted to capital expenditure. A review of past and present earnings of the Trust shows that in the last twenty years debt has been repaid to the amount of £166,400, while £99,000 has been paid out of revenue for capital works. The debt standing in the books was £289,000. The capital works of which the Trust have charge originally cost £1,190,000, and their present value is stated as £938,500. Works involving a large additional expenditure were commenced to provide a new entrance to the harbour and additional accommodation. For this purpose the Government had agreed to furnish £133,300, and to advance the balance of £236,400 estimated to be required at four per cent. interest; the interest and the existing debt to be paid off together in sixty equated payments. The affairs of the Trust are so much improved that there is little risk of a necessity for enhanced harbour dues arising in consequence of the new capital expenditure. The sum spent on the harbour extension works during the year was £85,900. 604 vessels of an aggregate tonnage of 1,457,473 tons made use of the port during the year. Of the 12 Trustees on the board four are officials and three non-officials appointed by the Government, while the rest are nominated by the Chamber of Commerce and the Trades' Association.

The year under report was very prosperous for the Karachi Port Trust. The revenue receipts were £189,500, against an expenditure of £129,500. The reserve fund, the limit of which has been fixed at £166,700, was increased during the year from £100,000 to £133,300. The number of steamers, excluding Government vessels and transports, entering the port was 781, with a total tonnage of 1,428,964 tons, against 737, with a tonnage of 1,240,521 tons in 1905-06. The works under the large loans recently issued by the Trustees were pushed on vigorously, while the Trustees were also contemplating the submission of further proposals for the improvement of the port. A sum of £93,700 was spent on capital works during the year. The total liabilities of the Trust at the end of the year stood at £543,000.

There are other minor ports at which smaller sums are raised yearly and expended on improvements, but these do not require notice.

CHAPTER II.

VITAL STATISTICS, SANITATION, &c.

(Detailed information on the subjects treated in this chapter is contained in the annual Report on Sanitary Measures in India, which is published as a Parliamentary Paper; and a brief review only is given in this place.)

VITAL
STATISTICS.
General
population.

VITAL STATISTICS.

As the date of the census of 1901 recedes, it is evident that the birth and death rates calculated upon the census populations become less accurate. There are also defects in the registration, and in some places these defects are very serious. Improvement in registration is, however, being steadily effected, and in some provinces the errors in the recorded numbers of births and deaths are now comparatively small, although the causes of deaths are incorrectly reported except in a few of the larger cities.

The population of the areas of British India in which births were registered was 223,511,195 according to the census of 1901, and the number of births registered in 1906 was 8,448,478. The calculated birth-rate in

BIRTH-RATES.		
	1906.	1905.
Bengal	37·3	39·5
Eastern Bengal and Assam.	37·4	39·4
United Provinces	40·2	41·2
Punjab	43·7	44·4
North-West Frontier Province.	38·6	35·4
Central Provinces and Berar.	51·7	54·0
Madras	30·9	32·0
Coorg	26·1	25·8
Bombay	33·8	33·1
Burma (Lower)	32·3	34·8
Burma (Upper)	34·2	31·9
Ajmere-Merwara	28·9	37·3

1906 was 37·8 per mille compared with 39·13 in 1905 and 38·41 the average of the five years ending with 1905. The provincial rates are given in the marginal table. In nearly all provinces the birth-rates were higher than the death-rates, the most considerable excesses being 8·2 per mille in the Central Provinces, 6·8 in the Punjab, and 5·7 in Eastern Bengal. In Bombay the death-rate exceeded the birth-rate, as a result of the persistence of plague and the unusual prevalence of other epidemics. An exceptionally high birth-rate was maintained in the Central Provinces, where the mean ratio per mille of population during the five years ending in 1905 had been 41·8. The mean percentage of male to female births was

106·88, the percentages ranging from 118·8 in the North West Frontier Province to 104·4 in Madras and 97·28 in Coorg.

The populations among whom deaths were registered aggregated 226,125,682 according to the census of 1901, or about 97 per cent. of the total population of British India. The number of deaths registered during

	1906.			1905.		
	Rural.	Urban.	Total.	Rural.	Urban.	Total.
Bengal	36·1	35·0	36·1	38·4	40·0	38·5
Eastern Bengal and Assam.	31·8	24·1	31·7	35·2	26·4	35·1
United Provinces	38·8	49·1	39·0	43·3	53·6	44·0
Punjab	36·1	44·7	37·0	47·4	49·1	47·5
North-West Frontier Province.	33·5	36·8	33·7	26·4	30·8	26·8
Central Provinces and Berar.	42·7	50·0	43·5	36·7	41·9	37·2
Madras	26·6	33·4	27·4	20·3	20·6	21·4
Coorg	24·6	36·6	29·3	25·7	32·1	28·2
Bombay	32·2	53·8	35·1	29·5	47·6	31·8
Burma (Lower)	24·9	42·6	27·1	23·0	38·2	24·9
Burma (Upper)	23·4	50·4	26·2	20·9	36·6	22·5
Ajmere-Merwara	27·7	44·2	32·2	28·0	50·9	34·2

1906 was 7,852,330, compared with 8,117,771 in 1905, and the death-rate fell from 35·96 per thousand in that year to 34·73, the decrease being due to the great decline in the mortality from plague. The mean mortality per thousand for the quinquennium ending 1905 was 32·91. The death-rates among the general population in each province during 1905 and 1906 are given in the marginal table. It must be borne in mind, however,

that the accuracy of the statistics is not yet very good, and that it varies in

different parts of India. The fall in the general death-rate was due to lessened mortality in the more populous provinces of Northern India. In Madras, Bombay, Burma, the Central Provinces and Berar, the North West Frontier Province, and Coorg, the death-rates of 1906 were higher than those of 1905. The highest death-rates were in the Central Provinces and the United Provinces; the lowest in Burma and Madras. Except in the Bengal provinces, the urban mortality was higher than the rural; but it must be remembered that registration is, as a rule, more complete in urban districts.

The greatest mortality occurred in October, November and December, and the least in February and March. In most provinces the male death-rates were higher than the female death-rates. Male infants died at the rate of 228·30 per thousand born, and female infants at the rate of 217·52, compared with rates of 231·11 and 217·72 in 1905. Infantile mortality was highest in Ajmere and the Central Provinces, and lowest in Eastern Bengal and Madras.

With respect to special diseases, it may be stated briefly that cholera was very prevalent in Madras, Bengal, Eastern Bengal, the Central Provinces, and the United Provinces, where the death-rates were between 3 and 4 per mille. Small-pox was more widespread than in 1905 and the death rates were upwards of ·5 per thousand in seven provinces, the highest being 1·42 in Lower Burma. Plague forms the subject of a separate section. The accompanying table shows the number of deaths, and the death-rates

Years.	Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhoea.	Plague.	All causes.
1902	224,130	115,443	4,279,351	235,750	456,975	7,112,386
	·99	·51	18·95	1·04	2·02	31·49
1903	312,864	93,693	4,459,237	273,459	686,485	7,881,125
	1·38	·41	19·66	1·21	3·03	34·7
1904	192,835	55,232	4,093,981	210,655	940,609	7,436,472
	·85	·24	18·09	1·06	4·16	32·86
1905	441,786	70,962	4,417,655	264,124	940,821	8,117,771
	1·96	·31	19·57	1·17	4·17	35·96
1906	690,519	109,583	4,452,842	298,117	300,355	7,852,330
	3·05	0·48	19·69	1·32	1·33	34·73

per thousand of population from each of the principal causes recorded in British India during the five years from 1902 to 1906. When reference is made to fever in India, malarial fever is generally understood, but it is obvious from the figures in this table that many causes of death and many diseases much more fatal than malarial fever are included under the heading. Investigation suggests that the true mortality from malarial fever in India is perhaps about 25 per cent. of the mortality recorded under the general heading fever.

The following table gives the ratio of deaths per mille in towns of British India whose population exceeded 150,000 in 1901:—

The following table gives the ratio of deaths per mille in towns of British India whose population exceeded 150,000 in 1901:—

—	1905.	1906.	—	1905.	1906.	—	1905.	1906.
Calcutta -	37·9	35·7	Benares*	76·7	58·47	Ahmedabad*	63·43	52·09
Bombay -	62·33	68·98	Delhi -	52·96	63·08	Mandalay -	32·7	57·1
Madras -	59·5	46·9	Lahore -	44·57	38·99	Allahabad*	43·69	36·87
Lucknow*	66·27	50·41	Cawnpore*	59·76	81·63	Amritsar -	49·02	49·42
Rangoon -	45·9	47·6	Agra*	47·16	39·62	Poona* -	42·8	103·56

* Excluding cantonment.

The total number of vaccinations performed among the civil population during 1906-07 was about 9 millions, being a decrease of about 200,000 on the previous year's work. 97 per cent. of primary vaccinations and 73 per cent. of re-vaccinations were successful, about 35 per mille of the population having been successfully vaccinated. The number of infants successfully vaccinated was 4 millions, and of children between one and six years of age, 3½ millions.

Vaccination.

The average strength of the European army in India during 1906, excluding officers, was 70,272, and of this strength 51 per cent. were men under 25 years of age and 21 per cent. were men with less than one year's service in India. The year was not so healthy as 1905, but the rates of

European troops.

VITAL
STATISTICS.

admission to hospital and of mortality, given in the table below, were considerably less than those of the antecedent quinquennium. There was rise in the number of admissions on account of ague; this disease, venereal diseases, and simple continued fever were the chief causes of sickness during the year. The admission rate for all venereal diseases in 1906 was 117 per mille of strength, compared with 154 in 1905, 198 in 1904, and 486 per mill in 1897. The chief causes of death were, as usual, enteric fever and abscess of the liver. Bengal-Orissa and Central India proved the most unhealthy districts, the hill stations and the Burma coast the most healthy. From the whole European army 1,993 men were invalided during the year.

Native
troops.

The average strength of the native troops, including those on duty in China, was 127,853; their health was excellent, the constantly sick rate and the death-rate being the lowest on record. Despite the continued prevalence of plague among the civil population, the disease has been prevented so far from appearing in epidemic form among the native troops. There were 83 deaths from this cause during the year. Out of the 160 stations occupied by native troops during 1906, 104 were situated in districts where plague was prevalent among the general population; yet in only 27 of these districts cases occur among the troops.

The following table shows that the admission rate among European troops during 1906 was nearly $1\frac{1}{4}$ times as high as that among native troops, the constantly sick rate was more than twice as high and the invaliding rate was four times as high:—

	Ratio per Mille of Strength.					
	European Troops.			Native Troops.		
	1900-04 Average.	1905.	1906.	1900-04 Average.	1905.	1906.
Admissions into hospital	1046.5	834.3	870.8	719.0	607.1	683.5
Constantly sick - -	64.6	52.3	51.4	27.2	23.2	23.0
Deaths - - -	13.03	10.05	10.48	10.87	8.09	6.57
Invaliding - - -	34.76	21.24	28.36	11.92	9.02	7.05

PLAGUE.

Plague in
1906.

The year 1906 was distinguished by a remarkable decline in the mortality from plague, the number of deaths recorded throughout the country falling to 356,721, the smallest total since 1901. The mean death-rate from plague in the British provinces was 1.33 per thousand, compared with 4.17 in 1905; males suffered less than females, the death-rates of the sexes being 1.25 and 1.40 per thousand. The decrease in plague mortality was common to all the larger provinces, and was most marked in the United Provinces, the Punjab and Bengal. The table in the margin gives the number of plague deaths in India as a whole in each year since the outbreak of the epidemic.

The great improvement of 1906 was not maintained in 1907. The relatively mild attacks of plague during the period August 1905 to July 1906 were followed by an outbreak of unprecedented severity, and the period from August 1906 to July 1907 proved the most disastrous of all the recent plague years in India. The statistics for the calendar year 1907, based on preliminary figures, are given in the margin, together with the death-rate from plague per mille of population, reckoned on the census figures of 1901. The plague mortality in the United Provinces and the Punjab, which as usual had fallen very low in August and September,

Plague Deaths.	
1896	
1897	57,543*
1898	116,285
1899	139,009
1900	92,807
1901	282,027
1902	576,365
1903	883,076
1904	1,143,993
1905	1,069,140
1906	356,721
1907	1,200,735†

* Plague broke out in India (Bombay) in August 1896.

† Preliminary figures.

Plague in
1907.

reached serious dimensions in December 1906; from that time onward the infection spread with increasing rapidity, a climax being reached in the week ending the 11th May 1907, when the cases of plague in the Punjab alone numbered 64,920.

	Plague Deaths in 1907.	Death rate from Plague per Mille of Population.
Bombay Presidency (including Bombay City).	143,354	9
United Provinces -	252,475	5
Punjab -	610,581	32
Rest of India -	155,125	0.7
Total -	1,200,735	4

In the two months April and May 1907 the deaths from plague numbered 420,223 in the Punjab and 132,072 in the United Provinces. By August 1907 the mortality had sunk to an inappreciable amount, nor was there, as in other recent

years, any marked recrudescence in December; the latest available returns indicate that for the present at least the force of plague in Northern India has spent itself. In Bombay the mortality throughout the year is somewhat differently distributed. June is as a rule the healthiest month; from that time the mortality increases until a maximum is reached in October; from October there is a relative decline until December or January, and then again an increase to a second culmination, though not so high as that of October, in March. Sind, with the exception of Karachi, has been throughout relatively free from plague; but in the Bombay Presidency proper few districts have escaped severe outbreaks in the course of the present epidemic.

Plague is so local in its visitations that all general and unanalysed statistics are likely to prove misleading. Many parts of India have been, with the exception of a few isolated cases, entirely free from its ravages, and in the greater part of the country the outbreaks of plague, though noticeable in the aggregate, cannot be described as having been severe or disastrous. The mortality in Eastern Bengal and Assam has been at no time appreciable. Burma has been relatively free from the disease, which seems, however, to have obtained some foothold since 1905. In the Madras Presidency 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 has been so severe as to disorganise the labour market and to affect the level of wages; yet even in this province plague has not shown itself everywhere, and if attention could be concentrated upon particular villages, it would become remarkably apparent how local in their severity the outbreaks have been.

In the meantime the efforts of Government to discover and apply the most effective and most practical methods of remedial action have not been relaxed. On the scientific side the Plague Commission, whose constitution has been described in former issues of this Report, continued its investigations bearing on the relation of rat plague to human plague, the connection that rats and rat fleas have with the spread of human plague, and the epidemiology of the disease. The Commission's researches have led to most important results. When it commenced its labours, the mode of propagation of an epidemic was still involved in considerable mystery, and many of the difficulties, which beset the earliest efforts of Government to check the spread of the disease, were due to the ignorance of the scientific world respecting the life history of the plague germ. The main facts in regard to it have now been ascertained for the first time, and rational methods of attack have thus been made possible. An account of the principal conclusions which have been reached is given in three special numbers of the *Journal of Hygiene* for September 1906, July 1907, and December 1907, 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 practical experience acquired by officers engaged in actual plague administration are described in the Parliamentary Paper (Cd. 3516) entitled "Correspondence regarding Measures for the Prevention

PLAGUE. of Plague." In the light of the knowledge and experience which now exists, 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 actual application of measures whose utility has been ascertained must be made to depend upon the particular circumstances of each locality and upon the character of its inhabitants. As the result of past experience and persistent attention, 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 is the only practicable way of removing man from contact with infected rat fleas, and it is the method which has actually proved most effective. Government is prepared to supply assistance in money and material for the provision of 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 brought upon the people and in regard to which their wishes and even prejudices must be consulted.
- (2) Inoculation with the prophylactic fluid. The great efficacy of this remedy has now been placed beyond doubt; its use has spread rapidly, and there are signs that 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.**

Some of the important sanitary works which have been completed or were in progress, or under consideration, during 1906 were as follows :—

BENGAL.
Calcutta.

In Calcutta the two chief works which the Corporation have in hand are the suburban drainage scheme and the continuous water supply scheme. The former, in spite of its name, includes a complete sewerage scheme for the town as well as for the greater part of the suburbs, and also a huge storm water reservoir, intended to prevent the flooding of the streets, which has hitherto been a serious inconvenience. The works were in progress during the year. The work of converting the intermittent into a continuous filtered water system was continued, but a final settlement of the difficult question whether the distribution should be by gravity or by pumping was only decided, in favour of the former, in the year 1905 after a reference to experts in England; and discussion as to the possibility of discarding the dual supply of filtered and unfiltered water, and as to the proper method of introducing the supply, further delayed operations. The former of these proposals was held to be too expensive, and the scheme now under discussion is designed to provide a daily supply of 32 million gallons by increased pressure upon the mains from an elevated reservoir. Details of the work undertaken during 1906-07 were not available at the time of going to press.

Overcrowding, with its concomitant circumstances, is a great evil in Calcutta, and a scheme for the improvement of the congested areas of the city has been the subject of controversy for many years. The formation of a Board of Trustees for the purpose of carrying through the projected improvements was sanctioned by the Secretary of State in 1905. The administrative and financial details of the Board's constitution were laid before the Municipal Corporation and other public bodies for criticism, and, as a result of the information thus obtained, legislation will shortly be undertaken to give effect to the scheme. The expenditure on street improvement and attendant measures is estimated at about five and a half millions sterling 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.

In eight municipalities of Bengal, other than Calcutta, there are complete waterwork installations. The chief is Howrah, where the water supply is most efficiently managed; the others have had greater difficulties, which have not in all cases been successfully met. A scheme for supplying Khulna with filtered water was completed. 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. In Howrah work was commenced on a further portion of the comprehensive drainage scheme. The scheme for the northern section of the town of Hooghly-Chinsura was completed. The Serampore drainage project was also completed, while that for the Cossipore-Chitpur Municipality was being revised. Various other drainage schemes were prepared and sanctioned. The expenditure under the head of conservancy rose in almost all municipalities, and the arrangements are steadily improving. Besides the expenditure incurred in combating plague and other epidemic diseases, attempts were made by some of the District Boards to improve the sanitation of several villages by thoroughly cleansing them. Patna maintained its leading position in this respect.

SANITATION.
Interior of
Bengal.

At Benares, Lucknow, Cawnpore, Agra and Allahabad, there were notable increases in the daily consumption of water per head of population, which ranges from over 19½ gallons at Benares to about 5 gallons at Meerut. The results of analysis of drinking-water were satisfactory in nearly every case. Further progress was made in the drainage and sewerage works at Lucknow, Cawnpore and Agra. The sanitation of Mussoorie has lately engaged attention, and the report of the special sanitary committee appointed in 1906 was under the consideration of the municipal board.

UNITED
PROVINCES.

The drainage schemes at Delhi, Multan and Rawalpindi made satisfactory progress during the year; while those at Jagraon, Gujrat and Sargodha were carried through to completion. The Ludhiana waterworks were sanctioned and a commencement was made with the project. A sum of nearly £2,700 was spent by local bodies in the clearance and protection of wells, but it is stated that the rewards offered by district boards for sanitary improvements in villages evoked no interest and remained unutilised. The provision of wells, bathing places, and other works that serve sanitary purposes is, however, a favourite method of showing charity on the part of private individuals, and much public spirit of this kind was shown.

PUNJAB.

The Rangoon sewerage, designed on the Shone system for a population of less than 42,000, was undergoing alterations necessary to enable it to serve the growing population; it will take some years to complete the work, the capital expenditure on which during the year exceeded £13,300. The work of reclaiming and draining East Rangoon was continued; it consists in importing earth by railway to raise low-lying tracts, and experience shows that, except possibly in central areas, where freehold titles have been acquired, it not only increases the habitable area but will provide a profitable investment for Government money. The pressure of population is very great, and the question of a revision of the building regulations has been contemplated in the interests of sanitation. The reclamation of the Lanmadaw quarter was commenced. The Hlawga water supply works, which were carried out at a cost of £313,000, to augment the present supply from the Victoria Lake, have proved disappointing, and the reservoir is not capable of supplying so large a population as was anticipated. Further surveys are to be undertaken for the purpose of designing the best method of bringing into the town the full supply of water that the present reservoir will give.

BURMA.
Rangoon.

Sanitation in Burma is in a very backward condition, and there is hardly a town or district in the province in which sanitary reform is not a pressing need. Schemes were drawn up during the year for dealing with the principal needs of some of the larger towns. In particular, a complete conservancy scheme for Mandalay was under consideration.

Interior of
Burma.

No original works of any importance were undertaken by the Public Works Department during the year, but a number of improvements were carried out by the municipalities, which spent nearly 40 per cent. of their

CENTRAL
PROVINCES
AND BERAR.

SANITATION. income on sanitary works. Conservancy of the larger rural villages is provided for in the Central Provinces by the Village Sanitation Act, the operation of which was extended during the year; but the Act had not yet been applied to any villages in Berar.

EASTERN BENGAL AND ASSAM. In Eastern Bengal, schemes were being prepared for draining and improving the sanitation of the town of Dacca, where the conservancy arrangements are very bad at present. In Chittagong, Narayanganj, Barisal, Dinajpur, and Gauhati, schemes for improving the water supply were in process of completion or under consideration during the year. The municipalities devoted about 42 per cent. of their income to sanitation or sanitary works. 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. Most of the districts report improvements made in the water supply of the larger villages, and many of the district and local boards are beginning to spend a larger proportion of their income on village sanitation.

MADRAS. The new drainage works were temporarily suspended during the year, in order that schemes might be prepared for remedying defects which have come to light in the works already executed. In spite of these defects it is reported that there can be no doubt that the portion of the city where the underground system is complete have greatly improved in sanitation and general health. A scheme for the introduction of a new filtered water-supply into the city, at a cost of £157,000, was sanctioned by Government and formally accepted by the Corporation in April 1907. A chief engineer has been sent out from England to superintend the execution of the works.

Madras City.

Interior of Madras. Outside Madras city there is no town in the Presidency with a complete drainage system. A drainage scheme for Madura has been drawn up, and a few towns have provided drainage for particularly bad localities. With these exceptions, surface drainage and sewage are disposed of in the most primitive manner. In all matters of drainage, water-supply, and sanitation generally the Presidency is reported to be in a backward condition, and the municipalities as a whole do not make use even of the legal powers and financial resources which they possess. Nevertheless some progress was made; 22 minor works were under execution during the year, and 22 new schemes of some importance, excluding those for Madras city, were under review by the Sanitary Board, which will involve, if they are carried out, an aggregate cost of about £200,000.

BOMBAY. The works in connection with the scheme for subsoil and surface drainage in Bombay city, commenced in 1903-04, were pushed on vigorously in the year under report, and were almost completed. The works connected with the Malabar Hill sectional sewerage were also nearing completion. The rainfall during the year was not far below the normal, and the supply of water was adequate. The birth-rate of the year 1906 is given as 21·2 per mille and the death-rate as 54, both these rates being based on the special census taken in February 1906. The number of deaths from plague during 1906 was 10,800, or 18·3 per mille, which is the lowest figure since the outbreak of plague in 1897.

Bombay City.

Interior of Bombay. Elsewhere in the Bombay Presidency there are many towns which are in urgent need of systems of water supply and drainage, but for some years past the financial situation of the municipalities has been so weakened by the plague ravages as to delay the execution of new schemes. Nevertheless the extension of the Ahmedabad drainage scheme undertaken in 1903 was completed during the year; further progress was made with the Karachi drainage extensions, and the Talgaon water supply was ready for use in 1907. The earliest water supply on modern lines outside the Presidency town was begun about 1873 and the earliest drainage work in 1890. At the end of 1906 there were 37 towns with a water supply, and two (Ahmedabad and Karachi) with a system of drainage. The Bombay Village Sanitation Act, 1889, which provides for the establishment of a sanitary committee or board, chosen by the Collector of the district or by the Local Government, was in operation in 239 villages.

HOSPITALS, DISPENSARIES AND LEPER ASYLUMS.

HOSPITALS
AND DIS-
PENSARIES.

The civil hospitals and dispensaries in India, which numbered 2,464 in 1906, against 2,411 in 1905, treated 404,597 indoor and 24,343,320 outdoor patients in the course of the year. The great bulk of their income is derived from government, local and municipal funds, and their total expenditure in 1906 was £642,353. Besides these institutions, which comprise all those aided to some extent by public money and intended for the public, there are a large number of special police and other medical institutions, as well as many private institutions which do not receive aid from the State. These numbered 1,469 in all during the year under report, and provided treatment for about 140,000 indoor and 6,266,000 outdoor patients. In Bengal the medical institutions have much improved in recent years in respect of general management and efficiency, and a satisfactory feature is the increased popularity of the dispensaries among women and children. In Bombay the work of bringing the equipment of the hospitals up to a higher standard was being steadily carried out; a scheme for a Central Nursing Service for the whole Presidency has been sanctioned.

There are many leper asylums scattered throughout India, 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 between them for about a thousand lepers. There are also a large number of asylums or homes, under some sort of Government supervision in many cases, including nearly 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 in every 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.

LEPER
ASYLUMS.

LUNATIC ASYLUMS.

LUNATIC
ASYLUMS.

The treatment of lunatics at asylums prevails only on a small scale in India. In comparison with European countries insanity appears to be infrequent in India, as for instance in Bengal, where the ratio of the insane to the population is given as 2.93 per 10,000, against 34.71 per 10,000 in England. But allowance must be made for the much greater completeness of the information available in England. 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 explained in many of them by the probability that the insane would suffer more than the general population in years of scarcity of food. The total number admitted into asylums in 1906 was 1,593, the average for the five years to 1906 being 1,480. The total asylum population of the year was 7,000. The causes of insanity in the various cases are not very accurately classified, but it is stated that the insanity of a large proportion of the patients admitted to asylums is due to the use of hemp drugs. The question of building a new asylum at Rangoon was under consideration. The number of asylums in actual use was 24; the expenditure incurred amounted to £52,000, the greater part of which was borne by the State.

CHAPTER III.

JUSTICE AND POLICE.

CRIME AND POLICE.

CRIME
AND POLICE.

In all the Provinces some advance was made during 1906-07 in the introduction of the reforms decided upon in consequence of the Report of the Police Commission. Reorganisation was effected so far as financial considerations permitted. Already good results have been obtained in several provinces, notably in the direction of facilitating recruitment owing to the improvement of pay and prospects, and in the detection of crime through the establishment of Provincial Criminal Investigation Departments. A general improvement may be observed in the discipline of the force. Police training schools have been established in several provinces, and those organised in the preceding year are already showing excellent results.

Bengal.

The total number of cases of cognisable^a crime reported in Bengal during the calendar year 1906 was 122,651, an increase of 7,188 on the total of the previous year. This was due mainly to an increase in thefts and burglaries resulting from the high price of food grains. Four thousand one hundred and fifty-seven cases were pending at the beginning of the year, and there were therefore 126,808 cases for disposal. In 19,065 of these inquiry was refused by the police, and 3,392 were declared to be maliciously false. Of the 104,351 cases remaining, 94,761 were inquired into, and 42 per cent. ended in conviction, as against 88,284 and 44 per cent. in 1905.

There was a decrease of rioting cases in all divisions except the Presidency, where the number rose from 242 to 298. The number of serious crimes against the person was 3,555, or 55 more than in 1905. Murders rose from 248 to 284, no less than 128 being undetected. Dakaities fell from 247 to 228, a figure which includes a number of cases that occurred in previous years, but were brought to light in 1906. There was a large increase in burglary cases (from 27,983 to 32,374) and in thefts. Cattle thefts also increased from 1,736 to 2,022.

Much valuable work was done by the Criminal Investigation Department, and co-operation between it and the Calcutta Police continued to be satisfactory. Considerable progress is being made in the classification of finger prints, the preparation of history sheets and the photographing of notorious criminals.

The reorganisation of the superior Police Establishment took effect from the 1st April 1906, and other reforms sanctioned are gradually being given effect to. The sanctioned strength of the police force, excluding the Calcutta force and the Railway and Military Police, was 1,610 officers and 18,387 men, the actual strength being 1,537 officers and 17,380 men. The total expenditure of 1906-07 was £378,725, as against £380,545 in 1905-06. The decrease is, however, more apparent than real, as the latter figure includes the expenditure up to 15th October 1905 of the 14 districts transferred to Eastern Bengal and Assam. There were 238 dismissals, 2,375 other departmental punishments, and 2,305 rewards; 1,450 officers and 5,529 men were able to read and write. The percentage of officers and men departmentally punished has risen from 12·9 and 10·1 in 1905 to 17·5 and 13·6 in 1906. This increase may be attributed to the stricter discipline resulting from the recommendations of the Police Commission.

Excellent work was done at the Police Training School, Bhagalpur, though the year's work was marred by an organised examination fraud on the part of the cadet sub-inspectors, who obtained from some corrupt press employees copies of the papers set for the Final Examination.

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

The Town Police is still in a state of transition; 500 town *chaukidars* were replaced by constables during the year. As regards the Rural Police, the inquiries which were set on foot with a view to improving the status of the *chaukidari panchayats* and strengthening their control over the *chaukidars* were completed during the year. In many districts the new system is working well.

CRIME
AND POLICE.

The Military Police will in future be called Special Reserves. Their conduct and discipline during the year were satisfactory. The total sanctioned and actual strength were respectively 300 and 268.

The Railway Police numbered 963. Cases of obstruction on the line rose from 29 to 60, notably during the strikes which occurred at Asansol, Jamalpur, and elsewhere. These strikes, which were engineered by outsiders from Calcutta, were brought to a prompt conclusion by the railway authorities.

The scheme for the re-organisation of the Calcutta Police is being gradually worked upon as funds permit. The principal step taken during the year under review was the entertainment of 18 additional sub-inspectors. The number of true cognisable cases reported direct to the police rose by over 4,000, there being a regrettable increase of offences against the person and against public tranquility. No fewer than 30,499 cases were instituted in the Presidency Magistrates' Court; of these 26,776 resulted in conviction.

There were demonstrations connected with the partition of Bengal on the 16th October, but they passed off without disturbance. The twenty-second sitting of the Indian National Congress was held in December, and an Indian industrial exhibition was held at the same time; these entailed considerable additional police work.

There was an increase in the number of dismissals and other punishments, due to increased supervision and stricter discipline, but, in spite of these causes, there was a considerable decrease in resignations.

The total volume of reported crime in this province for 1906 showed an increase of less than 1 per cent. on the figures of the preceding year. This maintains an increase of some 24 per cent. on the figures for 1904, in which year, however, the figures were the lowest recorded for 14 years. The conditions of the year were much the same as in 1905, and explain the maintenance of the increase. Prices continued high, and the prevalence of plague led to the evacuation of houses, which thus offered a temptation to the criminal classes. The increase of minor offences against property, due to the conditions of the year, was balanced by a notable decrease in dakaity, robbery, and serious mischief, while there was a progressive decrease in offences against the person.

United
Provinces.

Investigation was refused in 45·5 per cent. of the total crimes reported, as compared with 43·6 per cent. in 1905. In cases investigated by the police the percentage of convictions was 48·2, as compared with 47·6 in the preceding year; the percentage of persons convicted to persons arrested rising from 76·9 to 79·3. The total number of cases decreased by 1,485 to 53,249.

As regards dakaity, there was the large decrease of 166 cases; there were 24 cases of professional poisoning as against 17 in 1905; and 770 cases of true robbery reported, a decrease of 73 on the figures of the preceding year.

The number of murders fell from 501 in 1905 to 486 in 1906; cases of cattle theft rose by 30 per cent.; and there was a further increase of more than 2,000 cases of ordinary theft, this last being due to distress aggravated by the continuance of high prices. The amount of property stolen during the year was valued at £1,324 less than 1905, while the percentage of recovery remained at 20.

With regard to the police force, the re-organisation of the gazetted staff, as the result of the recommendations of the Police Commission, was carried out during the year under review. As a result an extra deputy inspector-general was appointed, the number of superintendents and assistant superintendents increased, and appointments of deputy superintendents created. The increased expenditure mentioned in last year's statement has by improving pay and prospects undoubtedly stimulated recruiting.

The total strength was 35,716, and the total cost £454,797. Though the conditions of 1906 were no improvement on those of 1905, the total number of punishments decreased from 785 to 636. Eight officers and 144 men were

CRIME AND POLICE. dismissed, as against 34 and 162 respectively in the preceding year. Though there was a slight improvement in this respect, there was still 1·2 per cent. of the officers and 73 per cent. of the men illiterate.

The Criminal Investigation Department, consisting of a superintendent of police, nine inspectors and eight sub-inspectors, with constables and head constables, was established on the 16th July 1906, and has already done good work.

Punjab.

The criminal statistics for the Punjab in 1906 are a reflection of the economic conditions of the year. Following on a period of scarcity and high prices combined with a severe epidemic of plague, the year opened unfavourably; and the abnormal scale of offences against property of the previous year was maintained, until the rains altered the agricultural outlook and lowered prices. There was, however, a satisfactory decrease in other forms of crime.

Thus there were 453 cases of murder against 475 in 1905; and 218 cases of culpable homicide against 228. Dakaities, which in 1900 reached the high level of 151 cases, now stand at 46. The number of burglaries reported fell from 12,331 to 12,306, while ordinary thefts rose from 8,423 to 8,696. Cattle thefts (2,463) showed a decrease of 177.

The total reported crime for the year was 67,510 cases, that for 1905 being 69,426; a decrease of 1,916 cases.

As regards the police force, the total strength was 19,385, and the total cost £299,774. This shows an increase of 250 men and £50,428 respectively, due to reorganisation. The number of officers who could read and write was 827, and of men 5,740; the figures for 1905 being 693 and 5,634.

The improvement of pay and prospects introduced by the re-organisation scheme has infused a better and more willing spirit into all ranks, and discipline has been well maintained. This is shown by the substantial fall in resignations (from 1,074 to 747) and desertions (from 45 to 23), the decrease in punishments and the increase in rewards. Departmental punishments inflicted on members of the force numbered 1,066, a decrease of 92. Judicial punishments fell from 93 to 75, and the total number of rewards rose from 2,434 to 2,985.

The Criminal Investigation Department has a record of good work, noticeable progress being made by the Finger Print Bureau.

The estimated value of property stolen during the year was £81,812, of which 43 per cent. was recovered.

Burma.

Further progress was made in Burma during 1906 in carrying into effect reforms resulting from the Report of the Police Commission. Some of the more important improvements were the reorganisation of the superior grades, the absorption of chief head constables, head constables, and sergeants in the new grades of sub-inspector and head constable on increased pay, and the opening of a Provincial Training School.

There were 42,469 cases of cognisable crime, as against 43,097 in 1905. Exclusive of cases under special laws, there were 27,428 true cases, of which 20,337 were investigated by the police and 11,935 resulted in conviction. The measure of success obtained was 59 per cent., as against 56 per cent. in 1905. Violent crimes rose by 102 to 920. Dakaities showed an increase of 32 and murder a decrease of 24 cases. The most unsatisfactory feature in connection with serious crime was the small proportion of stolen property recovered. The percentage of recoveries dropped from 14 in 1905 to 4 in 1906, while the value of property stolen was £137,672, or £27,004 more than in 1905. Detection in murder cases continued unsatisfactory, only 118 cases ending in conviction out of 326 dealt with.

The sanctioned strength of the Civil Police Force, excluding the Rangoon Police, was 1,599 officers and 11,613 men; the force actually entertained was 1,553 officers and 10,602 men. The cost rose from £276,471 to £300,258, the increase being due to the introduction of reforms. Difficulty was still found in recruiting. Thirty-one officers and 486 men were dismissed, these figures being an increase of eight officers and a decrease of 34 men. Other departmental punishments show a satisfactory decrease. There were fewer desertions during the year, but more resignations. The figures for the year exhibit an increase of 37 literate officers, but a decrease of 317 literate constables.

The actual strength of the Rangoon Town Police was 935, or ten below sanctioned strength. Reforms recommended by the Police Commission were carried into effect during the year. The conduct of the force was better than in the preceding year; but the percentage of convictions to cases investigated was lower than the low figure of 1905. CRIME
AND POLICE.

The Military Police numbered 15,620 officers and men, *i.e.*, 325 below sanctioned strength. The discipline of the force was good, and the relations of the men with the people satisfactory.

Reports are almost unanimous in acknowledging the invaluable assistance rendered by village headmen to the police in the detection of crime.

The year under review was marked by exceptionally high prices, and by scarcity in several areas, and the agitation and unrest in Eastern Bengal added much to the difficulties of police administration. These causes account for the very considerable increase of crime in the province during the year, the scarcity and high prices leading to theft and the imposition of exceptional responsibilities upon the police, in consequence of the general feeling of unrest, interfering with the supervision of ordinary criminals. Eastern
Bengal and
Assam.

The total number of cognisable cases pending at the beginning of the year and reported during the year was 83,660 against 72,725 in 1905, or an increase of 10,935 cases. Of these, 46,777 were investigated, 29,411 were decided, and convictions were obtained in 17,939 (61 per cent.). The corresponding figures for 1905 were 39,515 investigated, 24,995 decided, and 15,762 (63 per cent.) convictions. Rioting shows an increase of 425 cases. Of the 1,886 riot cases, 54 were serious, the majority arising from disputes about land. There was a considerable increase in serious offences against the person. Of the 1,924 true cases under this class, 68·6 per cent. ended in conviction. Murders rose by 29 to 225. The marked increase of serious offences against property (from 15,680 to 20,146) was undoubtedly due to the high price of food grains which prevailed during the year. Dakaities rose by 29. Ten such cases in Bakarganj may be ascribed as directly or indirectly due to the political agitation. Burglaries increased by 4,403 to 18,933, minor offences against the person by 67 to 1,229, and minor offences against property by 3,513 to 21,845. Cattle theft accounts for 842 cases, the increase in this direction being due to the expansion of the trade in hides. The percentage of value of property recovered to value of property stolen was 37·9, a noteworthy improvement on the 19·7 of 1905.

With regard to the police, the total strength of the Military Police was 2,708 and the total cost £50,589. There were 255 enlistments during the year, 56 resignations, 17 dismissals, and 33 deaths. The corresponding figures for 1905 were 79, 73, 14, and 40.

The total strength of the Civil Police was 9,326, or 406 below sanctioned strength; the total cost was £180,822, the increased expenditure being due to measures of reorganisation as a result of the recommendations of the Police Commission. The increase in the proportion of Mohammedans recruited is noteworthy, but they still form only 24·8 per cent. of the men and 14·6 per cent. of the officers. There were 177 dismissals during the year, and 1,899 other departmental punishments. Sums amounting to £1,114 were paid as rewards. Resignations numbered 215.

The total number of *chaukidars* in Eastern Bengal and the districts of Sylhet, Cachar, and Goalpara was 57,571, *i.e.*, 367 more than in 1905. Occasional instances are quoted of admirable work done by them, but generally speaking it is reported that they have done little good work.

The establishment of the Criminal Investigation Department, the increase of the cadre of the service, and the improvement of pay and prospects were among the reforms recommended by the Police Commission, which were introduced into the province during the year 1906.

The agricultural condition of the year were on the whole not unfavourable in the Central Provinces and Berar, though in some parts the rice crops were poor. The prevalence of plague and consequent evacuation of houses account to some extent for the increase in the total volume of crime. The increase was not, however, excessive, and figures are still not above the normal. Central -
Provinces
and Berar.

CRIME
AND POLICE.

The total number of cognisable offences, excluding nuisance cases and offences under special and local laws, was 18,895, as compared with 17,851 in 1905. Of these 12,022 were investigated, and in 4,286 convictions were obtained. There was a noticeable increase in murder cases, from 162 in 1905 to 194 in 1906, the latter number being considerably above the normal in non-famine years. Dakaities decreased by 1 to 15 in the Central Provinces and by 25 to 35 in Berar, but robberies, which in the Central Provinces remained at the same figure (127) as in 1905, increased from 129 to 151 in Berar. The small increase in rioting cases (from 191 to 234) does not seem to indicate any real excess of deliberate defiance of the law, and there were no cases of anti-Government riots.

The total value of property stolen during the year was £55,442, the percentage of value of property recovered to value of property stolen being 31.1. The corresponding figures for 1905 were £38,021 and 25 per cent.

Several important reforms due to the Police Commission were introduced during the year, *e.g.*, a new scheme of distribution of district police in Raipur and Drug, and the revised scale of pay. In spite of increase of pay, however, recruitment does not appear to have been stimulated.

The total actual strength of the police force was 11,060 (*i.e.*, 544 below sanctioned strength), and the cost was £158,951, the increase from £136,576 being due to the measures of reorganisation. There were 511 resignations and 195 deaths, as against 419 and 131 respectively in 1905. The punishment return shows 757 departmental punishments other than dismissal inflicted on constables, a considerable increase on the 409 of the preceding year, which was, however, an exceptionally low figure. Rewards, other than by promotion, numbered 2,662. The number of men who could read and write rose from 3,800 to 5,444.

North-West
Frontier
Province.

The statistics of the year under review are satisfactory in showing a falling off in serious crime in the North-West Frontier Province, undoubtedly due during the latter part of the year to the prevalence of severe malarial fever. The decrease under the heads of dakaity, murder, and robbery was marked.

The total number of cognisable offences reported to the police was 5,162, as compared with 5,259 in 1905. Murders (184), dakaities (28), and robberies (45), show a decrease of 12, 19, and 17 cases respectively. The principal causes which have led to murders have been quarrels about women; of the dakaities 14 would be more properly termed raids, as they were the work of trans-border men. The percentage of cases convicted to cases admitted was 50 per cent, against 48 in the preceding year. The value of property stolen was estimated at £8,101, the value of that recovered £1,861; the corresponding figures for 1905 were £9,848 and £2,461. The trade in arms and ammunition from the Kohat Pass with Buner and Waziristan has on several occasions been interrupted by successful arrests by the police and Border Military Police, but the trade has not decreased. The need of a Criminal Intelligence Department is felt in regard to this illicit traffic. One new punitive post was established during the year at Kakhi in the Bannu district.

The total strength of the force was 3,114, and the cost of its maintenance was estimated at £49,933. There were during the year 55 dismissals, 374 departmental punishments other than dismissals, 41 judicial punishments, and 456 money rewards. The corresponding figures for 1905 were 66, 297, 48, and 285. The number of educated officers and head constables was 387, or 50 per cent.; of 2,559 constables only 390 were able to read and write. In spite of the recent rise of pay, the difficulties of recruiting have caused anxiety. They are attributed to the fact that men in the Punjab are better off. A high standard of discipline has been maintained throughout, and the conduct of the force has been most satisfactory during the year. The success of the measures taken during the visit of the Amir of Afghanistan, to safeguard the various military camps from rifle thieves, and the capture of the notorious Taj-ud-din, reflect especial credit.

Coorg.

A very satisfactory feature of the police administration of Coorg during the year under review was the decrease (from 491 to 413) in the number of cognisable offences reported. The decrease was specially marked under the head of minor offences against property and serious offences against person

and property. Investigation was refused in only three cases, as against 24 in 1905. The percentage of convictions obtained rose from 68·85 to 72·34. There were two cases of dakaity and seven cases of murder, the corresponding figures for the previous year being four and five. The value of property stolen was £276, as compared with £341 in 1905, the percentage of recovery rising from 60·10 to 61·33. CRIME
AND POLICE.

The total strength of the force was 250, *i.e.*, four more than in 1905. The expenditure rose from £3,162 to £3,666, the increase being due to the cost of clothing for 1905 being debited to the 1906 account, and to certain increases of pay. A slight improvement was shown as regards discipline and educational attainments.

The notable features of the year 1906 in the Madras Presidency were high prices, a slight decrease in crime, and the progress of reorganisation. Madras.

The year was generally favourable for agriculture, and work was available. The prices of food grains, however, were even higher than in the previous year, but the volume of crime was practically the same.

The total number of true cases of cognisable crime decreased by 1,081 to 48,086. There were 1,119 more nuisance cases. The number of murders reported during the year was the highest on record, 946 persons being arrested and 812 tried. There were 484 dakaities as against 539 in 1905, and 751 robberies as against 865. Thefts fell from 14,581 to 14,468, a remarkable decrease in view of the rise of prices. There was no serious disturbance of the public peace during the year.

With regard to the detective work of the police, the figures show little or no improvement, but allowance must be made for the fact that the department was in the throes of reorganisation, and that the detective agency was severely affected thereby. The percentage of true cases detected was 32·8. Twenty-three per cent. of cases of murder reported were detected, as compared with 21·4 per cent. in 1905. The detection of dakaities was still poor, being 18·5 per cent. in 1906 and 17·8 in 1905. The proportion of convictions to cases prosecuted by the police was 78·7, the figure for 1906 being 79·0. Property stolen during the year was valued at £85,832, of which 24·5 per cent. was recovered.

Among the steps taken during 1906 to further the reorganisation of the department, consequent on the Report of the Police Commission, may be mentioned the re-gradation of superior officers, the grant of the first increment of pay to the constabulary, the establishment of the Criminal Investigation Department, and progress in the recruitment of sub-inspectors, due to the reorganisation of the Vellore School.

As to the *personnel* of the police, the total sanctioned strength was 24,088. Recruiting was easy, but difficulty was experienced in supplying literate men to satisfy the demand. There were 18,233 constables who could read and write. The conduct of the force may on the whole be considered to have improved. The percentage of men punished departmentally for offences other than being absent without leave was 13·0 as compared with 26·5 in 1905. Judicial convictions fell from 268 to 232. There was a somewhat larger number of deaths, owing to the prevalence of cholera in one district. The total expenditure for the year was £356,870 as against £306,685 for 1905, the increase being due to the reorganisation schemes.

The actual strength of the Madras City Police was 1,509, five below sanctioned strength. The police employed on the occasion of the Royal Visit did their work well, and received the thanks of His Royal Highness.

In Bombay, the total number of cognisable cases reported during the year was 33,022, a decrease of 1,062 on the figures for the preceding year. Murders rose by 20 to 520, dakaities fell by 36 to 231, robberies rose by 16 to 694. There were 3,983 cases of cattle theft and 11,218 cases of ordinary theft, as against 4,172 of the former and 11,237 of the latter in 1905. The majority of the cases of murder, housebreaking, and cattle theft occurred in Sind; but this province has the best record in convictions in murder cases for the year. Bombay.

Investigation was refused by the police in 207 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

CRIME
AND POLICE.

were received on 33,289 cases, or about the same as in 1905. Eleven thousand four hundred and forty-two resulted in convictions. This represents a percentage of 54·15 of true cases, last year's figure being 55·4.

The value of property stolen during the year in cognisable cases was valued at £77,322, and 36·63 per cent. of it was recovered. The corresponding figures for 1905 were £78,741 and 35·73 per cent.

The total actual strength of the police force in the Bombay Presidency, inclusive of Sind and Railways, was 21,991, the total expenditure £304,026, which shows an increase of £13,342. There were during the year 233 dismissals and 1,017 resignations, the corresponding figures for 1905 being 279 and 797. The total number of punishments fell from 3,142 in 1905 to 2,500 in 1906, while rewards rose from 3,897 to 4,051. The percentage of literate officers was 72·59, an improvement on the 71·8 of 1906, but the percentage of literate men remained at 49·98.

In accordance with the recommendations of the Police Commission, certain reforms were instituted in the grading of both superior and subordinate officers. The difficulty of recruiting still continued. There were 71 officers and 791 men short in 1906, as compared with 74 officers and 564 men in 1905.

The Criminal Investigation Department did good work during the year. The following figures show how the work of the Finger Print Bureau has increased. In 1905 there were 5,994 cards or slips received for record, 11,509 received for trace, and 963 cases traced. In 1906 these totals rose to 7,582, 12,650, and 1,068 respectively.

CRIMINAL
JUSTICE.
Bengal.

CRIMINAL JUSTICE.

The total number of criminal offences reported in Bengal was 234,400, an increase of 6,996 on the figures of 1905. Of this total, 136,899 were under the Indian Penal Code and 97,501 under special and local laws. These totals are more by 3,484 and 3,512 respectively than those of 1905. The number of cases declared to be false and dismissed constituted 16·6 per cent. of the whole number. Of the 195,017 true cases, 153,569 were brought to trial.

Presidency Magistrates, including the Municipal Magistrates, dealt with 38,994 cases. Of the 42,963 persons brought to trial, 38,416 were convicted. Magistrates outside Calcutta had before them 114,673 cases, and the pending file at the end of the year showed 2,946 cases, as against 2,722 at the end of 1905. Of the persons whose cases were disposed of, 59·0 per cent. were convicted. The sentences passed by magistrates included one of transportation, 18,795 of rigorous imprisonment, 497 of simple imprisonment, and 1,226 of whipping, with or without other punishment. The corresponding figures for 1905 were 17,301, 481, and 1,226.

Cases committed or referred to the Sessions Courts during the year numbered 1,303, or 164 more than in 1905. The number of cases disposed of was 1,276, and the pending file at the end of the year showed 121 cases. Of 2,931 persons under trial, 62·2 per cent. were convicted. There were 25 sentences of death, 165 of transportation for life, 111 of transportation for a term of years; 1,185 of rigorous imprisonment, and 27 of whipping. The average duration of Sessions Trials fell from 36·3 days in 1905 to 33·8 days in 1906. The number of persons tried by jury was 762. In 674 of these cases the judge approved of the verdict. Of 1,566 cases tried with the aid of assessors, the judge concurred in the opinion of both assessors in 1,211 cases and in 208 differed from both.

The High Court tried 80 cases, involving 98 persons, of whom 70 were convicted, and left 13 cases undecided at the close of the year. The average duration of cases from commitment was 32·2 days.

Including 45 pending cases, there were before the High Court 734 appeals, of which 702 were decided. Out of 581 appeals from sentences of the Sessions Courts, the orders of the lower Courts were upheld in 466 instances and reversed in 34 and modified in 76. Six appeals by the local Government against orders of acquittal were decided during the year, and in one of them the order was upheld. In 3 cases the orders of acquittal were reversed, and in 2 cases retrials were ordered. The Sessions Courts

decided 3,561 appeals and the Magistrates' Courts 3,595, the percentages of wholly unsuccessful appellants being respectively 66·1 and 63·9. In the case of death sentences referred from the Sessions Courts, the sentences on 12 of the 28 persons concerned were confirmed and 7 commuted to transportation for life, while 9 persons were acquitted. Twenty-seven references from verdicts of juries were decided by the High Court during the year; the verdict of the jury was accepted in 9, set aside in 16, and modified in one. The High Court decided 142 revision cases and the Sessions Court 2,997.

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

North-West
Provinces.

The number of offences reported during the year (126,886) shows a small increase on the number reported in the previous year (124,465). The number of cases returned as true and the number brought to trial were, respectively, 96,414 and 88,126, as against 93,828 and 85,236 in 1905. The total number of persons under trial increased from 153,231 to 159,177. The increase is entirely with respect to offences under the Penal Code. Under local and special Acts there is a small decrease under all the above-mentioned heads. Of 152,345 persons under trial before magistrates, 48 per cent. were convicted, as compared with over 49 per cent. in 1905. In trials before the Courts of Session, on the other hand, there was an improvement, as 69 per cent. were convicted as compared with 66 per cent. in 1905. The average duration of cases rose from 9 to 10 days, and the number of cases pending over six weeks was 1,588, or 347 more than in 1905. During the year 111 persons were sentenced to death, 267 to transportation, 19,140 to rigorous imprisonment, and 4,963 to whipping.

Appellants and applicants for revision in the Courts of Session were more numerous than in 1905, numbering 10,856 as against 10,284. The percentage of appellants whose convictions were affirmed rose from 74 per cent. in 1905 to 76 per cent. Appeals and applications for revision to the High Court were 1,011 and 769, as compared with 929 and 737 respectively.

The number of offences reported during the year in Oudh was 45,283, of which 32,845 were returned as true, the figures for 1905 being 44,806 and 32,210 respectively. The number of cases brought to trial was 33,399, as against 32,807 in the previous year. Courts of Session tried 538 original cases, while 32,868 were disposed of by magistrates. The percentage of convictions to the number of persons tried was 62·5 in Sessions Courts and 37·8 in Magistrates' Courts.

Oudh.

As regards punishments, sentences of death, transportation, and rigorous imprisonment were 53, 65, and 5,859, as against 40, 77, and 5,807 in 1905. The number of whippings fell from 1,840 to 1,815.

The number of appellants and applicants for revision increased from 5,096 to 5,699. In the case of 3,324, sentences or orders were confirmed, and in the case of 768 sentences were reversed.

The figures for the Punjab indicate a fairly serious increase in actual crime during the year, and also show that the Courts failed to check the steady growth of litigiousness in that Province. One hundred and ninety-eight thousand five hundred and fifty-seven offences were reported during the year, and 130,964 were returned as true, as against 188,961 and 127,715 respectively in 1905. The number of cases brought to trial in Courts subordinate to Sessions Courts was 113,517, the number of persons involved being 268,316. Cases under the Indian Penal Code brought to trial increased by 3,952, and cases under local and special laws by 1,078. The percentage of convictions was 27 as against 26 in 1905.

Punjab.

Of the cases returned as true during the year, 89,422, or 68 per cent., were cases under the Indian Penal Code. Of these cases, those affecting life fell from 933 to 856, the number of murders being 389, or 47 less than in 1905. Robberies and daktaities rose from 443 to 495, and there was again a slight increase (5,410 to 5,564) in the number of offences relating to marriage. Cases of criminal force and assault declined by 700, but cases of hurt rose by 800.

District Magistrates disposed of 4,713 cases, as against 3,869 cases in 1905, and Honorary Magistrates rendered even greater assistance than usual

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JUSTICE.

to the administration. The number of disposals in the Sessions Courts declined from 547 to 490.

The number of persons sentenced to death, transportation, and rigorous imprisonment were 82, 119, and 12,909 respectively, while the number of persons whipped fell from 2,451 to 2,361.

Of the total number of persons convicted, 24 per cent. appealed. Of these appeals 30 per cent. were summarily dismissed and 32 per cent. dismissed after notice; while in the case of the remaining 38 per cent. the appeal was either wholly or partially successful.

In the Chief Court the number of appeals instituted was 793 as compared with 833 in 1905, 801 were decided and 141 were left pending at the end of the year. The number of unsuccessful appeals was 604. Applications for revision decreased from 1,853 to 1,845, and disposals numbered 1,641.

Burma.

The total number of offences reported during the year in Burma was 90,804 as against 93,310 in 1905. This represents a decrease of 2,921 in Upper, and an increase of 415 in Lower, Burma. The percentage of true cases fell in Lower Burma from 87·2 to 85·6, and in Upper Burma remained practically the same as in 1905—namely, 88·5.

Magistrates of all classes tried 154,318 persons during the year. The percentage of persons convicted or committed was 61·3 in Lower and 62·8 in Upper Burma, as compared with 61·9 and 64·7 respectively in 1905.

The Sessions Courts in Lower Burma dealt with 839 persons, more by 61 than in 1905. The percentage of convictions was 57·9 as compared with 53·3 in 1905. The number of cases committed to the Chief Court was 85, involving 132 persons, and the percentage of convictions was 72·6. The average duration of trials in the Sessions Courts fell from 53 to 48 days and in the Chief Court rose from 35 to 40 days. In Upper Burma, Sessions Judges disposed of 112 cases, involving 155 persons. The percentage of convictions decreased slightly from 71 to 68, and the duration of trials rose from 29 to 37 days.

As regards punishments, the number of whippings increased from 2,919 to 3,185, while 87, 417, and 15,066 persons were sentenced to death, transportation, and rigorous imprisonment respectively.

In Lower Burma there was an increase of only 43 in the number of appeals preferred; in 1905 there was an increase of 628, and in 1904 of 350. The percentage of sentences confirmed was 69·4 and the average duration of appeals was 17 days. The number of appeals preferred during the year in Upper Burma was 1,761. Sentences were confirmed in 59·5 per cent. of the cases, and the average duration was 13 days.

The number of cases called for in revision by District Magistrates in Lower Burma (5,853) was 219 more than in the preceding year, but there was a decrease of 110 in the revision cases called for by Sessions Judges. In Upper Burma there was an increase in the quantity of revision work done by District Magistrates but a slight decline in that done by Sessions Courts.

Eastern
Bengal and
Assam.

There were 127,154 criminal offences reported during the year in Eastern Bengal and Assam, an increase of 9,142 on the figures of 1905. Cases under the Penal Code showed an increase of 8,586, and cases under special and local laws of 556.

Including cases which were under inquiry at the close of the preceding year, 85,121 cases coming before the courts were accepted as true during 1906. Of these, 58,506 were brought to trial. The figures, as compared with those of 1905, represent an increase of 6,584 under the former and of 4,239 under the latter head.

In the Courts of Magistrates, 56,943 cases, involving 85,912 persons, were finally disposed of during the year, the proportion of convictions being 49·3 per cent., and the average duration of cases 16·6 days. Courts of Session disposed of 913 cases, the pending file being 115 as against 117 in 1905. Of the 1,991 persons tried, 1,209, or 60·7 per cent., were convicted. The average duration of Session cases fell from 41·6 days to 40·4 days.

Punishments by death, transportation, and rigorous imprisonment numbered 17, 151, and 12,434 respectively. Whipping was ordered in 616 cases. Twenty-nine sentences of death came before the High Court for confirmation; 10 were commuted for transportation, and two were pending at the end of the year.

The High Court, Sessions Courts, and Magistrates' Courts disposed of 428, 2,675, and 2,301 appeals respectively, the percentages of wholly unsuccessful appellants being 76·1, 65·2, and 68·6. The number of revision cases was 1,039 less in 1906 than in 1905. CRIMINAL JUSTICE.

The total number of cases reported in the Central Provinces and Berar, and the total number returned as true were, respectively, 40,056 and 32,092 as against 42,277 and 34,374 in 1905. If offences under local and special laws be excluded, there was an increase of 1,485 in the number of offences reported and of 1,476 in the number returned as true, but there was no serious increase under any head except under those of hurt and assault. Central Provinces and Berar.

Magistrates disposed of 31,309 cases during the year. The percentage of convictions and committals was decreased from 45·8 in 1905 to 40·4 in 1906. Durations rose both in police and in complaint cases, in the former from 13·1 days to 14·9 and the later from 13·9 to 15·5.

Courts of Sessions disposed of 201 cases. The percentage of persons convicted or committed to the total of persons under trial during the year was 55·4. The average duration of Sessions cases further declined from 55·5 to 50 days, being higher in Berar than in the Central Provinces.

The percentage of appellate cases in which the sentence was confirmed was 65·5 in the Judicial Commissioner's Court, 71·7 in Sessions Courts, and 55·5 in District Magistrates' Courts.

The sentences of death, transportation, and rigorous imprisonment passed during the year numbered respectively 20, 99, and 3,956. The corresponding figures for 1905 were 14, 127, and 3,978. Whipping was awarded in 1,115 as against 1,195 cases in 1905.

The total number of offences reported during the year in the North-West Frontier Province was 18,471 as against 17,958 in 1905. Eight hundred and ninety-two cases were struck off as false and 4,621 complaints were dismissed *in limine*; these represent 29 per cent. of the offences reported, the proportion being the same as in 1905. The number of cases brought to trial was 12,148, which represents 94 per cent. of the offences admitted to have occurred. The percentage of persons convicted or committed to the total number of persons under trial was 48·1. Ten thousand three hundred and eighty-three offences under the Indian Penal Code were reported during the year, an increase of 200 on the figure for 1905. Of these, 5,519 were brought for trial as against 5,567 in 1905, and the percentage of convictions was 35, or 3 less than in the preceding year. North-West Frontier Province.

There were 20 sentences of death, 27 of transportation, and 2,479 of rigorous imprisonment, and 251 sentences of whipping were passed as against 295 in 1905.

The number of persons who appealed to District Magistrates fell from 561 to 553, while the number who appealed to Sessions Judges was 912, of whom 273 had their sentences reversed or altered. Out of 607 applications for revision 408 were dismissed summarily.

The average duration of criminal trials in Magistrates' Courts was 6·5 days, in Courts of Sessions 33 days, and in Superior Courts 28 days.

The number of offences reported in Coorg (1,601) declined by 194 in spite of an increase of 106 under the Workmen's Breach of Contract Act. Trials held numbered 1,434, or 178 less than in the previous year. Excluding breach of contract cases, 1,160 cases were reported, and 1,009 were returned as true. These figures show a satisfactory reduction of reported crime, those for 1905 being respectively 1,460 and 1,268. There were 649 convictions, as against 679 in the preceding year, the percentage to total of persons under trial increasing from 29·44 to 37·58. There were only 8 convictions of heinous crime, and there was no sentence of death. Sentences of transportation, rigorous imprisonment, and whipping numbered respectively 3, 259, and 25. Coorg.

The total number of appeals was 80, of which 63 were unsuccessful.

There was an increase in the total numbers of cases and appeals instituted during the year in Madras, excluding those in the Village Magistrates' Courts, the figures being 291,542 and 9,964 respectively, as against 299,258 and 10,080 in 1905. The number of cases instituted in the Village Magistrates' Courts fell from 11,073 to 10,591. There was a Madras.

CRIMINAL
JUSTICE.

decrease of 2,691 in the number of offences under the Indian Penal Code, and of 4,174 in the number of offences under special and local laws reported during the year. The percentage of convictions in cases brought to trial was 23·27 in the case of offences under the Penal Code and 87·13 in the case of offences under special and local laws, the average percentages for the preceding five years being 24·11 and 86·53 respectively.

Of 17,671 persons under trial in the Village Magistrates' Courts, 5,492 were convicted. In the regular Magistrates' Courts in the mufassal, 223,196 cases were instituted, as against 231,570 in 1905. The number of cases left pending at the end of the year was more than that of the previous year by 303. The total number of persons under trial in these courts was 388,774, of whom 381,231 were dealt with, the percentage of convictions being 48·92 as against 49·7 in the preceding year. The average duration of cases was nearly the same as in 1905, viz., 5 days. The number of appeals was 7,814; in 60·25 per cent. the convictions were confirmed.

The cases committed to Sessions Courts in the mufassal numbered 1,272, and 3,096 persons in all were tried, these figures showing an increase of 65 and 122 respectively on those for 1905. One thousand four hundred and fifty-nine persons were tried by jury, 1,366 with aid of assessors, and 44 partly by jury and partly with assessors. The percentage of convictions was 45·32, and the average duration of trials, 34 days. Appeals numbered 1,371, the sentence appealed against being confirmed in 71·86 per cent. of the cases.

The number of cases instituted before the Presidency Magistrates increased from 66,428 to 67,031. The percentage of convictions was 92·52. A sum of £211 levied as fines in cases of cruelty to animals was paid to the S.P.C.A.

In all, 48 persons were punished with death during the year, 173 with transportation, and 20,745 with rigorous imprisonment. Whippings numbered 3,508.

The High Court received for trial 43 Sessions cases, in which 56 persons were concerned. The percentage of convictions was 77, as against 74 in 1905. The cases of 80 persons who were convicted of murder and sentenced to death by Sessions Courts were dealt with by the High Court. The convictions of 66 were upheld, 48 sentences of death being confirmed and 18 being commuted to transportation for life. The number of appeals received during the year was 701; in 89 per cent. of the appeals against conviction the proceedings of the lower courts were not interfered with. In revision cases the proceedings of the lower court were confirmed in 74 per cent. of the cases.

Bombay.

The total number of offences reported during the year in Bombay (including Sind) was 159,751, as against 157,278 in 1905. Of the total number of cases, 148,276 were returned as true; of these 38·8 per cent. were under the Indian Penal Code and the rest under special and local laws. Cases brought to trial numbered in all 148,620, involving 237,821 persons, the figures for the preceding year being 150,439 and 239,581 respectively. Of the total number of persons under trial nearly 48 per cent. were acquitted or discharged, and nearly 47 per cent. were convicted. The total number of original cases decided was 148,540, as against 149,728 in 1905. Of these, 145,873 were disposed of by Magistrates. Of the total number of persons convicted, 65·6 per cent. were tried summarily. The average duration of cases fell from 5·06 to 4·40 days. There were 52 sentences of death, 138 of transportation, and 15,855 of rigorous imprisonment, as compared with 56, 128, and 14,833 respectively in the preceding year. Whippings increased in number from 1,414 to 1,654. The percentage of whippings to the total number of all punishments was 16·32 as against 14·58 in 1905.

Out of a total of 5,645 appeals, 42 per cent. were rejected; in 30 per cent. the sentences were confirmed and in 16 per cent. reversed. Applications for revision numbered 1,888, the sentence being reduced in 84 cases, reversed in 127 cases, and enhanced in 8 cases.

Persons tried by jury and with the aid of assessors numbered 455 and 1,214 respectively. In the High Court the verdict of the jury was approved in all cases. In the Courts of Sessions it was approved as regards 373 out of 388 accused persons, and disapproved as regards 15. In cases tried with

assessors, the Judge agreed with all the assessors in 70 per cent., with some in 9 per cent., and differed from all in 21 per cent.

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 :—

	1906.	1905.	1904.	1903.	1902.
Jail population of all classes on 1st January	98,244	93,781	93,881	101,664	108,741
Admissions during the year	480,098	464,660	436,569	440,948	471,529
Aggregate	578,342	558,441	530,450	542,612	580,270
Discharged during the year from all causes	479,280	460,202	436,668	448,984	478,532
Jail population on 31st December	99,062	98,239	93,782	93,865	101,738
Convict population on 1st January	88,344	85,034	85,209	93,682	98,873
Admissions during the year	163,956	161,783	153,880	156,112	171,256
Aggregate	252,300	246,817	238,589	249,794	270,129
Released during the year	160,022	155,220	150,289	160,503	172,202
Casualties, &c.	3,246	3,245	3,260	4,082	4,167
Convict population on 31st December	89,032	88,352	85,040	85,209	93,760

The total number of prisoners (480,098), including those under trial, admitted to jail during the year was 3·3 in excess of the previous year. Appreciable increases in admission occurred in Bengal (15 per cent.), Burma (4·5 per cent.); and Eastern Bengal and Assam (17·2 per cent.). There was a considerable decrease in Madras. The daily average number of prisoners rose by about 4 per cent.

The number of persons convicted and imprisoned during the year rose by 1·3 per cent. The increase was most marked in Bengal (12·3 per cent.), Eastern Bengal and Assam (12·5 per cent.), and Burma (5·8 per cent.). Madras showed a decrease of 10·5 per cent., and the Punjab of 4·1 per cent.; elsewhere the jail population was nearly stationary. The offences for which convicts were imprisoned show that the cases connected with property increased by about 7·4 per cent., that those against the person decreased by 2·8 per cent., and that convictions under the preventive sections of the Criminal Procedure Code were nearly the same as in the preceding year.

The escapes during the year, excluding Coorg, for which complete figures are not available, numbered 102 as against 85 in 1905, but 77 prisoners were recaptured before the end of the year. The largest number of escapes occurred in Eastern Bengal and Assam (30), the cause assigned being laxity of discipline on the part of the warders, and the defective structure of the Assam jails.

There was an increase of 9·3 per cent. in the number of juvenile offenders committed to prison during the year. This would seem to show a neglect on the part of magistrates to make sufficient use of the provisions of the law which empower them to send youthful criminals to a reformatory or to discharge them on security for their good behaviour.

The foundation in Calcutta of a Prisoners' Aid Society was a noteworthy feature of the year.

More than fifty-two per cent. of the persons admitted to jail came from the classes engaged in agriculture or cognate pursuits. Twenty per cent. were persons employed in miscellaneous callings, and about 10 per cent. gained their living by personal service. Four-fifths of the entire number were illiterate.

The number of previously convicted prisoners again rose, the increase being greatest in the United Provinces (56·1 per cent.). There was an increase of 14·1 per cent. over the figures for last year in the number of convicts sentenced to transportation.

JAILS.

The progress made in the segregation of casual and habitual offenders was satisfactory.

There was a slight decrease in the number and percentage to daily average strength of offences committed by convicts during the year as compared with 1905, but there was an increase of 4·4 per cent. in serious offences dealt with by major punishment. The most noteworthy increases in the percentage of major punishments to daily average strength occurred in Bombay (16·16 per cent.) and the Central Provinces and Berar (14·95 per cent.). As in past years, the ratio of total punishments is still considerably higher in the Punjab, Burma, and the Central Provinces than elsewhere. The figures for the different provinces are given in the following table:—

	1906.			1905.			1904.		
	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 -	10,404	10	10,278	10,130	12	11,314	9,272	15	14,331
Bombay - -	7,997	16	16,199	7,928	24	14,441	7,007	23	12,978
Bengal - - -	13,963	25	25,268	13,516	20	26,416	18,002	22	30,928
United Provinces	22,903	9	39,998	21,681	13	38,707	22,000	14	35,281
Punjab - - -	10,768	64	36,828	10,531	61	37,884	10,752	89	42,047
Burma - - -	12,608	17	42,092	11,951	25	44,891	11,113	41	41,241
Eastern Bengal and Assam.	6,733	58	8,292	6,277	29	7,418	1,480*	21*	2,054*
Central Provinces	8,062	23	9,405	8,232	30	8,360	8,558	21	8,710
North-West Frontier Province.	1,091	1	1,599	1,077	1	1,560	1,055	1	1,501
Coorg - - -	85	—	19	76	—	78	62	1	85
	86,612	218	189,928	86,449	215	191,069	85,235	246	190,156

* Assam only.

The aggregate number of corporal punishments was little more than half what it was five years ago. The total fell from 1,076 in 1904 to 799 in 1905, and to 568 in 1906, the proportion to total punishments showing a steady decrease in all provinces. The total number of cases in which penal diet (with and without solitary confinement) was prescribed was 6,505 as compared with 10,954 in the preceding year.

The result of the remission system during the year showed unimportant variations from those of the preceding year. The system of remission has been revised with the object of making it more intelligible to the average prisoner, and, in future, remission earned will be recorded in "days" instead of "marks." The special reward of 15 days' remission for committing no offence during the past 12 months was earned by 10,318 convicts.

There was again a marked increase in the total cost of maintenance of the prisoners in jail during the year, the figures for 1905 being exceeded by no less than £50,274. This was due in part to an increase in the jail population, but mainly to the high price of food grains, the average gross cost of maintaining each prisoner having risen to £4 15s. 10d., or 6s. 6½d. more than in the preceding year. At the same time the total cash earnings of prisoners fell off by nearly £10,000, with the result that the total net cost to the Government was just over £60,000 more than in 1905. Excluding Coorg, the provinces in which the average cost of maintenance was highest were the Central Provinces (£8 19s. 6d.), Eastern Bengal and Assam (£5 13s. 4½d.), and Bengal (£5 13s. 4½d.).

The year under review was an exceedingly unhealthy one; the northern provinces of India suffered severely from malarial fevers in the autumn, and cholera was rife through southern India. Although this led to an increase of sickness in the jails, and the ratio of admissions to hospitals rose from 647 to 658 per thousand, the death-rate was only 19·27 per thousand against 19·23

in the previous year. There was a decrease in the death-rate in all provinces except Madras, Bombay, and the North-West Frontier Province. The principal causes of death were dysentery (3·25 per thousand), tubercle of the lungs (3·21), pneumonia (2·55), and cholera (1·10). There were 12 cases, all fatal, diagnosed as cerebro-spinal fever, an increase of 2 on the figure for 1905; but in 4 cases the *post-mortem* examination did not support the diagnosis.

JAIL3.

PENAL SETTLEMENT AT PORT BLAIR.

The convict population of the Andamans at the end of the year 1906-07 was 14,496 (13,792 males and 704 females), being 200 less than at the end of the previous year. Discipline was well maintained, but the proportion of convicts punished increased by 8·82 compared with the previous year. The Viper Jail was closed as a jail on the 1st February 1907, and all prisoners who had been confined in it were transferred to the Cellular Jail. Twenty-three prisoners escaped during the year, of whom 14 were recaptured. The corresponding figures for 1905-06 were 35 and 32.

The revenue of the Settlement rose from £60,908* to £62,350, and the expenditure fell from £150,342* to £144,403, with the result that each convict cost the State £5 12s. to maintain against £6 3s. 7d.* in the preceding year. The estimated value of jail manufactures fell from £26,678 to £24,895, the principal decrease being in the value of building materials. The outturn of cocoanut oil was slightly larger. The experiment of issuing to convicts locally-grown rice was continued, and the net additional cost to Government was £96 against £150 in 1905-06. The police force was 50 under strength at the close of the year under review. The telephone system was completed and worked satisfactorily. The wireless telegraph service showed great efficiency, the monthly average number of messages sent being 613. The recorded rainfall of the year measured 99·23 inches, nearly 2 inches less than in 1905.

The health of the troops was better, and there was no death among them. The death-rate among convicts fell from 38·96 per 1,000 in 1905 to 27·30, the fall being due mainly to a reduction in the number of cases of dysentery. The death-rate attributed to malarial fevers was 3·47 per 1,000.

CIVIL JUSTICE.

CIVIL
JUSTICE.

The number of civil suits pending on the original side of the High Court at the end of 1905 was 1,100, including 31 pending suits received by transfer from other courts, and the number instituted during 1906 was 1,072. During the year 994 suits were disposed of, as against 1,121 in 1905, and the number left undisposed of at the end of the year was 1,178. There were 515 suits pending for over one year, showing a decrease of 5 from the figures of the previous year. The number of insolvency cases pending at the end of the year decreased from 228 to 207.

Bengal.

In the Civil Courts in the mufassal, the total number of ordinary suits and small causes instituted was 412,801. This figure is in excess of that of the previous year by 9,186. The increase occurred in title and money suits to the extent of 12·7 per cent. and 2·1 per cent. respectively. There was a slight decrease in the institution of rent suits. The number of suits disposed of was 420,856, the number being in excess of that for 1905 by 11,020. The average duration of cases showed an increase in the case of District Judges, but a considerable reduction in the case of Subordinate Judges.

In the Presidency Small Cause Court, both institutions and disposals showed an appreciable increase on the previous year's figures. The number of pending cases was less than in 1905 by 51.

The number of appeals decided by the High Court during the year (4,436) was less than that of the preceding year by 986, and the pending file was reduced by 880 to 4,401. In the Subordinate Courts, 12,194 appeals were instituted, an increase, as compared with the previous year, of 1,064, and

* Corrected figures.

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JUSTICE.

12,427, or 395 less than in 1905 were disposed of. The number of appeals pending at the close of the year (5,246) was more by 248 than at the end of 1905.

North-
Western
Provinces.

In the North-Western Provinces there has been a steady increase in institutions since 1902, but that in the year under review is exceptional, and the number of suits (105,470) is the highest on record, exceeding by 5 per cent. the previous highest figure, which was in 1887; last year's figure was 93,646.

The total number of suits before the courts was 119,165, as compared with 107,148 in 1905, but the pending file increased by only 1,031. The number of cases pending over three months increased from 3,126 to 3,210. In Subordinate Judges' Courts the average duration in contested cases was 37 days, as against 36 in 1905, but in all other courts the average duration decreased.

There were 11,073 civil appeals before the Subordinate Courts during the year, and the year closed with a pending file of 2,846 cases. Before the High Court there were 3,843 appeals for disposal, as compared with 3,813 in 1905. Of these 1,754 were disposed of, but in spite of the fact that the number of disposals was above the average, 2,089 cases, or only 25 less than in 1905, were pending at the end of 1906.

The number of applications for execution of decrees filed during the year was 92,646, representing a large increase of 13 per cent. over the figures for 1905. The pending file, however, increased by only 1,301. Realisation was complete in 22 per cent. of the cases and partial in 20 per cent., while 52 per cent. were wholly infructuous.

Village Munsifs decided 15,546 cases out of a total of 16,010 for disposal. Of these 1,231 were contested cases, as compared with 1,252 in 1905.

Oudh.

The total number of suits instituted in Oudh increased from 50,850 to 64,826. Disposals numbered 66,094 as against 51,674 in the preceding year, and the pending file rose from 7,219 to 7,257. The average duration of contested cases fell from 70 to 61 days, and that of uncontested cases from 30 to 28, the decrease being common to all courts, except the Courts of Honorary Munsifs and the Courts of Small Causes, City and Cantonment, Lucknow. The number of appeals before the courts was 3,224 as against 3,947 in the previous year. Disposals numbered 2,572 as against 3,259, and the pending file was reduced from 688 to 652. The Judicial Commissioner's Court decided 1,020 appeals. The total number of applications for executions of decrees during the year was 51,565, as against 44,343 in 1905; of these 25,116 were wholly infructuous. Village Munsifs disposed of 7,472 suits, as compared with 6,326 in the preceding year.

Punjab.

The decline in the volume of civil litigation, which has been a prominent feature of the reports of several years past, experienced a marked check during the year under review. The number of suits instituted (167,350) represents an increase of 7 per cent. over the figures for 1905. The fact that the rise in institutions was very largely under the head of suits for money or movable property seems to show that the check furnished by the extension of the period of limitation for suits for the recovery of money lent is now disappearing. The total number of suits brought by money-lenders against agriculturists again fell from 62,769 to 59,895, while suits to establish rights of pre-emption increased from 3,994 to 4,947, which would seem to show clearly that the new pre-emption Act has stimulated litigation.

Out of 193,295 suits for disposal in courts subordinate to Divisional Courts, 176,534 were decided. In spite of the large rise in institutions and disposals, the pending file rose by only about 900 cases during the year. The average durations of contested and uncontested cases were 51 and 27 days respectively, as against 51 and 29 days in the previous year. In proceedings for the execution of decrees the percentage of realisations remained the same as in the last three years, viz., 24.

The percentage of appeals to appealable orders rose from 28 to 29. In Divisional Courts 8,591 appeals were instituted, an increase of 573, and the pending file rose from 2,673 to 3,417. In District Courts appeals rose from 5,189 to 5,567, and the pending file increased from 472 to 518.

In the Chief Court, 11 original cases were instituted. Institutions in the more important classes of civil appellate work were about the same as in 1905, except that the number of first appeals fell from 138 to 93. Disposals were very much larger than in 1905 in consequence of the strength of the Court being maintained at nine Judges throughout the year, and the pending file was reduced from 2,048 to 1,131.

CIVIL
JUSTICE.

In the Burma Civil Courts there was again a considerable increase in the volume of original litigation. The total number of suits instituted rose from 82,971 to 88,402, the increase being common to both sections of the province, but was greater in Upper than in Lower Burma. The number of cases disposed of during the year was 88,344, as compared with 87,509 in 1905. Of this number 22,006 were contested. The number of cases left pending at the end of 1906 was 8,960, as against 2,015 at the end of 1905.

Burma.

The total number of regular appeals increased from 5,302 to 5,840, of which 1,360 were pending at the close of the year. Decrees of lower courts in Lower Burma were confirmed, on appeal to District Courts, in 61·8 per cent. of cases, modified in 7·8 per cent., and reversed in 28·4 per cent., the figures showing little variation from those of 1905. Out of 1,524 appeals disposed of in District Courts in Upper Burma 62 per cent. were confirmed, as against 59 in the previous year. In Divisional Courts in Lower Burma the decrees were confirmed in 61 per cent. of the cases. In Upper Burma, only 11 appeals came before Divisional Judges, all of which were disposed of. The Chief Court disposed of 223 appeals, as against 300 in 1905. Decrees of lower courts were confirmed in 66·8 per cent. of the cases. The Court of the Judicial Commissioner of Upper Burma disposed of 319 appeals, of which 66·5 per cent. were confirmed.

Applications for execution of decrees rose in Lower Burma from 34,784 to 41,334, full satisfaction being obtained in 9,064, and in Upper Burma from 10,725 to 12,201, of which 3,567 were fructuous.

The number of original suits instituted during the year in Eastern Bengal and Assam was 363,219, an increase of 4,573 on the figure of 1905. Of these 179,116 were suits for money or movables, 145,908 were rent suits, and 38,195 title and other suits. There was an increase in the number of suits instituted in all districts except four. Altogether there were 424,825 suits for disposal, and 365,263 were disposed of. This number was 494 less than the total disposed of in the previous year, but the decrease occurred entirely in uncontested suits, the number of contested suits having increased from 69,573 to 72,201. The pending file fell from 55,948 to 58,361.

Eastern
Bengal and
Assam.

In the High Court 1,125 appeals were preferred during the year. One thousand three hundred and eleven were disposed of, and the pending file fell from 2,094 to 1,903. In Subordinate Courts 10,181 appeals were instituted, and 10,084 disposed of, the pending file being increased by 321 to 5,549. The decisions of the lower courts were affirmed in 53·7 per cent. of the cases and reversed in 15·3 per cent.

The number of applications for execution of decrees made during the year was 277,934, and 54,836 were pending from the previous year. Full satisfaction was obtained in 69,154, and partial satisfaction in 61,291 cases, while 138,650 cases were returned as infructuous.

The number of suits instituted in the Central Provinces and Berar amounted to 90,782 as compared with 95,452 in 1905. The number of cases disposed of was 90,156, and the pending file rose from 22,446 to 23,023. The average duration of contested cases rose from 140 days to 160 days, and that of uncontested cases from 47 to 75 days.

Central
Provinces
and Berar.

In the Court of the Judicial Commissioner no proper comparison can be made with the previous year as regards the out-turn of work as a whole, owing to the change in the Appellate Jurisdiction of the Judicial Commissioner, Berar, on the 1st September 1905 (*vide* last year's Report). In Central Provinces cases the figures are fairly constant, except that the pending file tends to increase. For the Court as a whole the pending file has risen from 305 to 353. Divisional Judges disposed of 337 cases, as compared with 398 in the previous year, and there was but a slight rise in the number of pending cases. In the Courts of District Judges the number of appeals instituted rose from 5,409 in 1905 to 5,625 in 1906.

**CIVIL
JUSTICE.**

Applications for execution of decrees numbered 97,420, as compared with 105,405 in 1905. Of the applications disposed of, 54·6 per cent. were wholly infructuous, and in 22·4 per cent. satisfaction was obtained in full.

**North-West
Frontier
Province.**

The suits instituted in the North-West Frontier Province during 1906 numbered 22,282, as against 20,810 in the preceding year. This number is the highest recorded in any year since the province was created. Title and other suits rose by 1,169, and suits for money or movable property by 303. Bannu was still the most litigious district, while there was an extraordinary increase of litigation in Hazara.

Of the 26,053 suits for disposal in the District Courts, 24,081 were decided, 1,972 being left pending at the end of the year. The average duration of suits in the province remained at 20 days in uncontested cases, while that of contested suits rose slightly from 35 to 36.

District Judges and Subordinate Judges with appellate powers disposed of 675 appeals as against 666 in 1905. Divisional Courts disposed of 1,021 regular appeals, or 276 more than in the previous year. The increase was common to both divisions, but was more noticeable in the Pashawar Division. Applications for the execution of decrees numbered 16,518 as against 16,361 in 1905; 31 per cent. of the applications were satisfied in full, and 17 per cent. were partially executed.

Coorg.

There was no change in the number of Civil Courts (5) or their jurisdiction. The total number of institutions increased from 1,666 to 1,925. The total number of suits decided was 1,870, as against 1,698 in 1905, and the pending file was increased from 146 to 201. The bulk of the work as usual devolved on the two Munsifs, who together disposed of 798 suits and 1,152 small causes. The number of appeals for disposal was 67, as compared with 71 in 1904; 10 were successful. The Judicial Commissioner decided 7 appeals out of 11 preferred to his court; 5 were confirmed. The number of execution proceedings (2,100) was 299 less than in 1905. Wholly infructuous applications accounted for 73·6 of the total disposals.

Madras.

The number of suits instituted during the year in Madras was 398,798, or 30,682 more than in 1905. The increase occurred in all classes of courts, and in all the districts, except four. The disappearance of plague and the growth of trade are the main reasons assigned for the general increase in original litigation. During the last three years there has been a continuous increase, amounting to 66,900 suits in all. The number of appeals preferred increased from 10,371 in 1905 to 11,101 in 1906. There was a large increase of arrears in all the more important classes of courts.

Before Village Courts 96,040 suits were instituted, an increase of 2,112 on 1905, and 95,765 were disposed of. In Revenue Courts 8,456 suits were filed, or 1,126 more than in 1905. The number of both ordinary and small cause suits filed in District Munsifs' Courts was the highest on record, namely, 92,497 and 145,405, or 8,583 ordinary suits and 16,594 small cause suits more than in the previous year. The disposal was also a record, showing 89,661 of the former and 144,409 of the latter class of suit. In Subordinate Judges' Courts the numbers of ordinary suits and small causes disposed of were respectively 840 and 23,553, as compared with 960 and 22,553 in the previous year. In District Courts the numbers were 445 and 438, the figures for 1905 being 360 and 650 respectively. In the Presidency Small Cause Court 20,290 cases were disposed of and arrears increased from 2,043 to 2,689.

In the High Court an increase of 16 in the number of suits for disposal (467) took place, and the number of disposals was 259, or 26 more than in the previous year. The number of appeals before the High Court was 5,220, as against 6,064 in 1905, the number disposed of being 1,286, and the arrears in first appeals being reduced from 740 to 733. District Courts disposed of 6,183 appeals out of 10,935 for disposal, and Subordinate Judges' Courts of 1,819 out of 2,786.

The number of applications for execution of decrees for disposal during the year in courts in the mufassal was 285,088. Disposals numbered 254,120, and arrears increased from 28,644 to 30,970.

Bombay.

In the Bombay Presidency (including Sind) the total number of suits instituted showed a decrease from 142,207 to 132,478, which was attributed to the extension of the application of the Dekkhan Agriculturists' Relief Act

to the whole Presidency towards the end of the preceding year. Of these, 78 per cent. were for money or movable property, and 14 per cent. related to immovable property, all other suits totalling 8 per cent. The percentage of contested suits was 37 as against 22 in 1905. There was an increase in the average duration of contested suits, it being 243 as against 148 days in the preceding year, and the duration of uncontested suits rose from 79 to 91 days. The total number of suits disposed of was 131,419 as against 144,856 in 1905, and arrears increased from 33,954 to 37,020.

CIVIL
JUSTICE

Including arrears from the previous year to the number of 3,444, there were 8,742 appeals before the courts, of which 4,672 were decided, the pending file rising to 4,070. In 2,440 cases the decrees of the lower courts were confirmed, while 752 were not prosecuted or were dismissed. The average duration of appeals was 249 days in the year under review as compared with 219 in 1905.

Applications for execution of decrees numbered 167,334, and 166,960 were disposed of, arrears increasing from 50,263 to 50,637. Excluding 702 applications disposed of by transfer, 66 per cent. of the applications proved wholly infructuous; full satisfaction was obtained in 16 per cent. of the cases, partial satisfaction in the remainder. The total amount recovered in execution fell from £396,999 to £370,590. The number of persons imprisoned in process of execution was 646, as against 973 in 1904.

The total number of applications for declaration of insolvency disposed of during the year was 303, of these 104 were withdrawn, 125 granted, and 75 rejected.

CHAPTER IV.

REGISTRATION OF ASSURANCES, &c.

REGISTRATION.

REGISTRA-
TION.
General.

The Registration Law of 1877 was in force during the year under review throughout British India, with the exception of Upper Burma, for which Regulation II. of 1897 still provides a less complete procedure, and of certain other tracts in which the conditions are exceptional. For the purpose of registration, 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 not required by the law to be registered, but which can be so treated or not at the option of the holder, though liable, if unregistered, to be superseded by subsequent 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 value more than Rs. 100, and, with certain exceptions, annual or longer leases. In the second category, that of optionally registrable documents, are those relating to immoveable property not included in the above-mentioned classes, deeds affecting moveable property, wills, and other documents. As concerns transfers of immoveable property, however, the situation is affected in most provinces by the Transfer of Property Act of 1882. This Act was amended in March 1904. Before the latter date it was in force throughout British India, with the exception of Burma (outside Rangoon), the Punjab, and Sind, and other scheduled districts; and under its provisions all transfers by sale or mortgage of immoveable property had to be registered, excepting that in the case of tangible immoveable property of value below Rs. 100 transfer 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 most important changes effected by the amendment of the Act were the removal of the last exception, namely, that relating to small mortgage deeds, and a wider extension of the Act in Lower Burma. Practically all deeds transferring immoveable property have now, therefore, to be registered, and the question as to the supersession of an unregistered by a registered deed will cease to cause difficulties in the law courts. Offices are established in every district for the registration of documents, and for keeping copies of such documents. *Ad valorem* fees are charged for registration, and a small fixed fee for searching the records. The total registration receipts of the year 1906-07 were £369,000 as compared with £361,900 in the preceding year; and the cost of the registration offices was £205,000, leaving a surplus of £164,000, against £174,300 in the year 1905-06.

In 1906, as in 1905, there was a general increase in registration transactions throughout the greater part of British India, due to the amending Act of 1904. Although this Act was in force during the whole of 1905, a part of its effect was delayed, as its meaning and requirements were at first not fully understood. The other causes to which changes are due, are local in character, and may be explained in a particular district either by unfavourable or by favourable circumstances. An expansion in the work of registration may be due on the one hand to plague, high prices, bad harvests, and declining credit, or on the other to the development of new lands, the growth of towns, and the general effects of economic progress. The following particulars are taken from the provincial reports for the calendar year 1906.

Bengal.

There was an increase of 16 per cent. in the total number of deeds registered in Bengal, from 793,200 to 922,700. The number of registrations of immoveable property under the compulsory classes is given as 792,500 compared with 680,400 in 1905. This considerable increase is ascribed partly to the operation of the Act of 1904, partly to favourable local conditions, such as the growth of trade in the large towns, the reclamation of waste lands, and the demand for land amongst cultivators of jute, and in some districts to scarcity and high prices. Sales of immoveable property increased from 250,100 to 295,000, of which 199,000 represented values less

than Rs. 100. The total value of the immoveable property affected by the registrations under the compulsory classes was £11,591,000, of which 32 per cent. was contributed by the comparatively small number of deeds (4,332) registered in Calcutta. REGISTRATION.

The total number of deeds registered in Eastern Bengal and Assam rose from 735,300 in 1905 to 801,000 in 1906. The compulsory registrations affecting immoveable property in the province numbered 683,700, with a value of £4,766,000. An increase of 72,878 documents in the compulsory class is attributed to the operation of the Act of 1904, whose provisions are now becoming better known, and to the high price of food grains, which had the effect of increasing the number of sales and mortgages. Eastern Bengal and Assam.

The number of documents registered in the United Provinces rose from 220,400 in the year 1905 to 248,600 in 1906; nearly half of the increase is due here, as elsewhere, to the further operation of Act VI. of 1904. United Provinces.

In the Punjab, where the new Act is not in force, both the number of compulsory registrations of immoveable property and the value which they represented increased in 1906 by 16 per cent. The whole of the increase is due to registrations effected in the first six months of the year. It is suggested that the comparative freedom from plague during this period may have allowed the completion of transfers which had been held in abeyance. Punjab.

The figures of registrations in the North West Frontier Province are small; but the decrease in the number of instruments registered in the districts of Hazara, Bannu, and Dera Ismail Khan, from 3,593 in 1903 to 1,917 in 1905, due to the introduction of the Land Alienation Act, has been followed by an increase to 2,411 in 1906. There was also an increase in Peshawar, partly due to the expected construction of the Upper Swat River Canal. North West Frontier Province.

The number of registrations in Lower Burma increased from 42,400 to 47,700. This increase followed upon a similar increase in 1905, and was chiefly due to the legal change noted above. The value of the immoveable property concerned rose to £5,297,200; of this sum £2,353,000 was contributed by the comparatively small number of transfers (2,645) in Rangoon town, where 32 unusually large transactions occurred. In Upper Burma registrations were few in number. The Lieutenant-Governor decided not to recommend the extension of the Indian Registration Act to this part of the province, but revised rules under the Upper Burma Registration Regulations, 1897, were drafted for consideration. Burma.

The number of registrations in the Central Provinces and Berar rose to 60,300, of which 36,700 occurred in Berar. The year's results show the continuance of steady progress. The presence or absence of plague was the chief factor in local fluctuations, plague or the fear of plague causing an increase in wills and deeds of gift *inter vivos* in certain districts. Central Provinces and Berar.

In Madras the number of registrations rose from 1,061,600 to 1,142,500, the highest figure on record; there was an increase in the registration of all classes of documents, and in all districts except Nellore, where there was a decrease under mortgages, due to a liberal grant of State loans. Madras.

The number of registrations in Bombay was 195,200, representing a slight increase over the number in 1905. There was a considerable increase in sales of all sorts and a corresponding decrease in the number of mortgages, due to the conversion of mortgage deeds into sale deeds by *savkars* in order to avoid the consequences of the application of the Deccan Agriculturists' Relief Act. The sections of the Transfer of Property Act, making compulsory the registration of documents affecting immoveable property of a less value than Rs. 100, have not yet been applied to Sind. Bombay.

JOINT STOCK COMPANIES.

The report on Joint Stock Companies registered in India under the Indian Companies Act, VI. of 1882, for 1905-06, the latest year for which statistics are available, shows that the number of new companies registered was 268, with a nominal capital of £5,186,000 and a paid-up capital of £387,900; while 90 companies, with a paid-up capital of £524,700, ceased to work. JOINT STOCK COMPANIES.

REGISTRATION.

On the other hand, the paid-up capital of 463 companies was increased by an aggregate amount of £1,158,000, while 82 companies reduced their paid-up capital by £117,000. The net result was that at the end of the year there were in operation 1,728 companies, with a paid-up capital of £27,890,000. There has been an increase of 36·8 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 40·5 and 37·7 per cent. respectively of all the paid-up capital; in Madras the number of companies (528) was larger than in either of the two former provinces, but the paid-up capital constituted only about 8·5 per cent. of the whole. The Bengal companies are, taking the figures as they stand, the richest, the average of paid-up capital for the 387 companies in that presidency being £29,200; while for the 390 companies of Bombay it is £27,000, and for the 528 of Madras £4,500. The distribution of paid-up capital among registered companies for different classes of industry was as follows:—

	Paid-up Capital.		Paid-up Capital.
	£		£
Banking and insurance -	3,002,400	Mills and presses -	13,570,100
Trading and shipping -	5,702,700	Tea and planting -	2,354,200
Mining and quarrying -	1,977,300	Other industries -	1,283,500

The group of companies with the largest aggregate subscribed capital, £13,570,100, constituting nearly half of the total paid-up capital, were for weaving and spinning or for pressing cotton, jute, wool, and silk; and nearly 55 per cent. of the capital of such undertakings belonged to the Bombay Presidency. The capital stated above represents in all cases share capital only; the total value of the debentures issued amounted to £3,846,700.

It is now possible for the first time to give statistics of companies which are registered elsewhere, but which carry on work with sterling capital exclusively, or almost exclusively, in India. The total number of such companies is 165, and the paid-up capital amounts to £68,970,294, besides £27,721,223 debentures. The railways represent £43,524,597 paid-up capital and £24,694,100 debentures; the tea industry £12,183,399 and £1,240,550 debentures. Of the rest the sterling share capital invested in jute mills is £2,403,894, in cotton mills £831,492, in rice mills £934,585, and in mining and quarrying £4,796,211. The gold fields in Southern India are mostly worked by companies formed in London, the paid-up capital being £2,353,451. Thus, while the railway, gold, and tea industries are mainly financed from abroad, the great bulk of the mill and press industries are registered in India.

PATENTS AND DESIGNS.

PATENTS.

The laws for granting exclusive privileges to inventors and for protecting patterns and designs were amended and consolidated by the passing of the Inventions and Designs Act, V. of 1888.

The total number of applications filed under the Act in 1906 was 620, or 34 more than in the preceding year. Of these, 44 were refused or abandoned, and 84 were undecided at the end of the year. Sixty-five only of the applications were made by natives of India, 144 by Europeans and others resident in India, and 411 came from outside India, of which 194 were from the United Kingdom. The categories under which most of the inventions are classed, so far as the subjects are enumerated, are bicycles, the manufacture of tea, railway materials, electric contrivances, chemical appliances and preparations, and spinning or weaving machines.

CHAPTER V.

FINANCE.

FINANCE.

FORM OF ACCOUNTS.

The accounts of the Government of India show the transactions in India in rupees : 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.

GROSS REVENUE AND EXPENDITURE.

The gross revenue and expenditure of British India in 1905-06 and 1906-07 were as follows :—

Gross Revenue and Expenditure.

	1905-06.	1906-07.
Revenue - - - -	£ 73,327,957	£ 75,577,812
Expenditure - - - -	71,236,103	73,988,472
Surplus - - - - £	2,091,854	1,589,340

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 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.

STATEMENT EXHIBITING THE MORAL AND MATERIAL

NET REVENUE.*

FINANCE.

Net Revenue and Expenditure.

	1905-06.		1906-07.		Increase (+) or Decrease (-).	
	£	£	£	£	£	£
Land Revenue, &c. :						
Land Revenue	18,129,572		19,104,638		+ 975,066	
Forest	1,775,124		1,768,627		- 11,407	
Tributes from Native States	896,867		401,633		+ 4,766	
		20,801,563		21,269,898		+ 968,335
Opium : Net Receipts		8,572,944		8,743,778		+ 170,829
Taxation :						
Salt	4,109,030		4,095,172		- 14,767	
Stamps	3,876,326		3,985,706		+ 109,380	
Excise	5,631,398		5,845,799		+ 214,401	
Provincial Rates	2,792,267		2,375,411		- 516,846	
Customs	4,258,368		4,232,490		- 25,867	
Assessed Taxes	1,314,678		1,416,327		+ 101,649	
Registration	361,185		878,891		+ 17,766	
		22,344,096		22,229,305		- 114,291
Commercial Undertakings :						
Post Office	75,541		148,313		+ 72,672	
Telegraph	106,635		173,109		+ 6,664	
Railways	2,001,966		2,313,541		+ 311,575	
Irrigation	126,231		769,655		+ 643,324	
		2,087,108		3,056,110		+1,021,007
Mint		201,104		252,600		+ 51,496
Exchange		82,870		190,022		+ 107,152
Total Net Revenue	£	48,539,680	£	50,744,208		+2,204,528

NET EXPENDITURE.*

	1905-06.		1906-07.		Increase (+) or Decrease (-).	
	£	£	£	£	£	£
Debt Services (excluding amounts charged under Railway Revenue Account and Irrigation).		464,949		932,291		+ 467,342
Military Services :						
Army	18,077,424		18,440,276		+ 362,842	
Marine	877,094		482,384		+ 105,240	
Military Works and Special Defence Works.	1,191,905		1,214,874		+ 22,969	
		19,646,433		20,137,484		+ 491,051
Collection of Revenue		5,470,088		5,635,479		+ 165,396
Civil Services :						
Civil Departments	11,380,796		12,316,827		+ 936,031	
Miscellaneous Civil Charges	3,636,580		3,593,594		- 42,986	
Civil Works (including Railways charged to Provincial or Local Revenues).	4,874,991		5,024,697		+ 149,706	
		19,842,867		20,935,118		+1,092,251
Famine Relief and Insurance		1,000,000		1,000,000		-
Provincial Adjustments :						
1. Charge against Revenue of the year arising from increase of Provincial Balances.		23,994		514,796		+ 490,802
2. Diminution of the Charge against Revenue of the year, owing to Expenditure being met from Provincial Balances.						-
Total Net Expenditure charged against Revenue.		46,447,826		49,154,808		+2,707,042
Surplus		2,091,854		1,589,340		- 502,514

* It has recently been decided to exclude the "Local" Revenue and Expenditure from the Estimates and Accounts. Effect is given to this decision for the first time in the Financial Statement of the Government of India, and in the Return of Net Income and Expenditure of British India for the eleven years from 1926-27-1936-37, which will be published as Parliamentary Papers. The net figures in the above table, however, include the "Local" Revenue and Expenditure, and therefore differ from those exhibited in the Return of Net Income and Expenditure mentioned above.

Thus there was in 1906-07, as compared with the previous year, an increase in the net revenue of £2,204,528, and an increase in the net expenditure of £2,707,042.

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 Explanatory Memorandum by the Secretary of State. It will be sufficient here to refer only to the most important increases and decreases in 1906-07 :—

FINANCE
Net
Revenue
and Ex-
penditure.

Net Revenue.

Increases.—The largest increase is that under Land Revenue, viz.: £975,066. Agricultural prospects were not good at the beginning of the year but except in a few eastern districts harvests were good all over India. The improvement was greatest in Bombay (£423,239), the United Provinces (£184,616), the Punjab (£180,543) and Madras (£130,433). In Burma, mainly in consequence of floods in some districts, the expansion of the revenue (£17,360) was not so rapid as was expected.

Under Irrigation there was an improvement of £643,324, the net revenue for the year being the highest on record. The net receipts in the United Provinces were higher by £250,912 and in the Punjab by £226,916.

The increase in the net receipts from Railways amounted to £311,575. Of this improvement £123,762 occurred in connection with the Bombay, Baroda, and Central India Railway, being mainly attributable to the increased share in the profits of the line enjoyed by the Secretary of State in consequence of his purchase of the line on the 31st December 1905. The remaining increase was the net result of a simultaneous expansion of the gross receipts and working expenses of the State Railways. As compared with 1905-06 the following are the chief variations in the net traffic receipts from State Railways :—*Increases*—North-Western State Railway £216,200, Eastern Bengal State Railway £95,442, Indian Midland Railway £80,667. *Decreases*—Great Indian Peninsula, £161,148 (due to unfavourable agricultural conditions in Western India), East Indian Railway £147,298, Rajputana-Malwa Railway £73,594.

Under Excise there was a net increase of £214,404. The Revenue under this head has been steadily expanding since 1897-98, when the net receipts were only £3,609,400. In the year under review the increase was greatest in Madras (£93,386), in the Central Provinces (£75,744), in Bengal and Eastern Bengal and Assam, where the increase for the two provinces taken together amounted to £67,023, and in Bombay (£43,741). There was a decline of £52,017 in the United Provinces and of £42,325 in Burma.

The net revenue under Opium showed an improvement of £170,829. 52,800 chests of Bengal Opium were sold for export at an average price of Rs. 1,391 per chest in 1906-07 as against 49,200 chests at an average price of Rs. 1,434 per chest in the previous year. There was a slight falling off in the exports of Malwa Opium.

There was an increase of £109,380 under Stamps. This improvement was shared by all the Provinces except Bombay and the Central Provinces. About two-thirds of the revenue is derived from Court fee stamps, and the remainder from commercial and other stamps.

The remaining increases of revenue were as follows, viz. :—Exchange £107,152, Assessed Taxes (mainly Income Tax) £101,649, Post Office £72,672, Mint £51,496, Registration £17,756, and Tributes from Native States £4,766.

Decreases.—The largest decrease is under Provincial rates, viz. :—£516,846. Village Service Cesses amounting to £547,900 a year were abolished in April 1906, and the reduction in 1906-07 is due to this cause.

There was a small diminution in the receipts from Customs amounting to £25,867, the most important variations occurring in the receipts from spirits, rice (Export duty), cotton manufactures, and silver. The duty on imported spirits and liqueurs was raised from Rs. 6 to Rs. 7 per proof gallon with effect from 26th February 1906. The announcement of this measure led to large imports and withdrawals from bond towards the end of 1905-06 for the purpose of obtaining the benefit of the old tariff; and in 1906-07 there was a marked falling off in the imports.

In March 1905 the Salt duty was reduced from 2 rupees to 1½ rupees per maund (82½ lbs.). In March 1907 a further reduction to 1 rupee per

FINANCE. maund was made, at an estimated cost of over £1,250,000 of net revenue annually. The rate is now uniform throughout India and Burma. Consumers of salt have, as was hoped, benefited by the reduction of duty.

There were also decreases of net revenue under Forest amounting to £11,497 and under Telegraph amounting to £6,564.

Net Expenditure.

Increases.—The increase in the Expenditure on Civil Departments in 1906-07 amounted to £985,731. The chief increases occurred under Police (£339,160), Law and Justice (£186,116), Education (£169,441), and Political (£116,594). In April 1906 the permanent annual grants to the Provincial Governments of £333,000 a year for Police Reform, £233,000 for Education and £133,000 for the development of agricultural research and instruction were increased to £500,000, £266,700 and £160,000 a year, respectively. It was not possible to utilise these grants fully within the year, or the increase of expenditure under these heads would have been larger.

In 1905-06 the portion of the revenue which accrued to the Provincial Governments exceeded the expenditure chargeable to them by £23,994. This sum under the existing system of decentralised finance was added to their balances and charged against the revenue of the year. In 1906-07 the provincial surpluses amounted to £514,796, the charge against the revenue of the year due to the provincial adjustments being thus greater by £490,802.

The expenditure shown as attributable to the Service of Debt rose by £467,342. 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 by the State on Public Works, and the interest on this sum is charged to the Railways and Irrigation Works; 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 and of the interest thereon. Under this system the net interest payments other than those chargeable to Railways and Irrigation would have shown a diminution of about £80,000 in 1906-07. But certain changes in assessing the rate of interest charged on the capital invested in Railways and Irrigation were introduced with effect from 1906-07, and the increase above mentioned is the effect of these changes.

There was an increase of £491,051 in the net charges for Military services, of which £362,842 was under the head of Army, and was due to further expenditure on measures for improving the efficiency of the Army. The expenditure on Army Stores in England was £1,573,031, as against £714,080 in 1905-06. This increase was due to the fact that certain supplies of artillery and stores which were being procured in England and were to have been received in 1905-06 were not delivered until the following year. The increase of expenditure under the Marine head amounted to £105,240, and was attributable to the purchase of miscellaneous stores in England.

Under Collection of Revenue there was an increase of £165,396, of which £69,715 was due to heavier charges for collecting the Land Revenue. This increase is due mainly to changes in provincial and village establishments and variations in connection with survey and settlement operations. An increase of £58,103 under Stamps is due to the introduction of a unified Postal and Revenue Stamp; the cost of all stamps is now included under the head "Stamps," whereas formerly the cost of Postal and Telegraph Stamps was charged to "Post Office" and "Telegraph."

The increase of £149,706 under Civil Works is partly due to a further grant of £38,000 a year made by the Government of India in April 1906 to district and local boards in aid of their expenditure on roads, buildings, hospitals, schools, water supply, sanitation, &c., and partly to the application of a portion of the permanent grants made to Provincial Governments for expenditure on police reform, education, and agricultural development and research (*see above under "Civil Departments"*), to the construction of buildings. The money so spent goes to increase the charges under the head of Civil Works.

Decrease.—There was a decrease under Miscellaneous Civil Charges amounting to £42,986. FINANCE.

The tables in the Appendix (page 195) show the net revenue and expenditure in India of the several Provinces under the chief heads for the years 1905-06 and 1906-07, and the net payments in England.

The following summary shows the surpluses or deficits in the various Provinces and the net expenditure by the Government of India and the Secretary of State :—

Provinces, &c.	1905-06.		1906-07.	
	Surplus.	Deficit.	Surplus.	Deficit.
Bengal - - - -	£ 7,385,155	£ —	£ 6,910,248	£ —
Eastern Bengal and Assam -	700,998	—	1,242,614	—
United Provinces - - -	3,194,773	—	2,935,337	—
Punjab - - - -	1,419,015	—	1,557,719	—
Burma - - - -	2,298,841	—	1,854,848	—
Central Provinces and Berar -	447,219	—	510,133	—
Madras - - - -	4,791,703	—	4,707,861	—
Bombay - - - -	4,616,671	—	4,969,802	—
North-West Frontier Province	—	—314,295	—	—238,286
India, General - - - -	—	—4,726,993	—	—4,526,993
England - - - -	—	—17,666,233	—	—18,333,943
Net result - - -	Surplus £2,091,854		Surplus £1,589,340	

CAPITAL OUTLAY ON PUBLIC WORKS.

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

Capital outlay on public works.

	1905-06.	1906-07.
Amount supplied by State borrowing or from the Cash Balances, without being charged against the Revenue of the year :—	£	£
State Railways - - - - -	7,922,204	7,915,041
Irrigation Works - - - - -	556,194	797,627
Amount met by Debenture Stock issued by the East Indian and South Indian Railway Companies.	1,487,995	—
Amount defrayed from Revenue :		
Provincial Railways - - - - -	7,195	3,236
Preliminary railway expenditure not originally charged to construction.	9,687	—
Protective Railways - - - - -	55,278	3,442
Protective Irrigation Works - - - - -	296,573	356,460
Other Irrigation Works* - - - - -	16,305	14,222
Total Direct Outlay by the State -	10,351,431	9,090,028
Outlay by companies guaranteed or subsidised by Government	—315,744	1,809,714
Outlay by Local Boards - - - - -	26,698	62,648
Total Capital Outlay on Railways and Irrigation - £	10,062,385	10,962,390

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

FINANCE,
Debt,

DEBT.

The following table shows the alteration in the amount of the debt that took place in 1906-07, the amount of the rupee debt in India being expressed in pounds at the rate of Rs. 15 = £1 :—

	Amount of Debt on 31st March 1906.	Amount of Debt on 31st March 1907.	Increase.	Decrease.
	£	£	£	£
In India (permanent)	84,054,041	86,970,043	2,916,002	—
" (temporary)	—	—	—	—
In England (permanent)	146,457,439	147,518,634	1,061,195	—
" (temporary)	—	—	—	—
Total	£ 230,511,480	234,488,677	3,977,197	—

In 1906-07 a loan of 4½ crores of rupees (£3,000,000) was issued in India at an average price of 97·3 per cent. In England, £2,000,000 three per cent. stock was offered for tender at a minimum price of £94 10s. per cent. The average price obtained was £94 16s. 5d. per cent. Of the proceeds of this loan £749,900 was used for the discharge of debentures of the Bombay, Baroda, and Central India Railway Company, and the remainder for advances to railway companies.

Other obligations,

OTHER OBLIGATIONS OF THE GOVERNMENT OF INDIA.

Particulars regarding the obligations of the Government of India other than the permanent or temporary debt, and of loans by the Government of India and the Provincial Governments, are given in the following tables :—

OBLIGATIONS.

	Amount outstanding 31st March 1906.	Amount incurred 1906-07.	Amount discharged, 1906-07.	Amount outstanding 31st March 1907.	Increase 1906-07.	Decrease 1906-07.
	£	£	£	£	£	£
Savings Bank Deposits	11,222,784	4,440,380	3,713,993	11,949,171	726,387	—
Deposits of Service Funds.	1,199,243	98,507	87,364	1,210,386	11,143	—
Excluded Local Funds	300,090	785,601	796,270	289,421	—	10,669
Railway Funds - -	55,765	24,743	17,608	63,000	7,235	—
Deposits of Sinking Funds.	112,786	11,119	—	123,905	11,119	—
Special Loans -	1,125,708	—	213	1,125,495	—	213
Treasury Notes -	29,861	—	—	29,861	—	—
Departmental and Judicial Deposits.	4,222,969	21,990,348	21,608,615	4,604,702	381,733	—
Total - £	18,269,206	27,350,698	26,223,968	19,895,941	1,126,735	—

LOANS BY THE GOVERNMENT OF INDIA AND THE PROVINCIAL GOVERNMENTS.

FINANCE.

	Amount outstanding 31st March 1906.	Amount advanced 1906-07.	Amount repaid 1906-07.	Amount outstanding 31st March 1907.	Increase 1906-07.	Decrease 1906-07.
Loans by the Government of India to Port Trusts, Municipalities, Native States, &c.	£ 7,721,101	£ 340,755	£ 336,504	£ 7,725,352	£ 4,251	£ —
Loans by the Provincial Governments.	3,524,257	1,192,084	610,653	4,105,688	581,431	—
Total - -	11,245,358	1,532,839	947,157	11,831,040	585,682	—

CASH BALANCES.

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 :—

	On 1st April			Increase or Decrease.	
	1905.	1906.	1907.	In 1905-06.	In 1906-07.
In India - -	£ 10,749,770	£ 11,781,457	£ 10,328,237	£ +1,031,687	£ -1,453,220
In England - -	10,262,581	8,436,519	5,606,812	-1,826,062	-2,829,707
Total - £	21,012,351	20,217,976	15,935,049	- 704,375	-4,282,927

COINAGE.

Coinage.

The value of the coinage at the Indian Mints was—

	1905-06.	1906-07.
Silver - - - -	£ 13,334,297	£ 17,390,494
Bronze - - - -	—	124,420
Copper - - - -	144,659	55,652
Total - - - £	13,478,956	17,570,566

The silver coinage in 1906-07 consisted of 253,703,283 rupees, 3,436,113 half rupees, 10,671,938 quarter rupees, and 22,144,650 one-eighth rupees. A portion of the heavy rupee coinage of the year 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. This Silver Reserve consists for the present of 600 lakhs of coined rupees, of which 200 lakhs is held at the Calcutta Mint. The building up of this reserve was commenced from the beginning of the year, and was completed shortly before its close.

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 1906-07.

FINANCE.

The receipts and expenditure of the Indian Mints were as follows :—

	1905-06.	1906-07.
Receipts - - - -	£ 321,183	£ 419,498
Expenditure - - - -	120,079	166,898
Net Receipts - £	201,104	252,600

The profit on rupee coinage is transferred to the Gold Standard Reserve as it accrues and does not appear in the figures given above. There was a net profit of £3,677,880 on the coinage of rupees in 1905-06, and of £4,014,426 in 1906-07. The Mints are credited with a seigniorage of 2 per cent. on fresh issues of rupees to cover the cost of coinage. This is included in the Mint receipts of the year.

On the 31st March 1907 the Gold Standard Reserve consisted of Consols and other stock and securities of the nominal value of £13,313,297, £4,000,000 in coined rupees, £21,725 in gold held in India, and a sum of £301,305 held in India in the Treasury balances.

Paper
currency.

PAPER CURRENCY.

On the 31st of March 1907 the value of notes in circulation was £31,301,000, being greater by £1,530,000 than on the corresponding date in 1906. The paper currency reserve was, in gold £10,689,000, in silver coin £9,146,000, in silver bullion £3,476,000, and £6,667,000 invested in securities of the Government of India and £1,333,000 in sterling securities.

Rate of
exchange.

RATE OF EXCHANGE.

In 1905-06 the Secretary of State for India in Council sold Bills and Telegraphic Transfers on the Treasuries in India for Rs. 47,22,43,256, and received for them £31,566,973; the average rate was thus 1s. 4·0427352*d* per rupee. In 1906-07 the sales of Bills and Telegraphic Transfers amounted to Rs. 49,88,74,935; the sterling received was £33,432,196, and the average rate was 1s. 4·0836444*d*. per rupee.

CHAPTER VI.

SURVEYS.

SURVEYS.

SURVEY OF INDIA DEPARTMENT.

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 1906. The separate Forest Survey Branch has now been abolished, and in future forest surveys will be carried out by the topographical parties as part of their ordinary work. Cadastral survey in Madras and Bombay is already undertaken by a local department, and in the other Provinces, with the exception of Burma, cadastral work is carried out by the Settlement Department. The question of definitely relieving the Survey Department of all responsibility for this work is now under consideration.

At the end of the year 1904 a Committee was appointed by the Government of India to consider, in consultation with experts from England, the question of the state of the topographical surveys and other cognate matters. Their report opens with an historical account of the Survey of India and of its cost, an explanation of survey methods, an account of the present organisation of the Department, and of cadastral, forest, and miscellaneous surveys; it then proceeds to deal with the revision of the topographical maps of India, the organisation required, the methods and style of their publication, and various other matters. A mass of evidence was taken and the existing maps of practically the whole of India were examined in Calcutta, with the result that it was found that while these maps were undoubtedly good at the time they were made, and their accuracy as far as they went was unquestionable, they were published in an inconvenient size, and were not up to modern standards in quality of reproduction; that they had not been prepared on any one uniform system, nor were they necessarily complete to margin; that the symbols used on them were not uniform, that they were deficient in heights and levels; and that in many parts of India were so obsolete as to be of little use, and even misleading, on account of the changes effected in roads, etc., since they were prepared. The Committee recommended the preparation of a series of maps of half the present sheet size on the scale of one 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. The Government of India still have under consideration a scheme for effecting changes in the light of the Committee's recommendations, and for ensuring that the principal duty of the Survey of India shall be the provision and maintenance of up-to-date topographical maps.

During 1905-06 the field operations were carried on by 22 survey parties and four detachments. Of these, one party was employed on triangulation; nine parties on topographical surveys; four on forest surveys; three parties with one detachment on cadastral surveys; one party on both cadastral and topographical surveys; four parties on scientific operations; and three detachments on cantonment surveys.

The programme of the triangulation party was to prolong the isolated Kalát Series eastwards and to connect it with the Great Indus Series. The work was successfully accomplished, and this important series of triangulation

Trigono-
metrical.

SURVEYS. now stretches from the Indus, through Northern Baluchistan, as far west as longitude $64^{\circ} 30'$. It will eventually reach Koh-i-Malik Siah, the trijunction point of Baluchistan, Afghanistan, and Persia.

Topographical. The total area of detail topographical and forest surveys during the year was 23,312 square miles. 9,248 square miles were covered in Burma, where a five-years' programme of topographical survey was arranged in 1905, embracing a large area of the more important tracts of country. Topographical operations were also carried on in the Punjab and the North West Frontier Province, in the Central Provinces and Berar, and in Bengal and Eastern Bengal. Sixty-nine thousand square miles of gazetted forests throughout India have now been surveyed on various scales for forest purposes.

Special operations. Rigorous astronomical observations for azimuth have been regularly taken in past years at intervals of 40 or 50 miles along all series of the Principal Triangulation. A Professional Volume containing an account of the latitude observations taken in India and of the deduced deflections of the plumb-line has now been compiled for publication. Further pendulum operations were undertaken at stations lying between Simla and Quetta.

Systematic vertical observations of Himalayan peaks from stations near Dehra Dun were commenced. An account of the geodetic and other scientific work of the Department is to be found in the Annual Report of the Board of Scientific Advice for India.

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 nine stations. The programme of levels along the Indus in Sind was completed. A line of levels was commenced that will connect Lahore with Rawalpindi and complete the Punjab levelling circuit.

Magnetic. Four detachments of the Magnetic Survey party continued and extended the work of the Magnetic Survey over different portions of the country. 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.

OTHER SURVEYS.

Marine surveys. The marine survey vessel "Investigator" was employed in surveys in the Persian Gulf and neighbourhood, and was also used in connection with the scientific investigations of the Pearl Fisheries near Mergui and Tavoy. A programme of work for the five years 1907-08 to 1911-12, has been sanctioned, according to which the "Investigator" will be employed on the coast of Burma and the "Palinurus" on the west coast of India from Chaul Beacon to Cochin.

Geological. The first object of the Geological Survey Department is the preparation of the geological map of India, and this work was in progress during the year 1906 by surveys in Baluchistan, the Northern Shan States of Upper Burma, Central India, and the Central Provinces. Various economic questions, which are becoming an increasingly important part of the Department's work, were also dealt with, in connection, for example, with building stone and road metal in the neighbourhood of Rangoon, coal in Assam, copper in Chota Nagpur, and bauxite. In July 1906 a special post of chemist was created. A complete memoir on the disastrous earthquake which occurred in the Kangra district of the Punjab on the 4th April 1905 will soon be ready for publication. Investigations were undertaken concerning the conditions regulating the secular increase or decrease of Himalayan glaciers, and the determination of the quantity of silt carried down by the Indus.

Botanical. Various plant collections were made by or on behalf of the Botanical Survey of India in many parts of India. The study of economic problems forms no part of the work of the Botanical Survey as such, but a good amount of work of this character was done by the officers of the Survey in

their capacities as Economic Botanists to the local Governments. Work on the improvement of Indian wheat has been begun. Sugar-cane diseases were under study, and a scheme was drawn up for inquiry into the sugar-cane industry. Experimental cultivation of cotton was continued. SURVEYS.

The year 1905-06 was one of exceptional activity in the Archaeological Department. The earthquake which overwhelmed Dharmasala did great damage among the monuments of Northern India, and the precarious condition in which some of them were left made it necessary to take measures at once to avert further ruin and danger. Altogether the expenditure on conservation was about £33,300, of which £20,000 was spent in the Northern Circle, mainly on the preservation of the Mughal monuments at Agra, Ajmir, Delhi and Lahore. Among the multitude of monuments in other parts of British India, that were the subject of special repair, the most prominent were the following:—In the Bombay Presidency, the Gol Gumbaz and Ibrahim Rauza, at Bijapur; in Madras, the remains at Hampi and Mahabali-puram, and the forts at Gooty, Sankaridrug and Gurramkonda; in Bengal, the Black Pagoda at Konarak, and the Sona Masjid at Firozpur; in the Central Provinces, the Hindu temples at Janjgir and Mandhata; and in Burma, the Kyauku Onhmin and Nagayon Pagodas at Pagan and the spire of the palace at Mandalay. Excavations were carried out in various places, amongst which may be mentioned those on the Buddhist site at Kasia in the United Provinces. About 1,200 inscriptions were copied during the year, of which 605 were in Southern India. Lists of buildings to be maintained at the public cost, and of those thought worthy of preservation, were being compiled. Archæo-logical.

METEOROLOGICAL DEPARTMENT.

The area under observation by the Meteorological Department embraces not only India but the whole of the Arabian Sea and Indian Ocean, down to Zanzibar and the Seychelles, and the area northwards up to Resht and Kashgar. The observation stations were 265 in number at the close of the year 1906-07, ranging from the well-equipped observatories at Kodaikanal, Madras, Bombay, Alipore (Calcutta), Allahabad and Lahore, to small stations at which observations of temperature and rainfall 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 in 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, and a memoir by Mr. J. H. Field, Imperial Meteorologist, was published, giving an account of the preparations which have been made. Other points investigated are rainfall, snowfall, barometric and thermometric readings, cloud movements, storms and atmospheric electricity. Daily charts and weekly and monthly weather reviews, as well as seasonal forecasts and storm warnings, are issued. In the course of the year a Climatological Atlas of India, prepared by the late Sir John Eliot, K.C.I.E., recently head of the Department, was published by Messrs. Bartholomew, of Edinburgh, and a Meteorological Atlas of the Indian Seas and the North Indian Ocean was prepared for publication by Mr. W. L. Dallas. Meteoro-logical Department

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 revised system of storm signals introduced in 1898 provides for fuller signals being sent to the larger ports, the port authorities deciding in each case whether they will have the full or the less complete signals. The system of flood warnings to canal, civil, and railway officers, to military officers, and to private firms, continued to be useful; 990 such warnings were issued by the Meteorological Department during the year. The warnings are generally stated by the recipients to have been, with few exceptions, timely and satisfactory. A beginning has been made with a systematic attempt to obtain more detailed information as to when warnings are required and what form they should take.

SURVEYS.
Rainfall.

The average rainfall of past years and the actual rainfall of the three years 1904 to 1906, in the regions into which India has been divided, were as follows:—

Meteorological Division.	Average Rainfall of Past Years.	Actual Rainfall.			Variation of 1906 Rainfall from the Average.
		1904.	1905.	1906.	
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>
Western Himalayas - - - -	57·23	55·10	49·49	63·20	+ 5·97
Punjab Plains - - - -	21·28	17·02	15·75	23·67	+ 2·39
United Provinces - - - -	39·16	39·32	28·32	39·95	+ 0·79
Rajputana - - - -	23·11	19·66	8·49	20·11	- 3·00
Central India States - - - -	43·39	39·64	29·60	45·01	+ 1·62
Behar - - - -	45·20	50·90	54·70	45·21	+ 0·01
Western Bengal and Chota Nagpur -	53·70	60·93	54·91	52·29	- 1·41
Lower Bengal - - - -	65·78	59·08	81·31	64·78	- 0·95
Eastern Himalayas - - - -	124·14	114·48	145·43	127·77	+ 3·63
Assam and Eastern Bengal - - - -	95·10	101·43	107·50	106·92	+ 11·82
Orissa and Northern Circars - - -	51·84	50·85	46·98	51·74	- 0·10
Central Provinces, South - - - -	52·46	41·10	48·02	55·03	+ 2·57
Berar and Khandesh - - - -	34·94	26·83	24·92	37·88	+ 2·94
Gujarat - - - -	32·80	14·08	26·30	33·60	+ 0·80
Sind and Cutch - - - -	9·04	3·47	4·36	9·93	+ 0·89
North Deccan - - - -	30·78	22·72	19·60	28·74	- 2·04
Konkan and Ghâts - - - -	134·46	113·23	85·26	109·75	- 24·71
Malabar and Ghâts - - - -	114·93	120·78	108·66	101·22	- 13·71
Hyderabad - - - -	33·14	25·78	27·06	34·16	+ 1·02
Ceded Districts and Mysore - - -	29·16	23·37	23·90	38·61	+ 4·45
Carnatic - - - -	36·77	25·80	33·59	43·96	+ 7·19
Nilgiris - - - -	46·60	33·67	66·94	61·79	+ 15·19
Arakan - - - -	154·05	154·94	176·63	148·40	- 5·65
Pegu - - - -	78·02	85·99	83·92	67·24	- 10·78
Tenasserim - - - -	173·84	207·39	177·20	164·51	- 8·83
Upper Burma - - - -	38·16	43·00	39·85	38·81	+ 0·15
Bay Islands - - - -	113·82	105·15	94·98	98·51	- 15·31

Over the whole of India, excluding Burma, the rainfall of 1906 averaged about 43 inches, which was 1·16 inches, or about 3 per cent., above the normal.

CHAPTER VII.

LAND REVENUE, INCLUDING FISHERY RECEIPTS AND CAPITATION TAX; AND WARDS' ESTATES.

LAND REVENUE

The subjoined table shows the receipts and disbursements on account of land revenue for each province, as entered in the Finance and Revenue Accounts for the financial year 1906-07.

DETAILS of LAND REVENUE and EXPENDITURE.

	India (General)	Bengal	United Provinces	Punjab	North-West Frontier Province	Burma	Central Provinces and Berar	Eastern Bengal and Assam	Madras	Bombay	TOTAL
REVENUE	£	£	£	£	£	£	£	£	£	£	£
Ordinary Land Revenue -	88,478	1,903,571	4,168,551	1,678,014	184,313	1,580,579	1,128,052	1,240,502	4,182,169	2,765,707	18,866,829
Assessment of alienated lands, less quit-rents.	—	5,252	—	14,344	319	—	—	609	—	608,411	628,946
Sale of Proprietary Right of Government in Land.	—	757	127	455	—	—	—	23	16	—	1,395
Recovery of Survey and Settlement Charges.	—	—	6,192	—	—	—	—	12,337	—	—	6,146
Sale of Waste Lands and Redemption of Land Revenue.	55	5,524	471	63,023	1,036	2,076	2,613	543	2,745	—	78,199
Capitation Tax, or House Tax levied in Hon.	458	16	—	—	—	648,379	—	15,108	—	—	663,861
Fisheries and other Receipts classed as Miscellaneous.	12,997	17,942	45,002	57,241	12,328	843,045	10,556	21,050	28,222	43,222	593,280
Total Gross Revenue -	101,983	1,926,991	4,214,153	1,813,077	146,850	2,572,979	1,138,220	1,290,178	4,213,862	3,417,341	20,838,634
Deduct portion credited to Public Works for irrigation.	—	—	104,148	153,917	3,281	2,013	—	—	567,874	175,173	1,006,981
Total credited to Land Revenue for 1906-07.	101,983	1,926,991	4,110,010	1,659,160	143,569	2,570,966	1,138,220	1,290,178	3,646,488	3,242,168	19,831,653
Total for 1906-06 -	89,355	2,211,616	3,926,014	1,478,984	126,676	2,452,203	1,134,914	1,006,034	3,531,141	2,816,373	18,862,169
EXPENDITURE											
District Administration -	19,412	172,022	269,841	136,568	22,265	176,056	74,946	122,929	291,906	223,657	1,308,168
Survey and Settlement -	12,170	94,143	24,742	69,232	13,066	56,482	17,401	49,596	64,126	6,886	406,806
Land Records -	3,949	5,641	246,761	107,161	10,345	55,060	59,602	17,494	141,341	182,594	825,088
Charges directly connected with the collection of Land Revenue.	817	32,224	21,525	1,281	1,995	123,149	70,979	40,220	263,843	88,377	654,490
Total Charges in India.	41,398	201,032	562,939	314,233	47,669	419,748	222,929	230,250	761,225	800,515	3,404,826
Charges in England	—	—	—	—	—	—	—	—	—	—	790
Total Charges, 1906-07 -											£ 3,405,626

The provincial details, with the variations caused by the seasons, are discussed below, where the figures given are those for the agricultural year. But before proceeding to deal with the revenue collections it will be convenient to notice, in the first place, the progress of revenue settlement, survey and Land Records, and the salient facts regarding the rights and relations of landlords and tenants in the year under report. A short section

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is also inserted giving the Local Governments' summaries of the condition of the people during the year, as this has an important bearing on the question of the collection of their chief contribution to the revenues of the country.

REVENUE SURVEYS AND SETTLEMENTS, LAND RECORDS, AND TENURES.

Indian revenue settlements are broadly classified as follows. In the first place there are permanent settlements, by which the demand of the State has been fixed and made unalterable for ever; and, secondly, there are temporary settlements, under which the State demand is revised at recurring periods of greater or less duration. The permanently settled districts cover the greater part of Bengal, parts of the United Provinces and Madras, and a few other isolated tracts. The temporarily settled tracts fall into two broad divisions; Zamindari (in some provinces called Malguzari or Talukdari), where the landlord, or proprietary group, pays the land revenue to the State, whether the land is cultivated by the revenue payers themselves or by their rent-paying tenants; and Ryotwari, where the cultivator as a general rule pays direct to the State, though here too there are many sub-tenancies. In both these tracts the rates of land revenue are settled for periods varying between ten and thirty years, the latter figure prevailing in all the larger provinces with the exception of the Punjab and the Central Provinces, where settlements are usually made for twenty years. In the Zamindari areas, where estates range from hundreds to many thousands of acres, the amount of the periodical assessment is a share, generally rather less than one-half, of the ascertained or assessed rental enjoyed by the proprietors; in the Ryotwari tracts, where the estates are small and cultivated by peasant proprietors, rates of revenue are fixed at the periodical assessments for each field with reference to its productiveness, and are paid by the ryot on the area actually held for cultivation in each year; the incidence varies in different provinces from one-fifth to one twenty-fifth part of the gross value of the produce. The United Provinces, the Punjab, the Central Provinces, and Orissa mainly contain estates held by proprietary communities or large proprietors; while in Bombay, Burma, Assam and Berar, and in the greater part of Madras, the land is held and tilled by petty proprietors.

The appended table gives the acreage of the surveyed areas in which the various tenures prevailed during the year 1905-06. The figures are in thousands of acres:—

	Ryotwari (peasant proprietors).	Zamindari (larger proprietors) and Village Communities.		Total.
		Permanently settled.	Temporarily settled.	
Upper Burma	49,042	—	—	49,042
Lower Burma	54,963	—	—	54,963
Assam	26,000	8,910	1,433	31,343
Eastern Bengal	—	21,843	6,903	28,746
Bengal	—	60,141	15,110	75,251
United Provinces—Agra	—	6,160	46,438	52,598
" " Oudh	—	1,156	14,182	15,338
Punjab	—	—	62,220	62,220
North-West Frontier Province	—	—	8,357	8,357
Sind	30,054	—	—	30,054
Bombay	44,831	—	3,785	48,616
Central Provinces	1,649	—	40,713	42,362
Berar	11,333	—	—	11,333
Madras	60,167	30,518	—	90,685
Minor Provinces (Ajmere, Coorg, Manipur)	1,041	959	735	2,735

The Ryotwari area, therefore, embraces about 279 million acres, the Zamindari area under permanent settlement 124 millions and under temporary settlement 195 millions. In the permanently settled tracts of Bengal the land revenue falls at about 13 annas per acre of cultivated land, and represents on an average about one-fifth of the rental, or perhaps

one twenty-fourth of the gross value of the produce; in the permanently settled tracts of Eastern Bengal the incidence is about 11 annas per acre of cultivated land; and in those of the Agra province about Re. $1\frac{1}{2}$ per acre; in the similar tracts of Madras no corresponding figure is available, as the cultivated area is not distinguished in the returns. In the Zamindari area under temporary settlement the land revenue represents something less than one-half of the actual or estimated rental, and is probably about one tenth to one-twelfth of the gross value of the produce. The average incidence of the land revenue per acre of fully assessed cultivated land in the temporarily settled tracts, as given in the returns for 1905-06, is approximately Re. $1\frac{1}{2}$ in the United Provinces, rather over Re. 1 in the Punjab, Re. $1\frac{1}{2}$ in Berar, Rs. $2\frac{1}{2}$ in Lower Burma, Rs. 2 in Upper Burma, Rs. $2\frac{1}{2}$ in Sind, Re. $1\frac{1}{2}$ in Bombay, 9 annas in the Central Provinces, Rs. $2\frac{1}{2}$ in Madras, Re. $1\frac{1}{2}$ in Bengal and Re. $1\frac{1}{2}$ in Eastern Bengal. Rates of rent and revenue vary greatly according to the productive power of the land, according to the advantages of climate and rainfall or means of irrigation, and according to the facilities for carrying produce to markets or to the seaboard. In Sind and Madras the land revenue rates given above include the charge for irrigation supplied by the State; elsewhere payment for water, supplied by State canals or reservoirs for purposes of irrigation, is made over and above the land revenue, either according to the area irrigated or according to the quantity of water used. The State demand on any land is not enhanced in the Ryotwari provinces of Madras or Bombay on account of increased productiveness due to improvements made by the proprietors or occupiers themselves. In Northern India also such improvements are not taken into account in assessing the revenue until a period varying from 20 to 60 years has elapsed.

The work of the Survey and Settlements Departments in Bengal during the year ending in September 1906 extended over portions of fourteen districts, and large areas were surveyed, in addition to the survey of the suburbs of Calcutta which was completed. The area for which a record of rights was completed during the year was 4,210 square miles, bringing the total area thus dealt with in the province as now constituted to 34,700 square miles. The experiment of placing the settlement staff in charge of cadastral survey and record writing in large district operations, referred to in the previous issue of this Report, proved financially successful. The settlement of fair rents on a large scale was confined, during the year, to the districts of Purnea and Bhagalpur. In the former the enhancement (1.09 per cent.) was trifling; in the latter it was considerable (16.79 per cent.) as the result of special circumstances affecting one large estate.

As regards the method of maintenance of the record-of-rights, on which there has been much discussion, it has been decided that in the temporarily settled districts of Orissa the records shall be kept up continuously, and a scheme for the purpose was prepared. The revision of the records was commenced in the district of Balasore.

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, but instances still occur in which influential zamindars have managed to realise illegally enhanced rents. The Bengal Tenancy Amendment Bill came into force early in 1907. The Act contains provisions designed to secure greater facilities to landlords for collection of rent, but at the same time it guards against enhancement of rent on collusive compromises. Other important provisions are intended to secure the reduction of rents where they appear to have been oppressive to cultivators, and to remove ambiguities, anomalies, and defects in the Act, which have been brought to light from time to time during the 20 years of its existence.

In the United Provinces settlement operations during the year 1905-06 were confined to the province of Agra. In Mainpuri, Etah and Jalaun the work was completed. For Etah and Jalaun the final reports were submitted, and the settlement sanctioned in each case for 30 years.

It is not yet possible to give a final opinion on the effects of the Tenancy Act. But the expedients devised with the purpose of restricting ejectments do not seem to have proved effective, and the continued excess of ejectment

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cases, carried out no longer, as under the old Act, by notice but by a regular suit, have resulted in laying a heavy burden of costs on the tenants and seriously increasing the work of the courts.

The Land Records Department was reorganised during the year and its efficiency should be materially increased. Good progress continues to be made in reducing to accuracy the records of rent in the Basti district, in which widespread concealment of rent has been reported in the past.

Punjab.

The settlement work in the Punjab during the year ending on the 30th September 1906 was of an uneventful character. Of the seven large settlements in progress, that of Jhang was completed, and the Rawalpindi settlement was drawing to a close. In the Department of Land Records the year was marked by two administrative changes of importance, the separation of the Department from that of Agriculture and the abolition of the Patwari cess. The latter change has afforded appreciable relief to the agricultural community. In lieu of the cess the Government of India sanctioned a compensatory recurring assignment from Imperial to Provincial revenues of £104,300 per annum.

An amendment of the Punjab Alienation of Land Act was passed during the year. Reports again indicate that the Act has been working well. The diversion of capital from money-lending to commerce must inevitably be a gradual process, but there were indications in Ferozepore that this process had begun. During the year under report, a portion of the province was, for the first time since the passing of the Act, exposed to famine conditions, and the Act seems to have stood the test; the contraction of credit was not of such a nature as unduly to embarrass the cultivator, though it seems to have led to an increase in the amount advanced by Government.

**North-West
Frontier
Province.**

On the 30th September 1906 settlement operations in the Frontier Province were approaching completion; excellent progress had been made in Bannu. In the Department of Land Records it is reported that the Patwari establishment showed improvement both in respect of its educational qualifications and of its recruitment from the agricultural classes. As regards the survey, it was decided that there should be five parties on the frontier to prepare new topographical maps for the settled districts and the adjoining trans-border tracts. The Punjab Land Alienation Act, which has been applied to certain districts, continued to be unpopular with the money-lenders, but the zamindars fully recognised the advantages it confers on them.

Burma.

In Burma revision surveys by special agency were carried out, during 1906-07, in five districts of Lower Burma, and other minor operations were in progress. As in the previous year three parties were engaged on regular original settlement work, one in Lower Burma and two in Upper Burma, and three on revision work. The revision settlement of parts of the Pyapôn district was completed, and resulted in a great increase of the revenue demand from 7.24 to 12.64 lakhs. The total area under supplementary survey amounted to 47,470 square miles, showing an increase over the previous year of 3,818 square miles. Of this increase 3,680 square miles were in the Shwebo District, in which a regular Land Records staff was at work, settlement operations having been completed. The area assessed by the Land Records Department rose by over 50,000 acres to 10,987,827 acres.

**Central
Provinces
and Berar.**

During the year ending 30th September 1906 the bulk of the Sambalpur District of the Central Provinces was transferred to Bengal. In the Land Records Department the principal measure, here as elsewhere, was the abolition of the Patwari cess and the consequent payment from general revenues of the Land Record Staff. The abolition of the cess has given some relief to the people, and the Patwaris generally welcomed a change which substitutes the certainty of a fixed income paid from the treasury for one which, being partly collected from tenants by the Patwaris themselves, was liable to considerable fluctuations and troublesome to realise. In the Settlement Department operations continued in the districts of Chanda, Mandla, Raipur and Bilaspur, and in those parts of the Sambalpur District which were not transferred to Bengal.

In ryotwari villages there was a large increase, from 761,000 to 835,000 acres, in the area occupied for cultivation. A good deal was done in the improvement of the village sites by the sinking of wells. Much

progress has been made in the development of a once backward and neglected ryotwari tract in Balaghat by means of colonisation by good cultivating castes, communications, irrigation, agricultural improvements and experimental cultivation, the establishment of village schools, and a good forest policy.

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In the transferred districts of Eastern Bengal and Assam the main survey and settlement work during the year ending 30th September 1906 lay in Bakarganj and Faridpur, in both of which districts the preparation of a complete survey and record-of-rights has been ordered. In the Assam districts of Kamrup and Sibsagar survey and settlement operations were wound up and the final reports submitted. It is now the settled policy of Government to prepare an initial record-of-rights, not only where land revenue is about to be revised, but throughout the entire permanently-settled area of the province. In other parts of India the record-of-rights is invariably associated with the demand of land revenue, and the policy of keeping the initial record up to date by a process of annual revision has been readily adopted as a natural concomitant of the revenue system. Although in this province 90 per cent. of the records will refer to tracts in which Government is precluded from revising the land revenue, it has been decided after much debate that all records of right prepared under the Bengal Tenancy Act, whether in permanently settled areas or not, must be kept up to date.

Eastern
Bengal and
Assam.

Six survey parties were at work in Madras during the year 1906-07, in the districts of Ganjam, Kurnool, Cuddapah, Chingleput, Salem and Tinnevely, but the department was again unable to work up to the estimate. Four settlement parties continued their operations throughout the year; there is nothing of special interest to remark regarding their work. The work of the Land Records Department consisted mainly in the preliminary task of rectifying the mistakes of the past.

Madras.

The relations between landlords and tenants in the larger zamindaries were on the whole harmonious, and there was little resort to coercive processes for the recovery of rent. There was no appreciable increase in sub-letting, which is chiefly resorted to by the non-agricultural classes such as Brahmans and Vaisyas, absentee land owners, those engaged in professions other than agriculture, and large owners of landed property. The question of legislation regarding the relations of landlords and tenants was under consideration, the Madras Estates Land Bill, which had been introduced in the Legislative Council, being still under discussion.

In survey work in the Bombay Presidency the greatest activity during 1905-06 was in the northern and central divisions. Revision settlement rates were introduced into two talukas, and proposals for revised settlements were prepared. Revised rates were also introduced into several Government and alienated villages. Revised Irrigational Settlements were introduced in three talukas of Sind. The Land Records Staff, in addition to their ordinary duties of inspection, supervised the training of village accountants and the preparation of the record-of-rights.

Bombay.

So far as can be judged, the signs seem to point to a growing emancipation of the tenant class from the power of the landlord. The Deccan Agriculturists Relief Act has done much to check the rapacity of the *sávkár*, while the bad seasons, by lessening the demand for land and decreasing the number of cultivators, have forced the landlord to court his tenants and thus to reverse their respective positions. To these causes may be added the spread of education, the increase in communication, and the growing mobility of the population. There were reports from several parts of the Presidency during the year under review of combinations on the part of tenants against landholders.

CONDITION OF THE PEOPLE.

The following general notes on the condition of the people during the year are based on the observations recorded by the Provincial Governments:—

Bengal. — Taking the province as a whole, it may be said that during 1906-07 the agricultural and labouring classes were benefited, but that beggars and those of the middle class on fixed incomes were subject to considerable inconvenience owing to the high prices of food grains. In the Burdwan division the crops were disappointing and high prices prevailed;

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but wages were unprecedently high on account of the large demand for labour on railways, collieries, mills and brickfields. In the Presidency division the material condition of the people was not altogether satisfactory; but high wages and large profits from jute cultivation counteracted high prices to some extent. In the Patna division conditions were fair except in three districts where there was a failure of crops on account of floods. In the Bhagalpur and Orissa divisions the year was, from an agricultural point of view, poor; but in Chota-Nagpur the agricultural community was prosperous.

Eastern Bengal and Assam.—The year 1905-06 was one of considerable hardship to the people in most parts of the province. High prices told severely on the poor, especially the landless class and those dependent on private charity. Distress reached an acute stage in Noakhali and Bakarganj, where relief works had to be opened. Elsewhere agricultural loans were distributed. In the Assam valley the people not only suffered from poor harvests and high prices, but incurred heavy loss of cattle by flood and disease. On the other hand, the condition of the ryots who grew jute was excellent, and in the Rajshahi division, where the ryots got good prices for the rice they exported, there was little distress.

United Provinces.—The frost which occurred early in 1905 changed the expectation of a bumper crop into the certainty of a disastrous loss, and famine conditions were widely prevalent. Distress first declared itself in the Jalaun district, where famine was formally announced on the 1st November 1905. By the middle of April 1906 the number of people on relief works or in receipt of relief aggregated nearly 200,000, and the total did not fall below 150,000 until the monsoon broke towards the end of June. Relief works were then gradually closed, but the distribution of gratuitous relief continued until October. Outside the famine area the high prices of food caused hardship to the poorer classes and to those whose wages were paid in cash, but there was no marked scarcity of work.

Punjab.—The monsoon of 1905, which began well in most districts, was interrupted by a prolonged break of two months, and the copious rain which fell in most parts of the province in the middle of September was too late to save the bulk of the unirrigated crops. The result was that while the sown area was only 9 per cent. less than in the preceding year, a large area of crops failed, amounting to 41 per cent. of that sown. In addition, the cotton crop suffered severely from bollworm in the Lahore and Multan divisions, and in the Chenab Colony was a total failure. On the other hand, the rain which came too late to save the autumn harvest enabled the largest area on record to be put under spring crops with a yield estimated at 129 per cent. of the normal. Taking both harvests together, the total produce for the year amounted to 101·3 per cent. of the normal.

North-West Frontier Province.—The year was prosperous in the Frontier Province, and both harvests were good. In the late rabi harvest the demand for labour was so great owing to the large area to be harvested that the rate paid to labourers rose in some cases to 8 annas a day.

Central Provinces and Berar.—Except in a few scattered parts of the province the year was prosperous. The extreme north of the districts of Sangor and Damoh participated to some extent in the conditions which rendered famine relief necessary in a large part of Central India, but beyond suspensions of rent and revenue, liberal advances and forest concessions, no other special measures were required. The greater part of these districts enjoyed a year of prosperity such as they had not known since the days of the calamities which led up to the famine. The main difficulty which the agriculture of the provinces has now to face is scarcity of labour; but in the year under review labour for the reaping of a plentiful harvest was supplied by a horde of immigrants from the distressed areas of Central India. The rapid growth of the manganese industry, the extension of railway and irrigation schemes, and the expansion of cotton cultivation have created a greater demand for labour than can be supplied, and the high wages now obtainable more than compensate the labouring classes for the high prices of food grains. The rainfall in Berar was rather below the average and was unequally distributed, but the year was by no means a bad one for the agriculturist. The cotton crop gave a smaller yield than was anticipated, but the rise of prices compensated the cultivators for the loss of outturn.

Burma.—If the province be considered as a whole, the circumstances of the year 1906-07 were, for the agriculturist, normal. Nowhere was there a bumper crop, but nowhere was there scarcity. Hanthawaddy and Tharrawaddy districts again suffered from floods, but Pegu escaped and secured an outturn above the average. Cultivators benefited generally from the high prices, except where they were tempted into trenching on the stock of paddy required for their own domestic use. There was a satisfactory decline in cattle disease. An Agricultural Association was formed in the Akyab District without the aid or intervention of Government, the object of which was to infuse more vigour into the Arakanese cultivator.

Madras.—The year ending 30th June 1907 may be described as prosperous. The south-west monsoon was plentiful and well distributed, but the north-east monsoon, which opened in a promising manner, was in the latter part of its course intermittent and unevenly distributed. As a consequence, while the total area under cultivation exceeded that of the previous year by 860 thousand acres, and the normal by 80 thousand acres, the area under second crop showed a decline of 126 thousand acres below the normal. The rise in the price of food grains continued, but wages do not seem to have risen in proportion.

Bombay.—The season of 1905-06 was marked by a general failure of crops and consequent scarcity in the East Deccan and Karnatak, and by local failures, especially of the rice crop, in Gujarát. The cotton crop in Gujarát was, however, good, and the high prices obtained for it compensated largely for the loss in respect of other crops. The season in Sind was favourable, both inundation and rainfall being very satisfactory. Successive years of plague and famine had reduced the local supply of field labour in several districts, and emigration and industrial development contributed to the same result. The wages of the agricultural labourer were, in consequence, maintained at a fairly high level. The wages of industrial labour, both skilled and unskilled, ruled high, owing to the increasing demand of the mills in Bombay and Gujarát, of ginning factories in Khándesh, and on large railway and other works in Bombay. In Khándesh, notwithstanding the extensive immigration, the wages of unskilled labour rose by half. Many of the emigrants from the affected districts were thus enabled to save and remit money for the support of those whom they had left behind. Prices of food grains throughout the Presidency were very high, being in places as much as twice the normal. These high prices benefited the landholders generally, and in Sind the *hari* also, who receives a share of the produce as his wages.

COLLECTION OF THE REVENUE.

The fluctuations of the land revenue in past years may be seen in the following table, which does not include that part of the land revenue receipts which is credited to "Irrigation" :—

	Land Revenue Receipts excluding Receipts due to Irrigation.	Variation (Average of Five Years, 1881-85=100).
	£	
1861-65 (five years' average)	13,287,000	90·1
1866-70	13,327,000	90·4
1871-75	13,977,000	94·8
1876-80	14,076,000	95·4
	(includes the great famine of South India).	
1881-85	14,748,000	100·0
1886-90	15,445,000	104·7
1891-95	16,522,000	112·0
1896-1900	17,217,000	116·7
	(includes two famines)	
1900-01 (single year)	17,503,000	118·7
1901-02	18,288,000	124·0
1902-03	18,437,000	125·0
1903-04	19,234,000	130·4
1904-05	18,954,000	128·5
1905-06	18,862,000	127·9
1906-07	19,832,000	134·5

LAND REVENUE. The total advances made by Government to cultivators in the financial year 1906-07 are given as follows in the Accounts of the Government of India:—

	By the Government of India.	By Provincial Governments.	Total.
Advances for improvement of land -	£ 4,758	£ 154,387	£ 159,145
" relief of agriculturists and similar purposes.	18,357	693,626	711,983
" to co-operative credit societies.	143	8,637	8,780
Total - - -	23,258	856,650	879,908

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.

Bengal. The land revenue of Bengal remains fairly constant, as most of the province is under permanent settlement. The figures of the revenue demand for each of the last three years, excluding arrears, are given as follows:—

	1904-05.	1905-06.	1906-07.
Permanently settled estates - - -	£ 1,524,920	£ 1,524,989	£ 1,525,168
Temporarily settled estates - - -	184,992	198,084	201,916
Estates under the direct management of Government.	179,198	182,530	186,282
Total - - -	1,889,110	1,905,603	1,913,366

The total amount of revenue collected during the year, including receipts on account of the small arrear demand, was slightly in excess of the current demand, while the receipts on account of the current year's revenue, taken separately, were 98 per cent. of the amount falling due, the balance outstanding of the current and arrear demand being £45,250. The number of estates which became liable to sale for non-payment of Government dues was 8,662, compared with 10,591 in the previous year, and of these only 734, or 8·4 per cent., were actually sold. Under the Public Demands Recovery Act, 140,510 certificates were filed for recovery of arrears of revenue, cesses, &c., compared with 150,446 in the previous year; payment was generally secured on issue of notices or on attachment of property, but actual sale was necessary in 6,324 cases, and warrants were issued in 1,758 cases, 16 defaulters being imprisoned. Defaulters may deposit the amount due, with a penalty, within 30 days after the sale of the property under the certificate system, and thus have the sale set aside, and recourse is had to this procedure in nearly one quarter of the cases in which a sale is carried out. Defaulters are imprisoned only when there is good reason to believe that they are in a position to pay; and the imprisonment often has the effect of producing payment; upon which they are released. Advances to agriculturists under the Loans Acts amounted to £124,700, the larger part under the Agriculturists' Loans Act.

The gross rental of the 30 districts in which the Bengal Cess Act was in force was returned for road cess purposes at £8,448,750 for the year 1906-07, which is slightly above the assessment of the previous year.

United Provinces. The latest report on land revenue affairs in the United Provinces relates to the year ending 30th September 1906. The year was one of great vicissitudes. The provinces had suffered severely from the great frost of 1905, and the monsoon of 1905 was late and scanty; but the rains of 1906 were plentiful, recovery was rapid, and the outlook at the end of the year

was as promising as it had been gloomy at the beginning. The demand and collections of land revenue in the last three years are given as follows :—

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	1903-04.	1904-05.	1905-06.
	£	£	£
Land revenue, current and arrears { demand -	4,240,638	4,257,395	4,276,848
collections -	4,239,106	3,962,575	4,018,516

The collections thus fell short by about 6 per cent. of the demand; and this is accounted for by the remissions, amounting to £240,600, which were necessitated by the failure of crops in various parts of the provinces. Taking these and sundry other reductions of the demand into account, the percentage of collection was, as in the previous year, practically 100 per cent., a very satisfactory result considering the circumstances of the season. The net increase in the land revenue brought on the roll during the year was £12,800. The other headings of revenue dealt with in the land revenue report, but not strictly classed as land revenue, are the occupiers' rate (receipts, £642,400) and the owners' rate (receipts, £19,500), which constitute payments for irrigation, besides cesses (receipts, £524,400), &c. Certain of the canal rates were enhanced during the year, and the demand for occupiers' and owners' rates rose accordingly, being 48 per cent. above the demand of the previous year. The abolition of the rural police rate in five of the Oudh districts took effect during the year under report, and the total relief to proprietors due to the abolition or reduction of rates was large, amounting to £260,000 per annum. The abolition of the patwari rate took effect only from April 1906. As regards coercive processes, the figures for the severer forms were somewhat lower than in the preceding year. There were 157 attachments of immoveable property, 196 sales of moveable property, and 834 cases in which defaulters were detained in custody. Of the 231 estates under attachment, 154 were released during the year. On the whole, as compared with recent years, the figures indicate some increase in the difficulty of revenue collections, but they show also that collections were made without resort to any unusual or objectionable degree of pressure. A special feature of the revenue administration during the year was the large increase of advances under the Land Improvement Loans Act and the Agriculturists' Loans Act, the total amounting to £174,600.

The latest Punjab land revenue report available is for the year ending Punjab. on the 30th September 1906. The fixed land revenue demand for the year amounted to £1,372,400, of which £1,223,200, or 89 per cent., was collected. After a year which was, on account of the excellent spring harvest, of more than average prosperity, so low a percentage of collections might seem disappointing. But owing to the failure of the autumn crops large suspensions were necessary, especially in the Delhi division, where this is the more important of the two harvests of the year. A total of £151,700 was suspended, of which all but £20,000 was in the Delhi division, and nearly £130,000 remained recoverable under suspension at the close of the year. The "fluctuating" system of land revenue, applied for the most part either to canal-irrigated lands or to lands subject to floods, is stated to have been unpopular in Rohtak and Ferozepore, but popular in Multan and Muzaffargarh; about one-eighth of the cultivated area of the province, including the Chenab and the Jhelum colonies, is under fluctuating assessment, the principle of which is that the demand varies with the crop. The revenue under this heading rose from £275,600 to £307,000 in the year under report. In addition to land revenue proper, "miscellaneous land revenue" was collected to the amount of £83,300. Coercive processes for collection of revenue continued to show a satisfactory decrease. The total number of processes of all kinds was 15,851, compared with 18,964 in 1904-05 and 39,314 in 1902-03. Writs decreased from 12,577 to 10,588, warrants from 4,015 to 3,261, and sales of moveable property from 2,300 to 1,981. The total sum for the recovery of which processes issued was £102,700, compared with £144,000 in the previous year, while the amount thus recovered was £81,100. Cases of imprisonment numbered six

LAND
REVENUE.

only. It has been ascertained that the entry of 61 cases for the Gujranwala district, referred to in last year's statement, was due to a clerical error. The advances during the year under the Agriculturists' Loans Act amounted to £66,500, and £12,700 was advanced under the Land Improvements Act. A large increase under the former Act was due to the scarcity prevailing in the Delhi division.

North-West
Frontier
Province.

The report for the North-West Frontier Province covers the same period as that for the Punjab. For the year as a whole the harvested area was 5 per cent. above the quinquennial average, and the outturn about 10 per cent. above the normal. Under these favourable conditions £104,700 of fixed land revenue was collected, or more than 99 per cent. of the total demand. Collections on account of arrears from previous years were also satisfactory. Fluctuating and miscellaneous land revenue, between them, contributed £23,300, compared with £13,700 in 1904-05, the increase being chiefly accounted for by the districts of Hazara and Dera Ismail Khan. The fluctuating system of assessment which is in force throughout almost the whole of the last-mentioned district is popular with the people, but, so far, owing partly to unfavourable seasons and partly to the liberality with which remissions have been granted, the financial results have fallen short of anticipation. The steady decrease in the number of coercive processes for the collection of revenue was maintained, the number of writs and warrants of demand falling from 3,234 to 2,201. The main decrease occurred in Peshawar, but this district is still responsible for 70 per cent. of the total number. The agricultural advances made during the year amounted to £4,900.

Burma.

The season in Burma ending 30th June 1907 was normal, and there was only a small increase of about 1 per cent. on the demand of the previous year. In Lower Burma the area of cultivation under assessment increased by nearly 200,000 acres, but it was counter-balanced by a decrease in Upper Burma of over 150,000 acres. It was not to be expected, however, that the expansion of cultivation and the increase of land revenue would be maintained to the same extent as in former years. The totals of revenue (exclusive of the arrear demand) under the various heads for the last two years are shown in the margin. The collections of current land revenue amounted to

	1906-07.	1905-06.
Land Revenue	1,629,478	1,610,297
Household tax	309,199	309,898
Fisheries	179,129	194,165
Capitation tax	343,808	337,207
Other sources	173,442	161,884
TOTAL	2,634,611	2,616,451

£1,593,300, which is somewhat above the figure for 1905-06. There was again a substantial rise of 14,600 to a total of nearly 750,000 in the number of households assessed to the household tax, or *thathameda*, but owing to the reduction of the rates of this tax under new settlements, the yield slightly declined. There was a noticeable decline in the receipts from the river and other fisheries which are a considerable source of revenue in both the upper and the lower parts of the province. The heading "other sources" includes receipts from petroleum royalties, from ruby mines, from water rate, &c. There was an increase on the large figures of 1905-06 as regards processes for the recovery of revenue affecting property, but not as regards those affecting persons. The number of sales of real property rose from 1,271 in 1904-05 and 1,955 in 1905-06 to 2,637 in 1906-07, while the number of defaulters committed to jail fell from 80 to 65. The amount of agricultural advances rose to £57,100.

Central
Provinces.

The latest land revenue report available from the Central Provinces is for the year ending in September 1906. The harvests were on the whole satisfactory, and the provinces, with the exception of a few districts, enjoyed prosperity. The demand on account of the land revenue of the year stood at £562,300, reduced by suspensions and remissions to £547,000, almost the whole of which was collected. There was a further demand on account of cesses, land revenue not on the roll and miscellaneous revenue, current and arrear, amounting in all to £57,400; and the receipts under these heads came to £55,100. Coercive processes again showed a general decline, and it is specially satisfactory that the use of writs of demand was more prevalent, in place of the more severe process of warrant of attachment; the

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number of defaulters arrested fell from 263 to 172, of whom only two were imprisoned; attachments and sales of moveable property numbered 452 and 20 respectively, against 1,024 and 61 in 1903-04, and 783 and 47 in the preceding year; and no estates were sold. Advances made during the year under the Land Improvements Act and the Agriculturists' Loans Act amounted to £37,800. The amount of these loans outstanding at the end of September 1906 was £69,800, of which £14,600 had been advanced without interest.

LAND
REVENUE.

The latest report available respecting land revenue administration in Berar relates to the year ending on the 31st July 1906. The year was generally less favourable to agricultural operations than the preceding year, but it was by no means bad and the high prices of cotton were beneficial to the cultivators. The land revenue demand for the year amounted to £585,100, a small increase over that of 1904-05; almost the whole of this amount was collected during the year, and very little resort to coercive processes was found necessary; in no single case was it found necessary to proceed against immoveable property. The demand for land for the extension of cultivation appears not to have been affected by the orders restricting the right of alienation of newly-occupied lands. In Berar the advances under the Agriculturists' Loans Act continue to be comparatively small; in ordinary seasons the necessity for loans is less felt than elsewhere, as the credit of the cultivators enables them to raise small loans for seed and cattle without much difficulty.

Berar.

The year 1905-06 was distinctly unfavourable from an agricultural point of view, excessive floods doing wide damage to the crops both in Eastern Bengal and Assam. Owing to the unfavourable distribution of rainfall, the outturn of the rice crops was, with a few exceptions, poor. Districts, however, which had a second crop to fall back on, such as jute, were comparatively well off. In spite of these conditions the revenue demand under all heads showed a considerable increase. The incidence of Government revenue on the permanently-settled estates is extremely light, having been calculated at a time when these lands had not attained to anything like their present value. The total land revenue demand, including arrears, was £1,278,700, of which £1,213,000, or 95 per cent., was collected. In the permanently-settled estates £651,400, or 98 per cent. of the demand, was collected. There was a slight increase of coercive measures in the districts of the Assam Valley, but the sale law continues to be administered with consideration in the permanently-settled estates, and the certificate procedure was also applied leniently where the circumstances required it. There was no case of imprisonment for failure to pay. The amount of agricultural loans granted in Assam is insignificant, and even in Eastern Bengal there is but a small demand for them.

Eastern
Bengal and
Assam.

In the Madras Presidency in the year ending on the 30th June 1907 the south-west monsoon was plentiful, but the north-east monsoon somewhat deficient. Crop areas and outturns were on the whole fair, and prices of staple food grains continued very high. The total demand on account of the year for land revenue, including charges for irrigation and miscellaneous receipts, was £4,189,700, besides cesses amounting to £419,300, and the total collections were £4,676,700, including arrears. The land revenue demand was £88,500 in excess of that of the previous year, but the demand under cesses showed a decline of £123,000 on account of the abolition of the ryotwari village-cess. The area of ryotwari holdings, from which more than 90 per cent. of the land revenue is received, was 24½ millions, being an increase of nearly 100,000 acres over the area of the year 1905-06. The uncollected balances of current dues and of arrears at the end of June 1907 amounted to £66,200, of which 61 per cent. had been collected by the end of October 1907. Of the above land revenue demand, a sum of £332,200 represents land revenue due from permanently-settled estates, and £51,100 quit-rents from villages held under special tenures, these sums being fairly constant, and not liable to fluctuate from year to year; the remainder comes for the most part from the assessment and water rate paid by peasant proprietors. As the result of orders which were issued in 1904 to restrict the issue of demand notices to cases of real necessity, there

Madras.

LAND
REVENUE.

was again a large decrease in the number of preliminary processes for the recovery of revenue. Distraint and attachment notices, sale notices, and sales were fewer considerably than in recent years; the number of demand notices, which was 6,212,162 in 1903-04, had fallen to 2,141,560 in 1906-07, and the number of sales fell from 9,479 in the former year to 7,411 in the latter. More than one-third of the land sold during the year was of inferior quality, and was bought in by the Government at a nominal price. Advances under the Land Improvements Act and the Agriculturists' Loans Act amounted to £32,300, the advances being chiefly employed for the sinking or repairing of wells and the purchase of cattle.

Bombay.

The most recent report available for Bombay relates to the year ending on the 31st July 1906. There was a general failure of crops and consequent scarcity in the East Deccan and Karnatak. In Gujarat a good cotton crop, for which high prices were obtained, compensated for the failure of the rice. Sind experienced a favourable season, both inundation and rainfall being very satisfactory. The total demand on account of land revenue, including the demand on account of former years, but excluding remissions and sums written off as irrecoverable, amounted to £2,513,300. Collections amounted to £1,580,000, while £475,000 was under suspension. Considering the conditions of the year and the necessity for large suspensions of revenue, these results were not unsatisfactory. Of the suspended revenue more than 93 per cent. pertained to the affected districts of the Deccan and Karnatak. A large proportion of the unsuspended arrears was due to the districts of Kaira, Poona, and Satara. There was a satisfactory increase of over 60,000 acres in the area of occupied Government land. The number of distraints for non-payment of revenue fell from 1,996 to 1,679, while forfeiture was resorted to in 1,485 cases in the Presidency proper, and 5,728 cases in Sind, compared with 2,334 and 3,562 respectively in the previous year. Most of the forfeitures in Sind were carried out under the Sind Fallow Rules. A part cause of the increase in Sind was the large increase in the amount of revenue to be collected, the seasons being so favourable that the area under cultivation increased by 14 per cent. and the land revenue demand by 16 per cent. The agricultural advances made in the Presidency proper amounted to £224,000 in the year under report, while in Sind the advances amounted to £39,200.

WARDS'
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 with this object. 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 provincial Acts have been passed, giving to the Government further powers of putting estates under the control of the Court, without consent of the owners, when the latter are in a special degree unqualified for their proper management. 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.

Bengal.

In Bengal 190 estates were under the management of the Court of Wards at the close of the year 1906-07, with a total rent and cess income of £500,600. The collection of rents and cesses due to the estates, including arrears, amounted to 97 per cent. of the current demand. With other items, the receipts of the estates amounted to £1,109,000. The disbursements were £998,700, of which £124,000 was for Government revenue and cesses, £21,900 for dues of superior landlords, £47,400, or 9.5 per cent. of the rent and cess demand, for cost of management, £84,300 for wards' and family expenses, and £395,000 for investments and payment of debts. The aggregate cash balances at the end of the year amounted to £110,200,

together with Government securities to the value of £543,300. The total of the debts stood at £1,490,000, of which £406,800 represents the debts of the Bettiah estate, which is involved to the extent of more than three times the amount of the rent-roll, and £329,600 the debts of the Banaili estate in Bhagalpur. WARDS' ESTATES.

The number of estates under the Court of Wards in the United Provinces at the close of the year ending 30th September 1906 was 170, with rental receipts amounting in the aggregate to £486,800, besides other receipts, which brought up the total to £725,200. The charges amounted to £725,600, of which £211,100 was for the Government demand, £95,400 for the education and maintenance of the wards, £45,200 for improvements, and £210,800 for repayment of debts, the cost of management falling at the rate of 9·2 per cent. of the gross income, which was reduced by remissions of rent. The total liabilities of all the estates under management, including debts previous and subsequent to assumption of charge, were £2,828,000, of which £1,271,000 had been repaid, while £972,000 had been replaced by more favourable loans. United Provinces.

The number of estates under the management of the Punjab Court of Wards during the year ending in September 1906 was 45. The gross income of all the estates under management amounted to £93,000, besides £19,500 obtained by loans and sale of properties; and the expenditure amounted to £105,400, of which £42,700 falls under the heads of investments and repayments of debt. The cost of management was about 5 per cent. of the gross income. The most important of the new estates which were brought under the Court of Wards was that of the late Sardar Hardit Singh of Rawalpindi, a commercial magnate, who left a property valued at nearly £300,000. Punjab.

During the year ending in September 1906 there were 8 estates under the Court of Wards, which had been instituted in 1905, in the North-West Frontier Province. The total gross income amounted to £7,600 and the expenditure to £6,800, the percentage of cost of management to gross income being 4 per cent. The total assets at the end of the year were £20,100, and this was much more than the amount of the liabilities. North-West Frontier Province.

In the Central Provinces the number of estates under management of the Court of Wards on the 30th September 1906 was 83; the policy of giving up the charge of estates, whose condition is hopeless, has resulted in the credit of the Court of Wards being fully restored, and there are now comparatively few estates under the Court in which there is any doubt as to the ultimate repayment of their debt. The total rental demand was £44,600, of which £41,600 was collected. Including other sources, the gross income of the year amounted to £67,700. The ordinary expenditure was £49,500, besides £37,400 invested during the year, or spent on repayment of debt. The cost of management stood, over the whole province, at 14 per cent. of the gross income—a high percentage, but about the same as in the previous year. Some progress was made in the case of nearly all indebted estates in the matter of clearing off debts, which were paid off to the amount of £15,600, leaving a balance of £55,400 still owing at the close of the year. Central Provinces.

Twenty-six estates remained under the control of the Madras Court of Wards at the close of the year ending in June 1907. The estates released during the year included the large estate of Pithapuram, the administration of which had improved in every direction during the 14 years of the Court's superintendence. The gross land revenue demand of the estates was £133,600 for current revenue and £101,400 for arrears, and the receipts under these heads amounted to £123,200. The aggregate cash receipts from all sources amounted to £201,200; the expenditure to £197,200, including £63,300 invested and £8,000 spent on repayment of debts. The cost of management fell to 13·3 per cent. of the ordinary receipts. The balance at the credit of all estates, invested and uninvested, at the end of the year was £432,000. Eleven proprietors, who were minors, were under the care of the Court's European tutor. Madras.

In Bombay the estates under Government management are of several kinds, namely, estates under the management of collectors or other guar- Bombay.

**WARDS'
ESTATES.**

dians, estates in charge of the Talukdari Settlement officer, and encumbered estates in Sind. Outside Gujarat, in which lie all those of the second category, the estates were of small area. Altogether 581 estates were under Government management. The manager of encumbered estates in Sind had 396 estates in charge. The year's revenue of these estates, including loans, advances, &c., amounted to £74,800, and the expenditure to £64,100, which included £15,700 spent in the liquidation of loans and private debts.

CHAPTER VIII.

TAXATION, AND OPIUM REVENUE.

OPIUM.

OPIUM.

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. Though the poppy will grow in most parts of India, its cultivation in British territory, with the unimportant exception of 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. In these two provinces, the crop is grown under the control of a Government department, which determines the total area to be placed under the crop in each year. It will be seen from the particulars given on the following page that orders have been issued for the further restriction of this area. The cultivator of opium in these monopoly districts, who must receive a licence and is granted advances to enable him to prepare the land for the crop, is required to deliver the whole of the produce at a fixed price to Government agents, by whom it is despatched to the Government factories at Patna and Ghazipur. This price has been Rs. 6 per seer since 1895. The supply of prepared opium required for consumption in India 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 which take place 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 being used for consumption in India. Opium (known as Malwa opium) is grown in Baroda and in some of the Native States of Rajputana and Central India. 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 in British India, without a pass, which is granted only upon payment of a heavy duty. The duty on opium intended for export varied between Rs. 700 and Rs. 600 per chest (of 140 lbs.) during the thirty years preceding December 1894, when it was fixed at Rs. 600 to Rs. 650. It was reduced to Rs. 600 in July 1896, and to Rs. 500 in October 1897. The rate was restored to Rs. 600 per chest, with effect from the 7th 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 the year 1906 edicts were issued by the Government of China having for their object the suppression within ten years of the habit of consuming opium, and of the growth of opium, in China. Proposals were made for the co-operation of the Government of India in this object by the gradual restriction of the amount of opium exported from India to China. At the beginning of 1908 an arrangement was entered into by which the total quantity of opium (including Malwa opium) exported from India beyond seas will be limited to 61,900 chests in the calendar year 1908, 56,800 chests in 1909, and 51,700 chests in 1910. The question of making still further reductions after the year 1910 will depend upon whether China has, in the interval, effected a proportional reduction in its own production and consumption of opium. Papers giving further particulars, and including a report on the progress of the opium reforms in China, have been issued as Cd. 3881.

OPIUM.

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

	1897-98.	1900-01.	1902-03.	1903-04.	1904-1905.	1905-06,	1906-07.
Opium Receipts :*							
Auction sales of monopoly opium.	£ 2,660,697	£ 4,109,249	£ 3,662,600	£ 4,678,371	£ 5,079,541	£ 4,708,574	£ 4,895,505
Duty on Bombay (or Malwa) opium.	647,093	835,117	661,033	871,983	749,125	569,400	553,788
Cost of opium issued to the Excise Departments, and miscellaneous.	145,392	157,877	174,805	186,291	192,833	195,806	211,235
Total - - -	3,453,181	5,102,242	4,498,438	5,736,645	6,021,499	5,468,780	5,660,528
Opium expenditure, chiefly in Bengal.	1,592,744	1,783,875	1,848,483	2,225,744	1,967,085	1,892,441	1,913,292
Net Opium Revenue - £	1,860,437	3,318,367	2,649,955	3,510,901	4,054,414	3,576,339	3,747,236

* This does not include the licence fees and duty on opium consumed in India, which amounted to £931,054 in 1906-07, as shown below under "Excise."

Bombay.

The exports of Malwa opium to China in recent years are stated in the margin. The rise in 1903-04 was partly due to a rumoured failure of the China crop. With this exception the decline has been continuous, and the uncertainty engendered by the new opium policy in China led to a further fall in 1906-07. The average prices for opium in the Bombay market during the year under report, including export duty, were Rs. 1,362 per chest for one year old, and Rs. 1,473 per chest for two years old opium, against Rs. 1,556 and Rs. 1,688 respectively in the preceding year. The amount of Malwa opium imported and lodged in the Bombay warehouse during 1906-07 was 14,733 chests, against 16,194 chests in 1905-06; 972 chests were sold for consumption in the Presidency, including Native States, and 575 chests were supplied to the Madras Presidency.

Bengal.

The net area cultivated with the poppy in the Ganges Valley in recent years, excluding areas on which the crop was sown but failed, is shown in the margin. For the year 1907-08, the Government of India decided to reduce the area under opium to about 500,000 acres. The opium is received and prepared at the Government factories at Patna and Ghazipur, where 51,136 chests were manufactured during the year 1906-07, of which 6,218 chests were issued to the Excise Department.

The number of chests (of 140 lbs.) sold by auction for export and the average price realised during each of the last six financial years are shown in the margin. The number of chests to be sold during the year 1908-09 will be limited to 45,900.

	Chests.	Average Price in Rs.
1902-03 -	48,000	1,145
1903-04 -	48,000	1,462
1904-05 -	48,000	1,587
1905-06 -	49,200	1,436
1906-07 -	52,800	1,391
1907-08 -	48,900	1,367

SALT.

SALT.

General.

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 one-fifth of a rupee (in Burma) to 3½ rupees (in Bengal) per maund of 82½ lbs. In March 1905 the general rate for India, excepting Burma, was reduced from Rs. 2 to Re. 1½ per maund. In Burma the rate remained at Re. 1 per maund on 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. A further reduction of the rate of the salt duty to one rupee per maund was brought into effect from the 20th March 1907; this change, therefore, affected only the last few days of the year under review. Purchases had, however, been delayed by dealers in anticipation of a reduction, and large clearances were effected at the end of March. The records of price show that in almost all districts the consumer has certainly received the full benefit of the successive reductions of duty.

These successive reductions have led to a large increase in the consumption of salt throughout India, as will appear from the table in the margin. It was larger in 1906-07 than in 1905-06 by nearly 200,000,000 lbs., and the annual consumption is estimated to have increased between 1902, before the reductions of duty began, and 1907 by about 610,000,000 lbs. A comparison of the incidence of the salt duty in India and in European countries where a similar tax is levied will be found in the Financial Statement for 1908-09.

Year.	Issues of Salt in 100,000's of Maunds.	Rate of Duty per Maund in Rs.
1901-02 -	860	2½
1902-03 -	869	
1903-04 -	876	2
1904-05 -	394	
1905-06 -	407	1½
1906-07 -	431	
1907-08 -	443 (Estimate)	1

The Indian sources of salt supply are the coast, where salt is manufactured for the consumption of all southern and western India, and for part of Burma and Central India; the salt lakes and pits of Rajputana, which supply the United Provinces of Agra and Oudh, and a part of Central India; the salt mines of the Punjab, which supply that province and a varving area southward; and importations from beyond the sea, which supply Bengal and the greater part of 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 these salt sources belong to, or are worked under the direct control of, the various 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 from foreign countries is freely permitted. Manufacture is not allowed where the circumstances are such as to render proper collection of the duty impracticable, as, for instance, in the sea-coast districts of Bengal.

The Salt Revenues and Charges in the year 1906-07 were as follows:—

PROVINCE.	Price of Government Salt, and Excise on Salt made locally.	Duty on Salt imported from England.	Duty on Salt imported by Sea from other Places.	Miscellaneous.	TOTAL.	Charges.	Net Salt Revenue.
	£	£	£	£	£	£	£
Northern India - -	968,030	—	—	8,042	976,072	70,841	905,231
Burma - - - - -	25,542	33,766	55,058	—	115,367	1,917	113,450
Eastern Bengal and Assam. - - - -	—	52,020	76,386	1,700	130,106	1,563	128,543
Bengal - - - - -	—	473,171	592,599	6,804	1,072,574	22,048	1,050,526
Madras - - - - -	947,784	359	748	6,979	955,868	140,689	815,179
Bombay - - - - -	1,068,476	2,205	740	41,297	1,112,719	126,061	986,658
TOTAL 1906-07 -	3,009,832	551,521	726,531	64,820	4,362,706	363,119	3,999,587
TOTAL 1905-06 -	3,078,987	598,740	634,914	63,769	4,376,410	363,166	4,013,244

The charges above shown do not include a sum of £246,400 paid under treaties in the form of compensation, chiefly to Native chiefs who have assigned the management of their salt sources to the Government of India.

The rate of salt consumption per head of the population differs widely in the several provinces. If the total of licit consumption is compared with the population, as shown by the last census, the following results appear:—The consumption in the saliferous tracts of Bengal, including Orissa, was 13.5 lbs. per head; in Behar, 10.9 lbs.; in the rest of Bengal, 11.2 lbs.; in Eastern Bengal and Assam, 6.6 lbs.; in Gujarat, 11.34 lbs.; in Bombay, excluding Sind, 11.65 lbs.; in Sind, 9.23 lbs.; in Madras, 18.7 lbs.; in the Central Provinces and Berar, 13.89 lbs.; in the United Provinces, 8.43 lbs.; in the North-West Frontier Province, 6 lbs.; in the Punjab, 8.42 lbs.; in Kashmir, 11.16 lbs.; in Central India, 10.41 lbs.; and in Rajputana, 7.62 lbs. These figures compare in most instances very favourably with those of preceding years. No such estimate can be given of the rate of consumption in Burma, but it is believed to be high. It is to be noted, however, that as the census of 1901 recedes further into the distance, the average rate calculated upon its figures must be received with increasing caution.

The consumption of salt and the duty realised during the last 38 years are shown below. The figures have been taken from the returns of the

SALT.

Director-General of Statistics under the Government of India, and it will be observed that the amount of the duty received shows a divergence from the figures given above.

	Quantity.	Duty.		Quantity.	Duty.
	Maunds.	£		Maunds.	£
1868-69 to 1872-73 (average)	22,973,000	3,835,000	1893-94 to 1897-98 (average)	34,211,000	5,505,000
1873-74 to 1877-78	24,184,000	3,971,000	1898-99 to 1902-03	35,477,000	5,784,000
1878-79 to 1882-83	27,761,000	4,393,000	1903-04	37,603,000	4,922,000
1883-84 to 1887-88	32,439,000	4,141,000	1904-05	39,132,000	5,045,000
1888-89 to 1892-93	33,432,000	5,351,000	1905-06	40,729,000	4,037,000

Northern
India.

The salt sources under the control of the Northern India Salt Department are (1) the Rajputana sources, including the Sambhar Lake and the brine springs at 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. From these are supplied the main wants of the Punjab and North-West Frontier Province, part of the United Provinces, parts of the Behar districts of Bengal, the northern districts of the Central Provinces, and the greater part of the Rajputana and Central India States. The most important sources are the Sambhar Lake and the Mayo mine. At the Sambhar Lake 5,083,000 maunds of salt were produced in 1906-07. Since the year 1870, when the lake was leased by the Government of India, nearly 132 millions of maunds of salt have been taken from it, and the financial results show a total credit balance of £264,230, without taking into account the stock of salt in hand. Fears had been expressed that the salt available in this source was becoming exhausted, or that increasing difficulty would be experienced in recovering it from the brine; but these fears have been laid at rest by the success of a long trench which has been recently excavated through the bed of the lake. The expenses of construction are not heavy, and extensions will render available the inexhaustible supplies of subterranean brine. 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 1906-07 amounted to 5,302,800 maunds. In the Mayo mine 2,397,600 maunds of salt were excavated. This salt is sold at 9 pies per maund, or one anna at the Khewrah depôt. The price of Didwana salt is also 9 pies; Pachbadra salt is sold at the rate of 1½ annas with a charge of 3 pies for clearance; Kohat salt fetches on the average about 9 pies. The total amount of salt which was issued by the Northern India Salt Revenue Department for consumption was 8,925,023 maunds, as compared with 8,696,451 maunds in 1905-6.

The following table gives the total consumption of salt in the states and provinces mainly supplied by the Northern India Salt Department:—

	Total Consumption.	Average Retail Price.		Average Consumption per Head.*	
		1906-07.	1905-06.	1906-07.	1905-06.
	Maunds.	Per maund. Rs. A. P.	Per maund. Rs. A. P.	Lbs.	Lbs.
North-West Frontier Province	155,034	2 1 7	2 2 2	6·00	5·11
Punjab	2,533,089	2 2 1	2 2 9	8·42	6·22
Kashmir and Jammu State (excluding Frontier districts).	363,253	—	—	11·16	
United Provinces	4,969,672	2 10 11	2 11 11	8·43	8·67
Behar (Bengal)	3,224,885	2 9 9	2 11 2	10·94	10·62
Central Provinces and Berar	2,468,497	2 14 9	3 3 2	13·89	12·53
Rajputana	944,977	2 6 3	2 5 8	7·62	8·49
Central India	1,091,210	2 9 0	2 9 0	10·41	10·30

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

Bengal.

The salt consumed in Bengal comes from abroad or from other parts of India; several years ago a small amount was annually manufactured at private and Government factories in Orissa, but this manufacture was rendered unprofitable by the opening of the East Coast railway, which admitted Madras salt to Orissa, and it has therefore been discontinued.

In the other maritime tracts of the province the manufacture of salt is prohibited, owing to the difficulty of preventing illicit manufacture. The amount of salt imported by sea during the year 1906-07 was 11,656,142 maunds, as shown in the margin; there was an increase as compared with 1905-06, but the total imports were about the same as in 1904-05. The proportions supplied by the United Kingdom, Germany, and the Red Sea districts respectively were also restored to those of 1904-05. 947,102 maunds of Madras salt were carried into Orissa by rail. This salt is specially manufactured, and being of high quality is able to compete with the Liverpool salt. The average wholesale price of salt, including duty, at the chief marts of Bengal was about Rs. 2½, having decreased by 1½ annas since the preceding year and by 8 annas since the second reduction of duty. The average wholesale price of Liverpool salt in 1906-07 was Rs. 48½ per 100 maunds from the ship's side at Calcutta, exclusive of duty, compared with Rs. 50¼ in 1905-06 and Rs. 48½ in 1904-05.

SALT.

Salt Imports by Sea.	1905-06.	1906-07.
	Maunds.	Maunds.
From United Kingdom -	4,476,849	5,464,684
Germany -	613,859	1,012,129
Red Sea and Turkey	4,136,679	2,928,824
Persian Gulf -	64,528	57,768
Madras -	29,999	2,563
Bombay -	728,988	633,939
Spain -	767,032	1,556,235
Total -	10,918,934	11,656,142

The net amount of salt consumed in the province, which had been 6,536,655 maunds in 1905-06, rose to 7,894,200 maunds, with a consumption per head of 13·5 lbs. in the saliferous tracts and Orissa; and of 11·2 lbs. in the rest of Bengal.

The Rawana system, under Act VII., 1864, by which permits were required to possess or transport salt, was abolished with effect from the 1st April 1906. This abolition renders the comparative statistics of consumption in the saliferous districts, quoted above, unreliable. The trade in salt has received a decided impetus by being set free from the restrictions which formerly hampered its free movement. Open competition has been encouraged, and there has been in some districts a notable increase in the number of retail shops, resulting in a slight diminution of price. An increase in the number of offences against the salt laws is stated to be due in some measure to an impression, which was disseminated, that the abolition of the Rawana system was accompanied by permission to prepare salt for domestic consumption.

The total consumption of salt in Eastern Bengal and Assam was 2,501,567 maunds, being an average consumption per head of 6·6 lbs. The average wholesale selling price per maund was Rs. 2.11.5, against Rs. 2.10.6 in 1905-06 and Rs. 3.1.11 in 1904-05. The salt trade was hardly affected by the boycott agitation: imports during the year were greater by 16·55 per cent. than in 1905-06. As in Bengal, the Rawana system was abolished with effect from the 1st April 1906.

Eastern Bengal and Assam.

Originally there was a Government monopoly of the manufacture of salt 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 orders were given to establish a certain number of Government factories as a check on the prices and quality of the privately manufactured (or "excise") salt. This is the system that now exists. Of the 65 factories worked during the year, 43 were under private and 22 under Government management; the quantity of salt manufactured was 11,235,000 maunds, of which 6,989,000 maunds was prepared under the excise system in private factories. This represents a further increase over the amount (10,580,000 maunds) produced in 1905-06, which was the highest on record up to that time. The imports by rail and sea from Bombay rose from 1,247,000 maunds to 1,441,000 maunds. Excluding the salt used for fish-curing, or bought by the French Government, the total issue of salt for consumption was 11,164,377 maunds in 1906-07, 10,583,571 maunds in 1905-06, and 10,737,983 maunds in 1904-05. The average consumption per head of the population was 18·7 lbs. in the whole Presidency, including Mysore and Coorg, with the Native States except Travancore and Cochin. The corresponding figure for 1905-06 was

Madras.

SALT. 17·6 lbs. If the West Coast districts are excluded, this consumption figure would stand at 20·1 lbs. per head compared with 19·3 per head in the previous year, and 18·1 per head in 1904-05.

The average wholesale price of "excise" (i.e., private factories' salt) decreased from 3 annas 8·2 pies to 3 annas 1·8 pies per maund, chiefly on account of improved stocks. Government salt is sold at a fixed rate (3 annas per maund at most centres) with a view to controlling the price of "excise" salt. The retail prices varied from Rs. 1.13.6 to Rs. 3.5.4 per maund, against Rs. 1.13.11 to Rs. 3.3.7 in 1905-06.

During the year under report there were 135 bonded yards in the Madras Presidency open for curing fish under special regulations, whereby cheap salt is sold to fish-curers. The quantity of fish brought to be cured was 42,131 tons, the season, like that of 1905-06, being unfavourable for fishing, and 605,455 maunds of cured fish left the yards in a fit condition for use. Sir F. Nicholson was on special duty collecting information as to the migratory movements of fish on the coasts and for the improvement of the fisheries generally.

A substantial improvement in the conditions of service of the staff of the Salt Department was sanctioned by the Secretary of State.

Bombay.

The salt supply of Bombay comes from the Pritchard salt brine works, owned by the Government, on the Runn of Cutch (Baragra salt); from sea-salt works on the coast; and by importation. Of the sea-salt works one, at Dharasna, is worked by the Government; the remainder, of which there are some hundreds, are owned by, or leased to, private individuals; the imports of salt come chiefly from Goa. The conditions of the year were less favourable to salt manufacture than in 1905-06, and the stocks in hand had decreased by the end of the year. The following table shows the issues of salt from each source for the last two years:—

	1905-06.		1906-07.	
	Total Issues.	For Local Consumption.	Total Issues.	For Local Consumption.
Baragra salt	Maunds. 2,557,917	Maunds. 477,627	Maunds. 2,509,781	Maunds. 519,305
Sea salt	7,995,357	2,084,880	8,271,117	2,183,489
Imported salt	304,427	253,802	339,530	267,765
Total	10,857,701	2,816,259	11,120,379	2,970,559

The issues of duty-paid salt in the Presidency, excluding Sind, were at the rate of 11·65 lbs. per head of the population, against 11·05 lbs. in the previous year. In Gujarat the rate of consumption rose from 10·65 lbs. to 11·34 lbs. per head. The market price in Bombay city fell from Rs. 3.7.5 in 1905-06 to Rs. 2.13.3 in 1906-07; in the rest of the Presidency the average price remained about the same as in the preceding year. The record 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; in Bombay city the price has fallen from Rs. 4.1.3 in 1902-03, when the duty was Rs. 2.8, to Rs. 2.13.3 in 1906-07, with a duty of Rs. 1.8; in the rest of the Presidency the average price has fallen from Rs. 3.4.4 to Rs. 2.4.0.

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. Thirty fish-curing yards were open at the end of the year. The quantity of fish brought to be cured in bond rose from 122,500 maunds to 200,207 maunds, and the quantity of cheap salt issued to fish-curers rose from 36,300 maunds to 63,400 maunds, the catches being unusually good.

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 by importation. The amount passed into consumption during the year was 360,500 maunds. The consumption per head of the population is given as 9·23 lbs., the highest rate on record, against 8·87 lbs. in the preceding year, and 8·25 lbs. in 1904-05. The increase in consumption is attributed chiefly to the abolition of licences for the sale of salt, in consequence of which many petty dealers now stock salt in their shops. The average market price was about Rs. 2½. Two fish-curing yards were worked during the year. All the salted fish manufactured is exported. SALT.

A duty of Re. 1 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. The imported salt is superior in quality, and salt locally produced only holds its own by reason of its cheapness. The consideration of the question of levying a uniform duty of Re. 1 on all salt, whether local or imported, has been deferred, pending the report of an officer who has been deputed to make a comparative examination of the salt industry as carried on in Madras and in Burma. Burma.

The amount of imported salt which paid duty in Burmese ports during the year 1906 was 1,264,380 maunds. Imports from the United Kingdom constituted about 43 per cent. of the total imported during the year, and salt from Germany about 35 per cent. From 1888 to 1897 English salt predominated in the Burmese market; from 1898 to 1905, Germany took the lead; since 1905 the United Kingdom has regained its position. The statistics relating to locally produced salt are untrustworthy, but the returns, as in 1905, show a tendency to increase. The output for 1906 is given as 812,500 maunds. The average price of foreign salt varied in different districts from Rs. 3.4.3 per maund to Rs. 1.13.6, and of local salt from Rs. 3.4.3 to Rs. 1.1.3; it is not clear in all cases whether the returns relate to wholesale or retail prices. There was a considerable decline in the imports of salted fish, which amounted to 256,900 maunds. The rate of import duty on salted fish is 6 annas per maund.

EXCISE.

EXCISE.

In September 1905, the Government of India convened a Committee General. to consider the progress of excise administration in respect of intoxicating liquors, and to promote reforms. In a Resolution, published in the "Gazette of India" of the 9th September 1905, they restated the general principles on which their excise policy is based, which are substantially the same as those laid down in a despatch by Lord Cross, when Secretary of State for India, in 1888. They declared, when appointing the Committee, that they had no desire to interfere with the habits of 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, not as an end in themselves, but because the most effective way of forwarding this policy was to make the tax upon liquor as high as it is possible to raise it without stimulating illicit sales and productions, and without driving people to substitute deleterious drugs for alcohol or a more for a less baneful form of liquor.

The Committee's report, which is dated 4th July 1906, has been published as a Parliamentary Paper [Cd. 3327]. The orders, which the Government of India have passed on the Report, have been 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

Excise. farming concessions over large or small areas, and privileges of manufacture and sale, under a control varying in its effectiveness, but in no cases very complete. In out-still areas there are no means of obtaining statistics of consumption; 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 recommendation of the Committee a further reduction has been ordered, so that they will eventually remain in operation only in one large block of feverish 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 adequate control which the successful working of a distillery system demands. In these cases it is obviously better to impose a lump tax on liquor than to have 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 central distillery 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:—

- (1) That the contractors should be men who have the means to carry out their contracts in a satisfactory manner.
- (2) 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 been hitherto the typical Bombay system, has been found to lead to increased consumption, and will be replaced by the contract system as soon 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 now been the accepted policy of the Government of India for some years past. 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: (1) that the privileges of manufacture and vend must be completely separate; (2) 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 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. For details on these points reference may be made to the orders of the Government of India, published as House of Commons papers, which have been quoted above.

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 at the same time the largest possible part of the monopoly profits, brought into existence by these restrictions, is secured to Government.

The following table gives the excise revenue of 1906-07 and the preceding year under the different heads, as shown in the Finance and Revenue Accounts:—

	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.				
1906-07	£ 297,396	£ 3,153,908	£ 904,022	£ 218,268	£ 374,520	£ 712,786	£ 218,212	£ 24,107	£ 5,898,219	£ 274,609	£ 5,625,610
1905-06	£ 378,724	£ 2,914,067	£ 873,976	£ 219,068	£ 358,982	£ 691,185	£ 227,716	£ 24,112	£ 5,687,820	£ 258,116	£ 5,429,704

A net sum of £561,400 was yielded by customs duties* on exciseable liquors imported into India during the year 1906-07; the total net drink and drugs revenue amounting to rather more than 6 annas (sixpence) a head of the population affected. The net revenue from exciseable liquors and drugs (*i.e.*, total excise revenue less charges, plus Customs' duties on exciseable liquors) in previous years is given in the margin. The year shows the highest figure which has been reached by the excise revenue. It may be noted that neither tobacco, tea, nor coffee are subject to excise taxation in India.

* A customs 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 London proof spirit (raised to this figure from the previous rate of Rs. 6 in February 1906); Rs. 10 per gallon, irrespective of strength, on liqueurs (changed in February 1906 from Rs. 6 per proof gallon); Rs. 11 per gallon, irrespective of strength, on perfumed spirits (Rs. 8 before February 1906); Rs. 2½ per gallon on sparkling wines; Rs. 1 per gallon on other wines; and 1 anna per gallon on beer. (The duty on beer has been raised to 2 annas per gallon since the close of the year under report.) Opium is subject to a duty of Rs. 24 per seer on importation into India, and other narcotic drugs pay the general import duty of 5 per cent. *ad valorem*.

EXCISE.

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

PROVINCE.	Number of Persons per Retail Shop licensed in 1906-07 for the Sale of				Gross Excise Receipts per 10,000 of Total 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 Preparations.	Narcotic or Intoxicating Drugs, other than Opium.	In 1906-07.	In 1905-06.	
Bengal - - -	16,575	2,062	33,630	18,153	3,164	2,876	50,722,000
United Provinces - -	8,603	11,214	39,759	12,811	1,891	2,080	47,671,000
Punjab - - -	17,092	510,196	15,686	20,845	1,920	1,706	20,306,000
North-West Frontier Province.	47,120	—	22,320	21,860	1,021	960	2,120,000
Burma - - -	•	7,195	72,917	—	7,270	7,951	9,187,000
Central Provinces and Berar.	2,260	40,369	10,698	9,876	6,816	5,921	11,821,000†
Eastern Bengal and Assam	38,821	5,382	25,808	22,828	2,055	2,006	29,854,000
Madras - - -	3,338	1,965	34,102	58,052	5,005	4,730	38,196,000
Bombay - - -	6,095	1,515	18,894	26,836	3,124	7,852	15,323,310
Sind - - -	10,959	401,364	11,509	6,407	4,729	4,441	3,210,910

* For distillery spirits, 106,831; for outstill spirits, 129,401.

† Allowance has been made for growth of population since 1901.

Bengal.

In Bengal the total excise revenues of 1906-07 and the previous year as given in the departmental returns, were as follows :—

Receipts from	1905-06.	1906-07.
Country spirits - - - -	£ 534,557	£ 579,425
Foreign liquors and rum - - -	32,504	30,451
Fermented local liquors, toddy, and rice-beer - - -	113,234	116,359
Opium - - - -	149,537	156,779
Ganja, bhang, and their compounds - - -	190,171	187,472
Miscellaneous - - - -	1,226	1,499
Total Excise Revenue - - -	1,021,229	1,071,985
<i>Add.</i> —Customs duties levied in the Presidency on imported liquors, &c.	190,422	158,482
Total Revenue from Drink and Drugs - £	1,211,651	1,230,467

The year was marked by a further extension of the area under the contract supply system which has been introduced in Darjeeling and three other districts. The new system is credited with having checked drunkenness among tea garden coolies in Darjeeling. The central distillery system, which is still predominant in the south-east, and the out-still system, which prevails in the north and west, contribute in fairly equal proportions to the excise revenue. According to the programme which has received the sanction of the Government, the out-stills will disappear in a few years and the contract distillery system be introduced throughout the province. The small central distilleries are being closed, and liquor will be supplied at contract prices by a few large distilleries employing improved plant and machinery and producing wholesome spirit free from impurities.

EXCISE.

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. No less than one-fourth of the total revenue from country spirit was collected in the town of Calcutta. As in the preceding year there was an increased consumption of liquor and a large increase in the number of convictions for drunkenness in this neighbourhood. A larger population and higher wages on the one hand, and increased police activity on the other, may go some way towards explaining these results.

Important cases of the smuggling of opium, the licit consumption of which slightly increased, were detected during the year, and it is believed that there is a considerable illicit trade with Burma which escaped detection. No shops are licensed for selling opium prepared for smoking, but the vice, which is confined for the most part to low-class Muhammadans, is prevalent throughout Orissa and is common in all populous towns in the Gangetic Valley. The vice shows no decided tendency to increase; it is practised in secret and known participants are looked upon with reprobation. The price in Orissa has been recently increased. The sale of cocaine is limited to qualified and duly licensed persons; 227 licences were issued during the year. In November 1906 the bringing of cocaine into British India by post was prohibited, and its importation was restricted to specially authorised agents. The active measures taken in recent years against the spread of the habit seem to have met with some considerable success.

The prohibition of the sale of intoxicants of all kinds to children under 14 years of age was introduced during the year.

The excise report for the United Provinces for the year 1906-07 shows that for the last three years the gross excise revenues have been :— United Provinces.

Gross Receipts from	1904-05.	1905-06.	1906-07.
	£	£	£
Country spirits and fermented liquors -	443,780	387,839	395,213
Foreign liquors and rum -	55,589	91,095	29,833
Opium -	56,096	56,440	56,504
Other drugs -	125,920	129,363	131,911
Miscellaneous -	286	312	643
Total	£ 681,671	665,049	614,104

There was an increase in the consumption of country spirits in spite of the abnormally high price of the raw material of distillation. The fluctuations in the receipts from foreign spirit are due to withdrawals from bond in anticipation of the enhancement of duty enforced from the 1st April 1906. The sale and possession of cocaine were placed under restrictions during the year.

In the greater part of the province country spirit is dealt with at present under what is called the "ordinary distillery system," which corresponds in its main features with the central distillery system of Bengal. A further reduction was effected during the year of the out-still area, which consists of thinly populated and comparatively inaccessible tracts. The still-head duty on country spirit varied from Rs. 3 to Rs. 3½ per proof gallon in the larger towns and stood at Rs. 2½ elsewhere. The area of greatest consumption adjoins Bihar and stretches up the Gogra and Jamna rivers as far north as Lucknow, the bulk of the consumption, however, being confined to large cities and cantonments. The consumption in the districts of Agra, Bareilly, and Dehra Dun is also high.

Excise. The gross excise revenue in the Punjab in the last four years was raised as follows :—

Receipts from	1903-04.	1904-05.	1905-06.	1906-07.
	£	£	£	£
Spirits made in India -	108,734	131,356	148,814	162,328
Imported liquors and beer -	14,840	15,349	17,476	19,991
Opium -	39,039	40,289	43,184	48,659
Other drugs and miscellaneous	24,080	23,061	28,148	35,733
Total - - £	186,693	210,055	237,622	266,711

High consumption is confined to a track consisting mainly of the Sikh districts of Lahore, Amritsar, Ferozepore, Jullundur, and Ludhiana, which with 23 per cent. of the population account for 56 per cent. of the country spirits consumed, and the cities and cantonments of Simla, Ambala, and Rawalpindi. In the Sikh districts, with the exception of Lahore, the experimental grant on low fixed fees of vend licences, to sell at lower rates country spirit 25 per cent. below proof, was continued during the year. The object of the experiment has been the reduction of illicit distillation, which was so rife in these districts in the past that the consumption of illicit liquor was estimated to be at least equal to that of licit. The experiment, which has been the subject of a special report, has resulted in a very great increase in recorded consumption, a large part of which is put down to the substitution of licit for illicit supplies and to export into neighbouring native states. The price of spirits in these districts was increased with effect from the 1st April 1907.

Outside the area affected by the experiment, there was an increase in consumption of about 5 per cent. The growth is attributed in these, as well as in the Sikh districts, to the stimulus of plague and high wages, and would have probably been greater but for the high price of gur. Plague has had a twofold influence in stimulating consumption. On the one hand, panic and a widespread belief that spirits are a prophylactic have driven the people to drink, and on the other hand plague has made labour so scarce as to enable the menials to earn much larger wages, which, in the absence of any prejudice to the contrary, their first impulse is to spend in the wine shops. No tari is consumed in the Punjab.

There was some increase in the consumption of opium during the year, perhaps due to its being taken sometimes as a supposed remedy for plague. About one-third of the amount retailed was grown in the province. Malwa opium is imported, and pays an import duty of Rs. 4 per seer, while that coming from Kashmir and the Hill States pays Rs. 2 per seer.

The trade in cocaine was brought under regulation during the year.

North-West Frontier Province.

The excise receipts in the North-West Frontier Province amounted to £14,986 only, and there is nothing which need be noticed in the working of the excise system.

Burma.

In Burma the gross excise revenue during the past three years was raised thus :—

Receipts from	1905-06.	1906-07.
	£	£
Imported liquors -	76,462	62,537
Country spirit	38,495	31,992
Toddy and rice-beer, &c.	153,661	144,085
Opium	322,533	307,587
Fines, &c.	2,873	3,064
Total	594,024	549,265
Add,—Customs duty on imported liquors	114,838	102,122
Total revenue from drink and drugs	£ 708,862	651,387

The receipts under all the main heads show a reaction from the increases of the two preceding years. This may be partly due to certain changes of policy which have been recently introduced, although Burma was excluded from the investigations of the Excise Committee. The category of "imported liquors" includes plain spirit from Java and the Straits Settlements, and is consumed by the class which in most other provinces confines its potations to country spirit. The decrease under this head may be partly due to a recent increase in the duty on imported liquors. The contract distillery system for the production of country spirit was introduced into the Tenasserin Division during the year, and the area under the out-still system was further reduced. The partial substitution of country for imported spirit, and the absence of evidence as to the value of licence fees under the new conditions, leading to a decrease in the receipts from their sale, render the figures of the year unreliable for comparison. In Upper Burma *tari* is the only alcoholic liquor whose sale to native Burmans is permitted.

Excise.

Under the opium systems in force in Lower Burma, and recently introduced into Upper Burma, the revenue is derived chiefly from the sale of excise opium at fixed wholesale rates to the licensed retail vendors, the number of shops being now fixed at 88 for Lower Burma and 38 for the Upper province, and sales being restricted, as regards Burmans, to those who were registered as consumers in the year 1893. The falling off in the receipts for the year may be due to the closer supervision of sales at the shops by the officers in charge, but, as it is said that in Lower Burma little or no advance has been made in the suppression of opium smuggling into the province, it may well be that the success achieved in the control of licit sales has been counterbalanced by an increase in the illicit consumption. It is believed that there is a large contraband trade in opium both from China and Bengal. A scheme for the entire re-organisation of the excise staff in Rangoon, so as to allow of the better detection of smuggled opium, is now under consideration.

In the Central Provinces and Berar the excise receipts of recent years have been as follows:—

Central Provinces and Berar.

Receipts from	Central Provinces.				Berar.			
	1903-04.	1904-05.	1905-06.	1906-07.	1903-04.	1904-05.	1905-06.	1906-07.
Country spirits and toddy.	£ 111,990	£ 143,834	£ 181,067	£ 230,008	£ 101,862	£ 130,159	£ 182,163	£ 198,325
Opium - -	58,079	65,983	67,446	72,900	27,782	29,952	39,564	50,388
Ganja - -	14,435	17,303	19,745	23,184	3,361	4,191	6,437	6,717
Miscellaneous, including foreign liquors.	3,605	3,835	2,588	3,494	599	545	873	859
Total - -	£ 188,109	£ 230,955	£ 270,846	£ 329,586	£ 133,604	£ 164,847	£ 229,037	£ 256,289

This table shows a notable and progressive increase in the country spirit revenue, which constitutes nearly the whole of the first item. But this increase has not been accompanied by a corresponding growth in consumption. With the introduction and extension of the contract supply system, it was expected that there would be an increase in revenue from direct duty; but a large increase, at the same time, in the receipts from licence fees, on account of severe competition in the retail market, shows that the limit of expedient taxation of a direct kind has not yet been reached. In Berar the consumption of country spirit remained almost stationary during the year. In the areas of the Central Provinces for which exact comparison is possible consumption has risen by only 11 per cent., an increase wholly disproportionate to the increase in revenue. The consumption of hemp drugs has decreased by more than 5 per cent., the increased revenue receipts being due to higher rates of duty on ganja and bhang. The increase in opium revenue is also chiefly due to increased duties.

EXCISE.

The contract distillery system had been introduced by the end of the year into the whole of Berar and into twelve districts of the Central Provinces. Out-stills were responsible for less than 10 per cent. of the revenue from country spirit. The Government revenue from tari is derived from licence fees, the right to manufacture and sell being sold by auction annually. Since 1903-04 a reduction of nearly 25 per cent. has been effected in the number of shops for the retail sale of liquor and drugs. 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.

Eastern
Bengal and
Assam.

The excise revenue of the new province of Eastern Bengal and Assam for the last three years was as follows:—

Receipts from	1904-05.	1905-06.	1906-07.
	£	£	£
Country spirits	107,983	113,604	124,622
Imported liquors and rum	9,762	10,334	7,858
Opium	157,783	163,718	173,309
Ganja and its compounds	101,718	118,618	110,855
Miscellaneous, including toddy, &c.	5,096	5,003	4,802
Total	£ 382,332	411,277	421,446

NOTE.—These figures do not include small amounts raised in the Hill districts, where the excise administration is kept to some extent distinct.

No change was made during the year under report in the three systems—out-still, central distillery, and contract distillery—in force, the greater part of the province remaining under the out-still system. But plans for the complete introduction of the contract distillery system in all the plains districts of the province were under consideration. No comparison of the consumption of spirits with the consumption in the preceding year can be given, as under the out-still system no trustworthy records of output are available; the total number of out-stills licensed fell from 554 to 506. It is stated that sales of imported liquor were largely diminished by the *Swadeshi* movement.

Nearly 77 per cent. of the opium consumption was due to the Assam Valley districts; the total consumption was 1,871 maunds of opium, or about 6 per cent. more than in 1905-06. There seems to be some evidence of an increase in the habit amongst the cultivating classes resulting from the increased prosperity of recent years. Ganja is chiefly consumed in the Eastern Bengal districts; there was a further decrease in the total consumption, but it is said that the ganja habit is spreading among tea garden coolies in Assam, the drug to a certain extent taking the place of liquor.

Madras.

The gross excise revenue of Madras during the last four years was raised thus:—

Receipts from	1903-04.	1904-05.	1905-06.	1906-07.
	£	£	£	£
Country spirits	478,515	512,616	507,139	573,879
Toddy	585,708	621,887	639,547	661,510
Foreign liquors and miscellaneous	83,330	81,058	89,212	87,400
Opium and other drugs	76,719	82,619	86,134	92,602
Total	1,174,270	1,251,130	1,272,032	1,365,391
<i>Add</i> ,—Customs duty on imported liquors	76,631	77,232	85,387	75,511
Total Revenue from Drink and Drugs - £	1,250,901	1,328,362	1,357,419	1,440,902

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. The amount of country spirits consumed in 1906-07 in distillery areas is returned as 1,411,000 proof gallons, compared with 1,222,000 gallons in 1905-06 and 1,272,000 gallons in 1904-05. The increase is attributed to a favourable season. Over nearly the whole of the Presidency a tree tax, ranging from 1 rupee to 6 rupees a year, is imposed on all palm trees tapped for fermented toddy, while the shops for retail sale of toddy are separately sold by auction to the highest bidder. The amount of toddy consumed in the Presidency cannot be stated; the increase in the revenue was chiefly due to enhanced rates of tree tax which came into force over a large part of the Presidency, with effect from October 1906.

EXCISE.

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 in the Presidency, excluding that issued to Native States, is given as 953 maunds, compared with 935 maunds in 1905-06 and 955 maunds in 1904-05.

The general fiscal results of the excise management in Bombay, Sind, and Aden during the last four years were—

Bombay.

Gross Receipts from	1903-04.	1904-05.	1905-06.	1906-07.
	£	£	£	£
Country spirits - - - - -	579,003	661,456	685,738	727,029
Toddy - - - - -	103,467	110,054	111,803	114,816
Foreign and Indo-European liquors - - -	23,353	25,497	21,498	23,738
Opium - - - - -	56,829	70,663	67,403	64,859
Other intoxicating drugs - - - - -	33,104	51,045	57,658	52,253
Miscellaneous items - - - - -	5,409	5,601	5,424	4,842
Total Excise Revenue - - - - -	801,165	924,316	949,524	987,537
Add,—Customs duties on imported liquors -	215,148	213,265	255,736	229,341
Total Revenue from Drink and Drugs - £	1,016,313	1,137,581	1,205,260	1,216,878

According to the form of the central distillery system which obtains throughout almost the whole of the Bombay Presidency, the monopolies of manufacture and sale of country spirit over an excise area are sold together to one contractor, who guarantees a fixed minimum return of duty to the Government; and nearly all the revenue is obtained from still-head duties. The contract supply system of Madras, by which the monopoly of manufacture is separated from that of retail vend and an appreciable part of the revenue is obtained from the auction sale of shop licences, has now been introduced into six districts.

More than one-third of all the distillery liquor drunk in India is consumed in the Bombay Presidency, and the issues of country spirit for consumption in the distillery areas exceeded 2½ million proof gallons, the average for the five years preceding being slightly in excess of 2 million gallons per annum. In Bombay city, where the rate of consumption is highest, there was a decrease during the year.

STAMPS.

STAMPS.

The stamp revenue is leviable under Act VII. of 1870 (the Court Fees Act), which imposes fees on plaints, petitions, and other documents, with specified exceptions, filed before civil, criminal, or revenue courts, and under Act II. of 1899 (the Stamp Act), which imposes duties on commercial transactions recorded in writing, such as conveyances, bonds, cheques, bills of

STAMPS. exchange, receipts, and the like. The following table gives the stamp receipts, province by province, for the year 1906-07 :—

	India (General).	Bengal.	Eastern Bengal and Assam.	United Provinces.	Punjab.	North- West Frontier Pro- vince.	Burma.	Central Pro- vince and Berar.	Madras.	Bombay.	TOTAL.
Sale of court fee stamps	£ 15,396	£ 680,948	£ 424,906	£ 472,346	£ 172,703	£ 17,867	£ 165,295	£ 90,489	£ 406,223	£ 216,516	£ 2,602,489
Sale of commercial and other stamps.	£ 8,502	£ 284,306	£ 168,296	£ 139,081	£ 90,266	£ 10,272	£ 92,078	£ 63,645	£ 242,806	£ 190,857	£ 1,292,129
Fines and miscellaneous	£ 1,474	£ 12,192	£ 1,279	£ 2,257	£ 6,933	£ 171	£ 7,747	£ 898	£ 10,153	£ 9,985	£ 54,290
Gross Stamp Revenue of 1906-07.	£ 25,372	£ 960,447	£ 604,481	£ 614,764	£ 269,892	£ 28,110	£ 265,110	£ 164,032	£ 660,182	£ 417,458	£ 4,029,908
Deduct — Refunds and charges.	£ -46,706	£ 26,268	£ 28,250	£ 22,308	£ 14,121	£ 1,547	£ 12,264	£ 8,794	£ 22,177	£ 20,548	£ 120,169
Net Revenue of 1906-07	£ 72,027	£ 942,882	£ 576,231	£ 592,456	£ 255,771	£ 26,563	£ 252,846	£ 155,238	£ 638,015	£ 396,910	£ 3,909,739
Net Revenue of 1905-06	£ 26,750	£ 1,178,980	£ 298,482	£ 572,541	£ 247,725	£ 22,781	£ 227,080	£ 161,430	£ 602,209	£ 406,184	£ 2,748,162

CUSTOMS.

CUSTOMS.

Import duties, which had been abolished in India in 1882, and were re-imposed in 1894, are levied, generally speaking, at the rate of 5 per cent. of the value of the goods. The chief, though not the only, exceptions are railway material, machinery which is worked by power other than manual or animal labour, food grains, living animals, raw materials such as coal, jute, raw cotton, or wool, books, gold and unset precious stones, which are all admitted free of duty; petroleum, which pays 1 anna per gallon; and articles of iron and steel, on which an import duty of 1 per cent. *ad valorem* is levied. At first cotton goods were 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 handloom industry 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. 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; and this was put in force with regard to sugar. Subsequently, in accordance with the principles of the Brussels Convention, and in view of the protection enjoyed by the sugar-growers of certain countries in their home markets, Act VIII. of 1902 was passed, by which the Government was further authorised to impose a special additional duty on sugar coming from countries where the duties on imported sugar exceeded those levied on locally produced sugar by 6 francs per 100 kilogrammes in the case of refined sugar, or 5½ francs for other sugar, the amount of the additional duty being one-half of such excess. Thus, under the legislation of 1899 as amended by that of 1902, the Government of India have power to impose countervailing duties in respect of direct and also of indirect bounties. But since the Brussels Convention took effect, sugar, which is the produce of any of the countries adhering to the Convention, has not been subject to any duty in excess of the ordinary tariff rate. Sugar entering India from the Argentine Republic, Chile, Denmark, or Russia was subject to various rates of countervailing duty during the year under report; but the amount of such sugar is negligible.

The appended table shows the changes in the net customs revenue caused by the above-mentioned changes, giving the figures for 1894-95, during which the new tariff was in force, with the addition of the 5 per cent. duty on cotton goods from the 27th December 1894; 1895-96, during which the tariff

remained as at the end of the previous year, until the reduction of the cotton duties in February 1896 ; and the four most recent years.

CUSTOM

The Tariff Schedule was revised in December 1906, the new schedule coming into force on 1st January 1907 ; the principal changes were in the valuations of cotton fabrics for tariff purposes and in the list of cotton goods recognised as piece goods. No important change in customs procedure was made during the year.

	1894-95.	1895-96.	1903-04.	1904-05.	1905-06.	1906-07.
Sea Customs, import duty :	£	£	£	£	£	£
Arms, ammunition, and military stores.	10,126	11,403	8,252	10,925	10,796	10,996
Liquors - - -	406,855	440,669	542,196	552,141	646,286	561,401
Petroleum - - -	213,118	270,782	291,303	303,465	241,125	246,120
Cotton manufactures -	256,631	776,483	653,193	803,324	877,330	850,479
Silver bullion and coin	230,557	231,859	267,069	267,691	194,685	260,637
Other metals - - -	135,078	168,641	222,827	227,170	202,911	226,776
Sugar - - -	630,450	686,725	211,993	218,061	266,216	284,936
Other articles - - -			720,784	815,028	845,346	870,143
Export duty on rice -	594,017	609,581	780,863	858,958	751,115	681,816
Miscellaneous - - -	6,694	1,770	21,674	22,698	21,169	24,871
TOTAL Sea Customs	2,483,026	3,197,913	3,675,010	4,079,461	4,056,757	4,018,175
Land Customs - - -	15,884	13,397	21,307	24,630	20,059	20,351
Excise duty on cotton manufactures.	6,897	40,632	135,740	155,577	178,071	190,947
Miscellaneous (including warehouse and wharf rents).	10,773	18,672	18,767	19,044	17,523	17,290
TOTAL NET CUSTOMS REVENUE.	2,516,580	3,270,614	3,850,824	4,278,712	4,272,410	4,246,763

The receipts from import duties show an increase, following the course of the import trade, but the yield of the export duty on rice again fell. The receipts from the excise duty on cotton goods made in power mills continued to expand, and are a satisfactory indication of the prosperity of that industry.

PROVINCIAL RATES.

PROVIN
RATE

At the end of the year 1904-05 some famine cesses in Northern India and the Central Provinces were abolished, and this was followed in 1906 by a further measure of remission, by which the cesses for the district post and practically all those levied under the various names of patwari cess, village service cess, and the like, in Madras, the Central Provinces, the United Provinces, the Punjab, the North-West Frontier Province, Ajmere, and Coorg, were abolished; the amount so remitted being £547,900 a year. Certain petty appropriations hitherto made from the funds of local boards for various provincial purposes were also discontinued, a further sum of £38,800 being surrendered.

By these changes it is claimed that the system of local taxation has been placed on a sound basis. The object which they are intended to secure is the restriction of provincial rates or cesses to those, supplementary to the land revenue proper, which are levied on the land, by, or on behalf of, local authorities, to meet expenditure by them on local objects ; and their limitation to what is required for local administration by local bodies. This object has not been completely attained, as certain exceptions still survive, but the most important of the cesses having a different purpose have been cleared away.

PROVINCIAL
RATES.

The following is a table of the rates and cesses collected during the year 1906-07 :—

	India (General).	Bengal	United Provinces.	Punjab.	North- West Frontier Province.	Burma.	Central Provinces and Berar.	Eastern Bengal and Assam.	Madras.	Bombay.	TOTAL.
REVENUE.	£	£	£	£	£	£	£	£	£	£	£
District Local Fund :											
Cess on Land for ex- penditure on roads, schools, hospitals, and general purposes, and for railways in Madras.	1,666	331,090	331,098	173,973	12,106	137,196	62,654	153,394	454,458	314,034	1,816,479
Provincial :											
Cess on land for ex- penditure on roads, schools, &c.	—	323,765	—	—	—	—	—	104,080	—	—	330,845
Cess on land for canals and railways.	—	—	—	1,042	1	—	—	—	—	—	1,044
Cess on land for village service and patwaris.	—	—	—	4,076	497	—	19,948	—	7,069	—	31,587
Assessment on wards' estates for establish- ment charges.	—	8,483	11,869	3,175	1,178	—	—	3,289	—	—	23,886
Miscellaneous - - -	2,448	—	64,198	—	—	—	—	—	2,120	—	68,764
Total Receipts -	4,114	474,377	468,068	180,318	14,777	137,196	62,659	260,763	463,644	314,034	2,380,577
Refunds and charges of collection.	3	18,579	889	470	12	8,479	177	7,480	353	2,936	37,348
Net Receipts, 1906-07 -	4,111	455,898	467,179	179,748	14,765	128,717	62,482	253,283	463,291	311,098	2,343,229
Net Receipts, 1905-06 -	5,970	476,950	634,898	235,908	21,681	118,303	118,348	154,427	637,161	304,699	2,788,048

INCOME
TAX.
General.

INCOME TAX.

The principal provisions of the Income Tax Act (II. of 1886) are that incomes derived from salaries and pensions, or from interest on securities (classed as Parts I. and III. in the returns), if amounting to Rs. 2,000 per annum, should pay 5 pies in the rupee (equal to 6½d. in the £), and if less than Rs. 2,000, 4 pies in the rupee (5d. in the £); that companies (Part II.) should pay 5 pies in the rupee on their net profits; and that income derived from other sources (Part IV.) should pay according to a graded scale from Rs. 20 on an income of Rs. 1,000 to Rs. 42 on Rs. 1,999, the tax on incomes of Rs. 2,000 and upwards being 5 pies in the rupee. All incomes of less than Rs. 1,000 (£66⅔) a year were exempted by an Act passed at the beginning of the year 1903-04, which substituted that minimum limit for the limit of Rs. 500 which previously existed. The tax is not levied on profits or incomes derived from agriculture, or on military salaries of less than Rs. 500 a month (£400 a year).

The receipts and charges on account of income tax in each province were as follows :—

	Net Receipts, 1905-06.	1906-07.		
		Gross Collections, less Refunds.	Collection Charges.	Net Receipts.
India (General)	£ 131,890	£ 135,939	£ 98	£ 135,841
Bengal -	327,458	326,846	10,015	316,835
Eastern Bengal and Assam -	38,204	68,784	1,905	66,879
United Provinces -	139,766	142,969	21	142,948
Punjab -	84,590	91,890	719	91,171
North-West Frontier Province	7,693	8,308	67	8,251
Burma -	101,635	105,187	2,551	102,636
Central Provinces and Berar -	36,690	39,791	688	39,103
Madras -	172,462	184,572	2,185	182,387
Bombay -	251,665	312,043	5,590	306,453
Total - - - - £	1,292,053	1,416,327	23,828	1,392,499

The figures in the following table taken from the provincial reports give the income tax levied under Parts II. and IV. and the incidence per head of population in towns of more than 200,000 inhabitants :—

INCOME
TAX.

	Population.	Collections 1906-07.	Incidence per head of Population.	Collections 1905-06.
		£	s. d.	£
Calcutta	1,067,911	145,919	2 9	138,768
Bombay	977,822	143,688	2 11	101,781
Madras	509,346	*	*	*
Lucknow	264,049	*	0 3½†	3,801†
Rangoon	240,970	40,380	3 4	43,782
Benares	209,381	*	0 3½†	3,027†
Delhi	208,575	9,680	0 11	7,368
Lahore	202,964	3,969	0 4	3,822

* Figures not available.

† 1904-05.

CHAPTER IX.

FORESTS.

FORESTS.

The subjoined table gives the forest receipts, expenditure, and net revenue for each province during the year 1906-07, as given in the Finance and Revenue Accounts:—

	India (General).	Bengal.	United Provinces.	Punjab.	North West Frontier Province.	Burma.	Central Pro- vinces and Bihar.	Eastern Bengal and Assam.	Madras.	Bombay.	TOTAL.
REVENUE.	£	£	£	£	£	£	£	£	£	£	£
Receipts	89,838	71,083	166,941	107,029	13,314	654,169	100,077	88,039	219,378	228,165	1,766,601
EXPENDITURE.											
Conservancy and Works	23,788	21,863	66,920	53,081	4,441	155,359	24,996	25,740	101,299	65,564	643,181
General direction, Estab- lishment, &c.	20,289	20,203	29,790	22,313	1,802	90,907	24,829	21,461	81,978	67,183	402,406
TOTAL Expenditure	44,077	42,166	96,710	75,394	6,243	246,266	49,825	47,201	183,277	132,747	945,587
Net Revenue or Forest Surplus, 1906-07	45,851	29,220	70,121	31,748	7,073	407,910	75,252	62,839	136,081	162,417	820,044
Net Revenue or Forest Surplus, 1905-06	10,791	25,002	68,549	24,523	2,219	426,121	76,181	24,146	46,723	90,593	824,748
Net Revenue or Forest Surplus, 1904-05	10,179	31,025	67,049	67,472	1,069	267,523	46,190	20,801	56,207	74,451	722,559

Systematic conservancy of the Indian forests is based on the Forest Law of 1878, which gave to the Government powers of dealing with private rights in the forests of which the chief proprietary right is vested in the State. Forest administration is based upon the principle that State forests should be administered for the public benefit; they are worked, therefore, with a view to combining all reasonable facilities for their use by the public with the protection necessary for their preservation as sources of fuel and timber, and retainers of moisture in the soil. The forests are classified, according to the degree of completeness of the management undertaken, as "reserved," "protected" or "unclassed." In the case of reserved areas the control of the Forest Department is more complete than in the case of the protected or unclassed forests. In the latter category, the area of which cannot be stated with any great exactness, there are included large tracts of uncultivated land, especially in Burma, much of which will in all probability pass into cultivation as agricultural land. Among the most important measures of conservancy are the exclusion, so far as possible, of the yearly fires which used to devastate the forests, the maintenance of a supply of seed-bearing trees, and the regular reproduction of timber of the more valuable kinds. At the present time the reserves cover an area of nearly 92,000 square miles; and they may hereafter be further extended in Madras and Burma, where the work of reservation is as yet incomplete. Outside the reserves there are about 163,000 square miles of State forests, including 12,500 square miles of protected forests, nearly 9,100 square miles of "district protected forests" in the United Provinces, and a small area of leased forests. Some part of this area will eventually be brought within the "reserve" area, and all of it is, with more or less completeness, managed and worked for the benefit of the people, of their cattle, and of the public revenue. The forests with which this chapter deals are, almost exclusively, those which belong to the State. The limited areas of private forest, except where they have been leased to the Government, are being gradually exhausted; and few private communal or village forests have been successfully brought under conservancy. In every province a very few of the most valuable timber trees are declared to be reserved trees, and can only be felled under special licence. Outside

the reserves, the country folk are generally allowed to obtain from the State forests timber, bamboos, firewood, and grass for their own use free of charge; inside the reserves, persons specially licensed are allowed to extract timber or other produce, on payment of fees, though all rights recognised by the forest settlements are preserved to the public. Forest revenue is raised by royalties on, or by the sale of, timber or other produce and by the issue at specified fees of permits to graze cattle, or to extract for sale timber, firewood, charcoal, bamboos, canes, and minor forest produce. Some of the better-managed Native States, such as Kashmir, Mysore, Travancore and Baroda, have followed the example of the British Government, and have organised a systematic forest administration, from which they enjoy a considerable forest revenue.

FORESTS.

The following paragraphs treat of forest administration in each province.

In Bengal, at the end of the year, the areas of reserved and protected forests were 4,240 and 3,432 square miles, the latter figure including 600 square miles under the control of the local revenue officials. Working plans had been provided for 5,093 square miles, and the preparation of further plans was in progress during the year. Attempt was made to exclude fire from 1,879 square miles, and only 0.38 per cent. of this area was burnt, the season having been very favourable for fire protection. The rubber plantation (*ficus elastica*) in the Tista division has been so far very successful; good progress was also made with the teak plantation recently started in Southern Puri. The yield of timber was nearly five million cubic feet, a small increase on the yield of the previous year, the apparent decrease being due to a revised method of measurement; the out-turn of fuel (29,700,000 cubic feet) was rather larger than in the previous year; the number of bamboos taken from the forests was 11½ millions. Tigers are reported to have killed 114 forest workmen, against 166 in the previous year. The net financial result was rather better than in 1905-06. The forests are well provided with young growth of trees of valuable kinds, and the net revenue should show a steady increase in the future. Though the Department endeavours to sell marketable produce in such ways that it may obtain the benefit of increases in market prices, it is not its object to run up these prices; as large quantities as possible of the kinds of produce in demand are placed at the disposal of customers.

Bengal.

In the United Provinces the area of reserved forests was 3,934 square miles, in addition to 157 square miles of leased forests; there was also an area of 9,070 square miles of "district protected forests," which are under the Forest Act, but are controlled by district officers, and 43 square miles of unclassed forest. The greater part of the area under the Department is settled and surveyed, and worked under regular working plans. Protection from fire was attempted over 3,200 square miles; the year was favourable and only one per cent. of this area was burnt. The area thrown open to cattle, for the whole or part of the year, was 1,280 square miles, besides the large area of district protected forests. The yield of the forests was 7½ 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 only important departmental operations are the supply of fuel to Naini Tal, the export of railway sleepers which have fallen considerably in value, and the manufacture of turpentine. The latter industry was being conducted in the Naini Tal division on an increasing scale and at a satisfactory profit.

United Provinces.

The reserved forest area administered by the Punjab Forest Department at the end of 1906-07 comprised 1,808 square miles, besides 114 square miles under military or other control. The protected forests aggregated 5,241 square miles, while there is an area of 1,756 square miles of "unclassed" forest, and 526 square miles of leased forests. Some valuable additions were made during the year to the reserved forests of the province, but the total area in charge of the Forest Department was reduced by 48 square miles chiefly by transfer to the Colonization Department or disforestation on account of the new colonies. Working plans had been completed for 4,145 square miles of the 9,445 square miles of forest under the Department; 152 miles

Punjab.

FORESTS. of paths were constructed as compared with 138 miles in the previous year, and this was an important part of the work of the department. The year was very favourable as regards forest fire protection, on account of the wetness of the season, and the area damaged was the lowest for many years; special fire protection was attempted over an area of 919 square miles, of which only 0·48 per cent. was burnt. The total timber out-turn was 4½ million cubic feet or 52 per cent. less than that of the previous year; the fuel out-turn was 23½ million cubic feet or 18 per cent. less than in 1905-06. The decline is ascribed to a variety of causes of which the chief were the shortage of labour and the gradual supersession of wood fuel by coal. As a result the net profits of the year (£27,200) were less by £6,900 than in 1905-06. More than 90 per cent. of the area of the forests was open to all cattle for grazing. The difficulty of protecting forests from damage by agricultural animals is increasing owing to the growth in the profits of pastoral farming. 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.

North-West Frontier Province. In 1906-07 the total area of the reserves under the direct control of the Department in the Frontier Province was 234 square miles, and there were also 120 square miles of civil protected forests. It is not necessary to enter into the details of the working of this area; there has been a steady and substantial increase in the out-turn of timber, and the net revenue for the year was the highest on record. There was a decrease in the number of forest offences, and the amount of destruction by fire was almost negligible.

Burma. The reserved forest area in Burma was increased by 1,028 square miles during 1906-07, bringing it up to 21,575 square miles; the unclassed forests, much of which will ultimately be cultivated, are given as covering 109,000 square miles, but the real area is unknown, and may be considerably greater than this. Good progress was made with settlement work during the year, and the Forest Survey Branch covered 525 square miles; but the progress of reservation is quicker than that of survey. Working plans had been completed for 4,208 square miles by the end of the year, and plans for a further 3,025 square miles were being compiled. The area in which fire protection was attempted covered 8,466 square miles, of which 5 per cent. was burnt. The question of the effects of fire protection has long been discussed by forest officers. The conclusion has been tentatively reached that it is beneficial in some cases and useless or harmful in others; where rainfall is abundant, protection is probably harmful by promoting growths which retard or destroy the growth of teak; while in dry forests it is probably beneficial. At the Mergui rubber plantation the area under rubber was 1,914 acres; the quality of the rubber has been favourably reported upon, and the lease of the plantation is being offered for sale. A valuable report on the prospects of a paper pulp industry in Burma from an expert, Mr. Sindall, engaged for the purpose, led to many enquiries. The quantity of teak extracted from the forests was nearly 12 million cubic feet, equivalent to 236,568 cubic tons; this is somewhat more than in 1905-06. During the year 400 tons of selected teak squares were supplied to the Admiralty under arrangements made with them. It has been decided to reduce the area worked by the Department, and to throw open to working under the purchase contract system forests which have been worked hitherto departmentally. Of other timbers, 12 million cubic feet were extracted, besides 14 million cubic feet of fuel; these figures show a decline as compared with those of the previous year. The forest surplus of the year amounted to £333,700, which was less by £38,000 than in 1905-06. The forest revenue in Burma appears to be at a standstill, and no great expansion is likely for the next few years. A certain fall must be faced owing to the curtailment of departmental works, and it is probable that the expansion of trade will do little more than counter-balance this until an increased establishment renders it possible to open out new sources of revenue. An important re-organisation of the Imperial and Provincial forest establishments, involving a substantial increase in the number of officers in each branch, was sanctioned during the year. The reconstitution of the local Forest School was being pressed on, and it is hoped that under the new conditions the training of subordinate officers will be much improved.

The grand total of the area of the forests in the Central Provinces and Berar was 22,002 square miles at the end of the year 1906-07. Reclassification of the forests has been in progress, and it is considered that the area of permanent reserves, now fixed at 19,861 square miles, is approximately final. The working plans sanctioned up to the end of the year covered in all 11,847 square miles, or 54 per cent. of the whole, 996 square miles having been completed during the year; but in respect of 2,257 square miles of this area the prescriptions continue to be unsuitable to existing local conditions and are inoperative. For 4,686 square miles of the rest no working plans are required, and for 4,473 square miles they must be prepared in due course. Fire was excluded from 98 per cent. of the 10,660 square miles in which protection was attempted. The rules regulating the details of fire-protection in the Central Provinces have been recently revised, and for the future the system of partial protection has been abolished and replaced by the more thorough methods hitherto designated as "systematic protection." Eighty-two per cent. of the area of the forests was open to cattle for grazing during the whole or part of the year, and the number of cattle grazed was about 4½ millions, as compared with 3½ millions in the previous year; there has been recently a continuous increase in the number of cattle pastured in the Government grazing grounds. The question of making adequate provision for cattle-pasture presents serious difficulties. There is good reason to believe that grazing is excessive and accompanied by serious injury to the forests in many localities, but elsewhere over wide stretches of forest the pasture available is utilised to an extent far below its capacity. The main problem is to effect a more equable distribution of the grazing pressure over the available pasture grounds. The amount of timber removed from the forests during the year, chiefly by private persons, was nearly 4½ million cubic feet, that of fuel 19½ million cubic feet. Only 4 per cent. of the total was collected by Government agency. The utilisation of lac and systematic endeavours to extend its spread in the forests were continued. The financial results continued to show steady improvement. The revenue, £163,200, exceeded that of 1905-06 by 7 per cent., and the average revenue of the three preceding years by 20 per cent. The surplus was £73,600, or 13 per cent. more than in 1905-06. As usual, the greater part (42 per cent.) of the revenue was yielded by grazing and fodder-grass; 37 per cent. being derived from timber and fuel.

FORESTS.
Central
Provinces
and Berar.

The forests under the control of the Forest Department, Eastern Bengal and Assam, included 6,250 square miles of departmental reserves, 22,056 square miles of unclassified forests, and 11 square miles of other reserved or protected forests. The unclassified forests, however, consist very largely of grass or treeless waste in Assam, and part of their area is more or less regularly under cultivation. Working plans had been prepared for 1,103 square miles by the end of the year 1906-07. Special fire protective measures extended over 1,497 square miles, and were almost completely successful; protection was attempted on a less ambitious scale over about 200 square miles in Goalpara, about 4 per cent. of that area being burnt. The grazing question presents no difficulties in the province; about 26 per cent. of the reserves was opened to cattle, and the large area of unclassified forest was open to all animals throughout the year, on payment by professional graziers and free to ryots. The seeding of sâl was good—except in the relatively damp forests. The rubber plantations (*ficus elastica*) at Charduar were kept in good order; arrangements were being made for their disposal by lease. Efforts are being made to introduce the cultivation of *ficus elastica* elsewhere in the province. The gross yield of the forests is given as 5½ million cubic feet of timber and 11½ million cubic feet of fuel. In recent years there has been a steady growth of net revenue.

Eastern
Bengal and
Assam.

The total area of reserves in Madras was 19,620 square miles, of which 13,541 square miles were classed as forests, 256 square miles being added during the year. The early completion of the remaining settlement work is anticipated, and the total of settled and systematically protected forest will amount approximately to one-seventh of the area of the Presidency, excluding the great feudatory States. A Survey of India party continued to work in the Presidency, and a certain amount of departmental survey was also done. As regards the management of the forests, detailed working plans were

Madras.

FORESTS. sanctioned for 602 square miles during the year, and plans for 1,041 square miles were under preparation; the area for which working plans have still to be prepared is estimated to be 8,913 square miles. Protection from fire was undertaken over 7,357 square miles, and was successful in only 92·8 per cent. of that area, on account of incendiarism and an abnormal season in several districts. The regular plantations, consisting chiefly of teak in Malabar, eucalyptus on the Nilgiri and Palni hills, and casuarina on the eastern coast, covered more than 23,000 acres, and there was a large area under other cultural operations. The area of reserves open to cattle for grazing throughout the year was about 17,600 square miles. The yield of the forests according to the returns was about 2½ million cubic feet of timber and 24 million cubic feet of fuel, besides 39 millions of bamboos, and other minor produce; the timber included 238,000 cubic feet of teak, and many other valuable woods. The out-turn was greater than in 1905-06, and in spite of increased expenditure the net surplus has been only once exceeded in former years.

Bombay. The area of the reserved forests in the Bombay Presidency was 13,356 square miles at the end of 1906-07, while that of the protected forests was 970 square miles, the total area of forest remaining much the same as in the preceding year. There were also various reserves under the management of the Department, covering an area of about 12,000 square miles, and a large area of fodder reserves and pasture lands under the Revenue Department. Working results were generally good, natural reproduction being excellent almost everywhere. The area of forest fires, however, nearly doubled in Sind and increased by 3 per cent. in the Central Circle. There was a general increase in prosecutions for forest offences in the Central Circle. Financial results were most satisfactory, the Northern Circle showing an increased surplus of over £16,700.

Coorg. The area of reserved forests in Coorg was 476 square miles, while that of the reserved lands was 30 square miles. The management of the protected forests, 570 square miles in area, consisting of village forests, or sacred groves, has been transferred to the revenue authorities. No new working plans were approved during the year; such plans existed for 178 square miles. The steps taken by the Forest Department to deal with the "spike" disease in sandal trees, which form a valuable part of the forest produce, continued to be successful in preventing the disease from spreading to new areas. 730 acres were disafforested for purposes of rubber cultivation. Protection against fire was undertaken over about 203 square miles, and was entirely successful, not a single fire having entered the forests. The out-turn of the forests included 273,000 cubic feet of timber and 79,000 cubic feet of fuel. Elephant catching operations met with good success.

CHAPTER X.

AGRICULTURE AND MINERAL RESOURCES.

AGRICULTURE.

AGRICUL-
TURE.

The greater part of the scheme for the development of agricultural experiment and instruction put forward in 1905, has now been realised in fact. Its objects are based on the principle, which has become generally accepted, that effective improvement in Indian agriculture depends largely, or mainly, on the application of European science to Indian conditions. India has been a land of skilled agriculturists for hundreds of generations, and it is chiefly necessary at present to prosecute, with more system and energy than heretofore, inquiries into the existing methods of Indian agriculture, which will enable the Government to improve and develop them on natural lines. There is, therefore, no intention to make any break in the continuity of work, which has been hitherto in the hands of Provincial Departments of Agriculture; but the necessary researches will be prosecuted with more scientific method and greater scientific knowledge than was previously possible.

This 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 should be available in India, in order that the country may become self-supporting, so far as that is possible, in the scientific development of agricultural methods on lines suited to the local conditions. For this purpose, in addition to the Central Research Institute and Agricultural College at Pusa, which has been provided with a Director and six European experts, there is to be established, in each important province, an agricultural college and research station, equipped with laboratories and class-rooms, and connected with a farm of suitable size. The notes on the provincial reports which follow show that the organisation of several of these institutions is now nearly complete. A staff of specialists has been sanctioned, the number being limited to the minimum requirements in the first instance, the majority of whom have been already appointed and have entered upon their duties.

In each large province, with the exception of the United Provinces, the Department of Agriculture has been separated from the Department of Land Records and placed under a separate Director. Deputy Directors also have been appointed in seven provinces.

The working of the Land Records organisations, formerly dealt with here, is now described in Chapter VII. The following provincial details on the subject of seasons and crops, and agricultural inquiry and experiment, are taken from the reports of the provincial Departments of Agriculture:—

The rainfall in Bengal was not well distributed during the year 1906-07. Bengal. It was in defect from April to July; in July and August it was general and heavy, especially in North Behar, where the crops were seriously damaged by floods; in October, the critical period for the *aghani* and *rabi* crops, it was unequally distributed. The total area cropped in 1906-07 was 42½ million acres, against 42¾ millions in 1905-06, and a normal total of 45 millions. The three rice crops of the year covered 24½ million acres, falling short by 600,000 acres of the area of the previous year, and by 1,600,000 acres of the normal; there was a large increase in the area under jute. It has frequently been asserted that the rapid extension of jute cultivation has been at the expense of the rice crops; but experiment shows that even if the area under jute should enormously increase, the supply of rice need not

AGRICULTURE.

necessarily be endangered, for the ryot can take a crop of jute off the land and also grow his paddy as before. The final estimate of the outturn of autumn crops was 70 per cent. of the normal, and the winter rice crop was estimated to be 73 per cent. of an average crop. Besides the winter rice crop, which is the most important crop of the province, the following crop outturns may be quoted: Autumn rice, 65 per cent. of the normal; jute, 76 per cent.; sugar cane, 89 per cent.; gram, 79 per cent.

The abnormally high prices of food grains during the year were the subject of special inquiry; many causes probably combined to bring about the high range of prices, of which the principal were the poor rice harvests of the two preceding years, and the enormous sums of money received by the cultivators in payment for jute, enabling them to increase their own consumption and to withhold stocks that would otherwise have been thrown upon the market. The high prices naturally benefited those agriculturists who had a surplus to dispose of; but the landless middle classes and the poorer classes outside the jute districts were generally hard pressed. In several districts, however, there was a rise in wages side by side with the high prices of food grains, and the demand for labour was keen throughout the year. In Darhbhanga famine was declared and relief works opened.

During the year ten students passed the final examination at the Sibpur College; in view of the establishment of a Provincial Agricultural College near Bhagalpur, the agricultural classes at Sibpur will be closed after November 1908. The organisation of the central seed store was completed. Important experiments with jute were continued with satisfactory results; an account of them was embodied in a vernacular leaflet, which was distributed in large numbers throughout the jute-growing areas of the province. Owing to the repeated failure of the experiments with exotic varieties of cotton, experiments were made with indigenous varieties, satisfactory results being obtained. Experiments were also made with *aman* paddy and the *ikri* variety of sugar cane. The experiment stations, with the crops to which special attention was being given in each, were as follows:—Burdwan (rice and jute), Dumraon (sugar cane and wheat), Sripur (maize, oats, and millet), Cuttack (rice, jute, and potatoes), and Sibpur (jute, rice, sugar cane). Land was prepared for two new stations at Sabaur and Bankipore. Research work was also being conducted with regard to indigo at Sirsia and Pusa, as well as in England.

A scheme was under consideration to give effect to the recommendations of the Committee appointed to inquire into the state of the silk industry, which reported during the year.

United Provinces.

The rains set in gradually during the month of June, and they were exceptionally favourable throughout, except in the east and north-east; the cold weather was unsatisfactory, too dry at first and very much too wet late in the season. The cultivated area of the provinces exceeded that of the previous year by 3 per cent. and the normal by 2·6 per cent. The crop area of the autumn harvest was 24 million acres, and the area under spring crops nearly 20 million acres. Of the autumn crops, early rice (4½ million acres) yielded 101 per cent. of the normal, millets (6½ millions) from 93 to 107 per cent.; among spring crops, wheat (7 millions) yielded 102 per cent., barley (4½ millions) 105 per cent., gram (5½ millions) 98 per cent. The prevailing high prices were much felt by persons on small fixed incomes and by landless labourers; but there seems to have been a rise in money wages, and there was little unemployment.

Of the ten agricultural stations to be eventually provided in these provinces, four were already in existence. The agricultural college was definitely established, though in temporary quarters; the Economic Botanist and the Agricultural Chemist arrived at Cawnpore, the laboratories for their use being nearly equipped. Among the operations of the Agricultural Department an important place is held by the system of distribution of seed and implements, which is of great and increasing value to the public. The increased number of private farms and the growth of correspondence and of requests for personal advice, suggest a growing popular interest in the operations of the department. Further distribution of acclimatised American cotton seed of the upland type gave generally satisfactory results.

The first wage census of the United Provinces was carried out during the year. AGRICULTURE.

The first phase of the monsoon of 1906 in the Punjab was satisfactory in districts dependent on the rainfall, and the second phase was everywhere excellent. The months of October and November were, as usual, rainless, and no rain fell until the 18th December; but during the season as a whole nearly every district received a rainfall above the average. The total area sown in the year is returned as nearly 30 million acres; or about 9 per cent. above the normal; the proportion of the autumn to the spring harvest was as 37 to 63. Wheat suffered severely both from rust and from heavy showers and hot winds in April; but the outturn was 97 per cent. of the normal. The cotton crop did not suffer so severely as in the preceding year from the attacks of bollworm. Punjab.

The supply of labour was seriously affected by the ravages of plague among the rural population. Owing to the keen competition for its services, labour was master of the situation, and agricultural labourers certainly profited greatly at the expense of the zemindar class. In many villages, where the plague mortality amongst the male population was of unprecedented severity, the crops were left partly uncut owing to the deficiency of labour.

The total area of crops sown on irrigated land in the year 1906-07 was about 10½ million acres, or 36 per cent. of the total cropped area; the figures show a shrinkage when compared with those of the previous year, as the copious rains enabled the cultivators to dispense largely with artificial irrigation. About 6½ million acres of this area were served by Government canals, and 3½ millions were irrigated from wells. Colonisation on the Chenab Canal, the extension of the Western Jumna, Bari Doab, and Sirhind Canals, and the construction of new canals elsewhere, have resulted in a steady increase of the area irrigated by Government canals during recent years; the area in each year since 1899-1900 is noted in the margin. Detailed comparison is not possible owing to the change by which

Acres irrigated by Government Canals.	
1899-1900	4,243,524
1901-02	4,530,766
1902-03	4,887,677
1903-04	5,508,896
1904-05	5,374,888
1905-06	5,606,237
1906-07	6,801,161*

* Area sown, not area matured as in previous years.

the returns now refer to sown areas and not to matured areas only, as in previous years.

On the Chenab Canal the area allotted to cultivators has grown steadily from 230,800 acres in 1892 to 1,829,880 acres in the year ending in September 1906, only 97,515 acres remaining for allotment, so that the end of the colonisation operations was fairly in view. The area of crops sown was 1,818,000 acres, which was higher than in the previous year; as much as 15 per cent., however, failed. A good wheat crop and the high prices obtained for it did much to compensate for another failure in cotton. A census of the colony showed a population of 858,000.

In the Jhelum colony the area allotted by the end of the year was 338,782 acres, including 34,000 acres allotted during the year; the area sown with crops was 277,800 acres. Special conditions are imposed in the grants in this colony with regard to horse breeding. The enforcement of the condition of residence has worked satisfactorily, and nearly 8,000 new houses were erected during the year. In the Chunian Colony on the Bari Doab Canal 1,547 acres were allotted, bringing the total up to 74,638 acres, of which 71,795 acres were sown.

A separate Department of Agriculture for the Punjab was organised during the year. The European staff was completed by the appointment of a botanist. It was hoped that a college course would be started at Lyallpur in July 1908, where a combined Agricultural College and Research Institute is to be established. Experiments were conducted at the Lyallpur farm and in other parts of the province with respect to wheat varieties and other matters. Attempts were made to account for and to withstand the bollworm pest which ruined the cotton crop of 1905. No definite conclusion as to the value of indigenous cotton compared with the American and Egyptian varieties has yet been reached.

AGRICULTURE.
North-West Frontier Province.

In the North-West Frontier Province the autumn crop for the year 1906 was excellent, the rains being copious and well distributed. Prospects for the spring harvest were very favourable up to February 1907, and, in spite of bad weather in March and April, the crops were above the average both in area sown and in outturn. The rainfall of the year was everywhere in excess of the normal. The total area sown during the year was nearly three million acres, exceeding that of the previous year by a quarter of a million acres; the area under irrigation was 835,000 acres. Wheat, the most important crop, occupied 1,153,239 acres, or 40 per cent. of the total cropped area. The area sown with cotton shows a steady expansion, and amounted to 62,036 acres.

Central Provinces and Berar.

In the Central Provinces the monsoon of 1906 broke in good time, and the rain was generally ample and well distributed, though somewhat too heavy for the cotton crop. The rainfall was favourable for the generation of the spring crops, and enabled large areas of kharif land which had been somewhat damaged by excessive rain to be re-sown with rabi crops. In spite of the comparative deficiency of the cotton crop, the total outturn of agricultural produce was almost equal to the normal yield of a normal area, the rice crop generally, and the wheat harvest in Chattisgarh being excellent.

The Agricultural School was raised during the year to the status of a college with a three years' course; the progress of agricultural education, however, is still far from satisfactory. A new agricultural station to serve Berar was established at Akola in June 1906, and 11 series of experiments, principally with juar and cotton, were initiated. Further experiments and demonstrations were carried on at the other stations.

Substantial improvement and progress were made by the Agricultural Associations during the year. A general readiness was evinced by them to try the various seeds, implements, and manures recommended to them by the Agricultural Department.

Burma.

In Burma the rains began favourably; in the autumn there was a prolonged break, but the final rains were for the most part good, and allowed the crops to recover. The area of crops rose to 12½ million acres, and there was also an increase in the area under occupation. The rice crop covered about 9½ million acres, which is about the same as in the two years preceding. The final forecast for the 15 chief rice-producing districts of Burma estimated an outturn rather above that of 1905-06, and an increase of 220,000 tons of cargo rice in the surplus available for export. Harvest prices of paddy were abnormally high in all districts. The price of wheat also was generally increased.

The appointment of Director of Agriculture in Burma was sanctioned early in 1906, and the first separation of the department from the Department of Land Records was effected during the year. Plans were under preparation for the establishment of an Agricultural College at Mandalay, which is to have an expert staff, consisting of an all-round agriculturist as principal, an agricultural chemist, and an agricultural botanist. The scheme for the Department contemplates three main agricultural stations; the land for that at Mandalay, in connection with the college, and that at Hmawbi in the Hanthawaddy district, for the study of paddy and other Lower Burma crops, has been already acquired. Some experimental gardens were in existence previously; and seeds of various products which appear to merit investigation are distributed for cultivation in suitable parts of the province. The remarkable advance within recent years of the cultivation of ground-nut is one of the greatest successes which have resulted from the working of this system.

Eastern Bengal and Assam.

The total area cropped in Eastern Bengal and Assam during 1906-07 was about 25½ million acres, or about 4 per cent. below the normal. The area under rice was 16 million acres, which is a million acres below the normal, the total outturn being 6½ million tons. The area under jute rose to 2,665,257 acres. The average wholesale price of rice for the year at eight representative marts was Rs. 4.15 per maund, compared with Rs. 3.7 in the previous year and Rs. 2.11 in 1904-05, which is approximately the normal price of recent times. The great bulk of the population realised high

prices for all their surplus produce; the wages of agricultural labourers rose; and only those whose stock of food grains was considerably below their requirements were seriously affected.

AGRICUL-
TURE.

During the year under report the Department of Agriculture was separated from that of Land Records, and progress was made with the organisation of the newly-constituted department, some of the sanctioned staff of expert officers having been recruited. The principal staple crops which were under investigation were jute, cotton, and wheat. The experiments in jute cultivation were in the main satisfactory, and a report published by the Government fibre expert, Mr. R. S. Finlow, shows that the area for jute cultivation is capable of almost indefinite expansion throughout Assam, and that in the Assam valley at least the results should be almost, if not quite, as good as those obtained in the Eastern Bengal districts. Experiments with various kinds of cotton were tried in all the divisions of the Province, and the result was almost universally a failure. The experiments with wheat in the neighbourhood of Lumding were also unsuccessful.

The land for the Government Central Farm at Dacca had been acquired and fenced, and the buildings were in process of erection.

The south-west monsoon in Madras was plentiful and well distributed. The north-east monsoon brought on the whole a normal rainfall, but the distribution was relatively unfavourable, and in consequence the late crops did not do as well as the early one. The total crop area of the year 1906-07 was 29½ million acres, which was slightly in excess of the normal. The rice crop was normal, and covered about 7½ million acres; other food grains were grown on 15½ million acres. The cultivation of cotton, which covered 1½ million acres, was slightly less than in the previous year, but was well above the normal. The agricultural labourers are still paid in kind as a rule, and they therefore benefit by the rise in prices in respect of the surplus which remains, after satisfying their own needs, for exchange for other commodities.

The year 1906-07 was the first of the Agricultural Department's working since its reorganisation. A Director was appointed, with two Deputies to assist him, and all the specialists whose appointment had been sanctioned joined their posts within the year. The buildings required for the Agricultural College and Research Institute at Coimbatore were being pushed forward, and it was hoped that they would be completed in the course of 1908. The large farm attached to the Institute was being brought into good order. A new farm was opened during the year at Nandyal. It is proposed to establish eventually an experimental agricultural station in each important and distinctive agricultural tract. Experiments in sugar cane at the Samalkota station were directed to the production of canes which shall be proof against disease, and some progress was made; there was a keen demand from the ryots in the Godavari delta for the new canes. Experiments were also conducted at the various stations in regard to cotton, jute, ground-nut, and agave. Ten installations for the extension of irrigation by pumping were erected by private persons under the auspices of the department.

The character of the season 1906-07 in the Bombay Presidency was on the whole fair. Autumn crops both in the Presidency proper and in Sind gave a fairly good outturn. The spring crops gave a tolerable outturn in Gujarat and the western parts of the Deccan and Karnatak, but were poor elsewhere. The area under crops in the whole Presidency was 29½ millions of acres, of which 4½ millions were in Sind; the figures for the Presidency proper show an increase of about 9 per cent. as compared with the previous year, and those for Sind an increase of 10 per cent. owing to favourable inundations. Forty-five per cent. of the crop area of the Presidency consisted of millets; cotton covered 14 per cent. of it; and pulses 12 per cent. The area irrigated in the Presidency included 3½ million acres in Sind irrigated by Government canals, the area irrigated in the Presidency proper rising to 671,000 acres, chiefly of well irrigation.

Thirteen agricultural stations were in charge of the Department of Agriculture, and the season was good on the whole, compared with those of the past few years. The most important work was in connection with cotton, and was directed to the breeding of new varieties, the distribution of selected

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seed, and the investigation of the varieties grown in Khandesh. A large number of experiments with sugar cane, ground nut, wheat, tobacco, and other crops were in progress. Progress was made with the organisation of the College of Agriculture at Poona, and the construction of the new buildings, at an estimated cost of £23,000, was in progress. Meanwhile, the work is being carried on at the Poona College of Science. In 1905-06 there were 113 students on the College rolls compared with 27 in 1902-03.

AGRICULTURAL PRODUCE.

AGRICULTURAL PRODUCE.

The following tables show the area under different crops, in British India, and their territorial distribution, for 1905-06, 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 extent to which this practice prevails is shown at the end of the tables.

TERRITORIAL DISTRIBUTION OF THE PRINCIPAL CROPS IN 1905-06.

Figures in Thousands of Acres, omitting 000.

Administrations.	Rice.	Wheat.	Barley.	Jowar or Oholum (Great Millet).	Bajra or Cumba (Spikol Millet).	Ragi or Marua (Millet).	Maise.	Gram (Pulse).	Other Food- Grains and Pulses.	Total Food- Grains and Pulses.	Oilseeds.	Sugar.
Bengal	25,352	1,259	1,531	158	33	940	1,825	978	4,451	36,522	2,204	501
Eastern Bengal	12,986	160	61	6	1	5	22	63	1,203	14,507	1,477	177
Assam	3,803	10	—	—	—	—	1	—	107	3,922	803	49
United Provinces (Agra).	4,253	4,791	3,137	2,098	1,793	188	1,374	3,697	4,249	25,527	602	954
United Provinces (Oudh).	2,826	1,712	991	853	873	100	797	1,545	2,418	11,115	153	266
Punjab	493	8,505	1,206	694	829	17	896	2,943	1,285	16,808	1,195	155
N. West Frontier Province.	30	917	315	33	71	—	312	113	79	1,900	72	26
Upper Burma	1,964	85	—	858	75	—	95	77	332	3,434	869	32
Lower Burma	7,320	—	—	—	—	—	18	2	29	7,368	63	11
Central Provinces - Berar	4,178	3,020	12	1,861	41	19	134	863	4,200	14,337	1,861	18
Madras	28	424	—	2,660	57	—	2	153	534	3,859	267	2
Bombay	7,471	15	8	4,702	2,978	1,699	72	135	6,218	23,293	1,907	163
Sind	1,512	963	23	6,570	4,354	460	158	332	2,575	16,940	1,181	56
Minor Provinces (Ajmere, Coorg, and Manpur).	1,014	585	17	670	867	1	1	123	255	3,535	323	3
	79	5	80	43	32	5	47	7	13	262	7	—
Total	73,310	22,402	7,327	20,703	11,504	3,385	5,786	11,024	27,956	133,398	12,486	2,413

Administrations.	Cotton.	Jute and other Fibres.	Opium.	Tea and Coffee.	Tobacco.	Fodder Crops.	Orchards and Garden Produce.	Miscellaneous Crops.		Total Area cropped.	Deduct Area cropped more than once.	Net Area cropped.
								Food.	Non- Food.			
Bengal	73	679	209	†38	165	123	732	808	922	42,988	6,666	36,317
Eastern Bengal	1	2,581	—	†38	364	2	530	531	456	20,309	4,894	15,415
Assam	8	38	—	†389	6	32	363	36	37	5,134	312	4,822
United Provinces (Agra).	1,318	97	254	8	83	870	362	161	136	30,911	5,212	25,699
United Provinces (Oudh).	44	31	184	—	15	122	144	80	12	12,167	2,872	9,295
Punjab	686	44	7	†10	68	2,107	164	391	66	23,144	4,032	19,112
N. West Frontier Province.	42	—	—	—	10	74	8	38	3	2,584	367	2,197
Upper Burma	163	—	—	†1	27	26	41	101	8	4,703	305	4,398
Lower Burma	10	—	—	—	49	2	362	61	79	8,005	4	8,001
Central Provinces - Berar	1,658	87	—	—	12	298	33	52	2	18,407	1,482	16,925
Madras	3,192	27	—	—	14	—	20	—	1	7,421	10	7,411
Bombay	1,389	99	—	†64	132	257	393	511	491	29,771	3,539	26,232
Sind	3,700	108	—	—	65	23	120	240	4	22,401	424	21,977
Minor Provinces (Ajmere, Coorg, and Manpur).	280	1	—	—	9	2	42	77	38	4,241	374	3,867
	23	—	—	†48	—	—	4	48	1	357	22	335
Total	13,992	3,792	654	607	1,018	3,340	3,917	3,090	2,265	233,040	30,535	207,505

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

† Tea.

‡ 51 Coffee; 13 Tea.

§ Coffee.

Regarding some of the more important staples of Indian agriculture, particulars for the year 1906-07 are given below; they are taken from the crop forecasts published by the Government of India, which in many cases do not correspond exactly with the figures given above for the year 1905-06, the chief difference being due to the inclusion here of Native States.

AGRI-CULTURAL PRODUCE.

The estimated area and yield of wheat is given thus:—

Wheat.

	1906-07.		1905-06.		Average for last Five Years.	
	Area.	Yield.	Area.	Yield.	Area.	Yield.
	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.
Punjab - - - -	9,037,800	3,282,900	8,572,100	3,510,300	7,366,500	2,618,900
North-West Frontier Province.	1,146,400	305,200	1,024,600	279,700	900,900	247,300
United Provinces - -	7,039,100	2,164,500	6,478,900	2,428,700	7,131,400	2,577,200
Bengal - - - -	1,402,600	388,700	1,248,300	396,600	1,274,700	391,700
Eastern Bengal - -	158,700	44,000	159,800	50,000	193,000	83,000
Central Provinces and Berar.	3,689,800	904,700	3,443,800	834,400	2,877,900	616,300
Bombay - - - -	1,596,200	328,200	1,347,200	275,100	1,835,300	386,000
Sind - - - -	623,600	176,600	628,100	196,200	491,400	127,300
Hyderabad - - -	1,039,500	58,000	934,500	41,800	823,000	59,000
Rajputana - - -	810,000	215,000	604,000	145,000	845,000	190,000
Central India - -	2,895,900	639,800	1,852,100	420,600	1,613,800	376,200
Mysore - - - -	4,600	440	2,400	140	4,500	410
Total - - - -	29,444,200	8,508,040	26,295,800	8,578,540	25,357,400	7,673,310

The following figures give the quantities (in sers) sold for a rupee in the first half of the months mentioned:—

	Punjab.	United Provinces.	Central Provinces and Berar.	Bombay.
March 1903 - - - -	15.01	14.75	12.94	10.35
" 1901 - - - -	16.85	15.67	14.1	13.24
" 1905 - - - -	14.81	12.13	13.64	12.47
" 1906 - - - -	13.15	10.56	11.36	8.86
" 1907 - - - -	16.28	12.69	13.34	9.97

Wheat exports are subject to great fluctuations, as will appear from the following particulars:—

2,500 tons in - - - 1900-01	2,150,000 tons in - - - 1904-05
515,000 " - - - 1902-03	938,000 " - - - 1905-06
1,296,000 " - - - 1903-04	802,000 " - - - 1906-07

The combination of a considerable increase in the area under wheat cultivation with a small decrease in the estimated yield is explained by the prevalence of rust, which dull weather rendered very serious over wide extents of country. The yield, however, was well in excess of the average of the five years preceding. 57 per cent. of the total area under wheat in India is in the Punjab and the United Provinces, 51 per cent. of the wheat area in each of these provinces being irrigated.

	Average of previous Five Years.	Previous Year.	Year under Review(a).
Outturn, thousands of tons - - - -	7,675	7,532	8,578
Exports, thousands of tons - - - -	1,053	937	802
Average export value per ton, rupees - - -	86	91	90.5
Imports, thousands of tons - - - -	7	23	10

(a) In respect of area and outturn, the "year under review" is 1905-06. In respect of exports and imports, the "year under review" is 1906-07. The wheat exported in one financial year is drawn mainly from the crop of the previous year.

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OIL SEEDS:

The area under, and the yield of, the main oil-seed crops for all India may be approximately given thus:—

	Average for preceding Five Years.		1905-06.		1906-07.	
	Area.*	Yield.	Area.*	Yield.	Area.*	Yield.
	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.
Rape and mustard	3,539,200	1,012,600	4,052,800	968,700	4,196,500	1,073,600
Linseed	2,908,600	412,200	2,711,800	352,900	3,028,200	422,300
Sesamum	3,424,100	357,000	3,154,100	292,700	3,101,000	420,600
Groundnut	444,700	{ Not available }	485,900	211,200	601,400	299,000

* These figures do not include an area in the United Provinces, estimated at about 3½ millions of acres, on which the crops are grown mixed with other crops. A conjectural yield for that area is included in the figure given. Apart from this, the figures given above are very unreliable, in regard to both area and yield.

The rape and mustard-seed crop is grown chiefly in the United Provinces, the Punjab, Eastern Bengal, and Bengal; linseed in the United Provinces, the Central Provinces, and Bengal; sesamum in the United Provinces, the Central Provinces, Bombay, Madras, and Hyderabad; and the groundnut area lies chiefly in Madras and Bombay. For oil seeds generally the season was satisfactory. Details relating to the export of seeds, which represent about 16 per cent. of the entire exports of Indian raw produce, are given below:—

Quantity of each Seed exported in the last Five Years (Unit 1,000 cwt.).

	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.
Linseed	6,328	8,616	11,182	5,789	4,379
Rape	3,927	4,343	5,155	1,994	3,725
Cotton	3,974	2,677	2,529	3,891	4,391
Sesamum	3,733	3,513	2,517	1,685	2,741
Groundnuts	1,036	1,922	1,674	1,374	1,725
Castor	1,725	1,567	1,461	1,299	1,501
Poppy	966	1,315	1,363	797	803
Other sorts	478	528	993	747	466
Total	22,194	24,681	26,874	17,576	19,731
Value - £	9,922,000	9,677,000	9,607,000	7,073,000	8,680,000

In the last two years a much larger proportion of the linseed grown was retained in the country than formerly, in spite of a rise in the export price. The price of rapeseed per cwt. (at Bombay) rose from Rs. 5½ in 1904 to Rs. 7¼ in 1905, Rs. 8¾ in 1906, and Rs. 9¾ in 1907. There was a rise of 12 per cent. in the price of cotton seed during the year under review, which is attributed partly to the dearness of linseed.

rice.

The provinces for which rice crop statistics are given below ordinarily include 78 per cent. of the Indian rice crop:—

	Area in Acres.			Yield in Tons of Cleaned Rice.		
	Average of preceding Five Years.	1905-06.	1906-07.	Average of preceding Five Years.	1905-06.	1906-07.
Bengal	24,064,000	25,150,600	24,506,200	10,654,900	11,398,000	9,773,100
Eastern Bengal and Assam	Not available	15,960,200	16,105,800	Not available	5,069,900	6,123,800
Madras	7,034,000	6,604,400	6,934,900	2,554,900	2,291,700	2,519,800
Lower Burma*	6,622,000	6,713,400	6,988,500	2,917,000	2,724,000	2,840,300
Total	—	54,428,600	54,535,400	—	21,483,600	21,257,000

* Final estimate not available

The total yield of these provinces was expected to be slightly below the yield of 1905-06, chiefly owing to a falling off in Bengal. Other provinces, notably the United Provinces, the Central Provinces, and Madras, produce a large quantity of rice.

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Exports of rice represented 67 per cent. of the total value of food grains exported from India in 1906-07. The most salient features of the trade were the strong internal demand, high prices, the large shipments from Burma to India proper, and the substantial diminution of exports to foreign countries. These facts are probably to be explained partly by a shortage in the crop, and partly by exceptional prosperity and enhanced consuming and holding power amongst cultivators and the population generally. The following statement shows the quantity and value of the exports abroad, which are subject to an export duty of three annas per maund, during each of the last five years :—

—	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.
Quantity - in tons	2,374,240	2,250,100	2,474,300	2,151,800	1,935,200
Value - in £	12,595,000	12,722,000	13,079,000	12,423,000	12,348,000

The shipments of rice from Burma to India proper amounted in 1906-07 to 821,000 tons, being an increase of 78·4 per cent. on the figures of the previous year, and nearly 171 per cent. on those of 1904-05. In former years almost the whole of these shipments were to Bombay and Madras; but in 1906-07 about two-thirds went to Bengal and Eastern Bengal. The average declared price for the year of rice exported from Calcutta was Rs. 7 per cwt., compared with Rs. 5½ in the previous year, which was itself an exceptionally high rate. The increase of price in Rangoon was not so marked, but there was, nevertheless, an advance of 19 per cent. during the year. The unprecedented price of rice in Bengal must be largely attributed to the extraordinary prosperity of the cultivators of jute.

The area under cotton in India is returned and estimated as follows for Cotton. the last three years :—

—	1904-05.		1905-06.		1906-07.	
	Area (Acres).	Yield in Bales (of 392 lbs. each).	Area (Acres).	Yield in Bales (of 392 lbs. each).	Area (Acres).	Yield in Bales (of 392 lbs. each).
Madras (ryotwari areas only)	1,755,000	132,000	1,597,000	145,000	1,544,000	157,000
Bombay, with Native States, Sind, and Baroda.	6,176,000	893,000	6,948,000	1,282,000	7,458,000	1,895,000
United Provinces -	1,201,000	368,000	1,372,000	394,000	1,489,000	638,000
Punjab and North-West Frontier Province.	1,674,000	418,000	2,079,000	205,000	1,469,000	370,000
Central Provinces and Berar	4,553,000	1,229,000	4,849,000	818,000	4,852,000	882,000
Nizam's Dominions -	2,781,000	330,000	2,537,000	303,000	3,486,000	430,000
Burma -	189,000	39,000	183,000	35,000	186,000	35,000
Central India -	846,000	136,000	979,000	130,000	1,177,000	227,000
Rajputana -	469,000	186,000	291,000	61,000	428,000	176,000
Bengal -	78,000	20,000	71,000	16,000	75,000	16,000
Eastern Bengal and Assam	50,000	17,000	61,000	17,000	57,000	14,000
Mysore -	71,000	5,000	76,000	5,000	89,000	10,000
Ajmere-Merwara -	52,000	53,000	29,000	15,000	40,000	58,000
Total -	19,918,000	3,826,000	21,072,000	3,426,000	22,344,000	4,908,000

Of this total area, some 13,537,000 acres are in British territory. This is less than the area cultivated in 1905-06, on account of the shrinkage in the Punjab, where the preceding season had been disastrous for cotton. The total area showed a marked increase, and the character of the season was generally favourable, although the crop suffered from disease and insects in various quarters. The average yield per acre was expected to be about 88 lbs. This would be the largest recorded average yield for all India, but it has often been exceeded in single districts or provinces, and compares very poorly with the estimated average of 233 lbs. per acre in America in 1906.

The exports of raw cotton from India in recent years which, in 1906-07 represented 27 per cent. of the whole value of Indian raw materials exported, have been as follows :—

AGRI- CULTURAL PRODUCE.	1899-1900	-	-	4,373,000 cwts., valued at	£6,617,000
	1901-02	-	-	5,700,000 "	9,617,000
	1903-04	-	-	7,931,000 "	16,251,000
	1904-05	-	-	5,657,700 "	11,623,000
	1905-06	-	-	7,396,000 "	14,222,000
	1906-07	-	-	7,397,000 "	14,644,000

Prices were somewhat higher than in 1905-06, and the textile trade was very active throughout the world. In India, however, there was a considerable slackening in the late months, and mill consumption fell from 7,234,800 cwts. to 6,943,900 cwts. References have already been made, in the earlier part of this chapter, to the work that is being done in the various provinces with a view to classifying the Indian cottons, introducing the most suitable varieties, and extending the area under cotton cultivation.

TEA. The following is an estimate of the cultivation and the production of tea in British India and Travancore during recent years; for Southern India and Travancore the figures are not reliable:—

	Area under Tea, in Acres (Mature and Immature Plants).			Production of Tea in Lbs.		
	1904.	1905.	1906.	1904.	1905.	1906.
Bengal	53,000	53,000	51,000	13,953,000	12,781,900	15,531,700
Eastern Bengal	81,700	83,100	83,300	39,933,000	40,788,800	44,602,900
Assam	337,800	339,200	340,500	143,197,000	151,904,800	162,468,000
Madras	13,000	13,500	13,500	1,653,000	1,538,500	3,094,500
United Provinces	8,000	7,900	8,000	2,573,000	2,474,700	2,290,200
Punjab	9,300	9,400	9,400	1,917,000	1,432,200	1,237,700
Travancore and Cochin	24,700	25,300	25,900	9,074,000	10,147,600	11,186,300
Burma	1,400	1,500	1,500	266,000	419,500	438,600
Total	528,900	532,900	533,300	212,566,000	221,488,000	240,849,900

These figures show that the yield continues to increase much faster than the area under cultivation; since 1885 the area has increased by 86 per cent., and the quantity produced by 236 per cent. The production of green tea was reported to be 4,871,000 lbs. in 1904, 3,999,000 lbs. in 1905, and 3,587,000 lbs. in 1906. The year under review was, on the whole, one of the most prosperous recorded in the Indian tea trade. The reduction of the British duty stimulated the market, and the demand for Indian tea was further increased by a contraction of some 3 million lbs. in Ceylon's production and by a shortage in the shipments from China. The tea gardens of India are reported to have given employment during 1906 to 489,000 persons permanently and 81,600 temporarily, there being an addition of 22,000 permanent employes during the year. The capital engaged in the production of tea in India is returned at £14,540,900, but this takes no account of the large but unknown quantity of private capital engaged. An estimate of the consumption of tea in India which appeared in the *Indian Trade Journal* of 12th July 1906 put the consumption of rather less than half the total population at 4.2 million lbs., or .033 lb. per head. The exports of Indian tea during the last three years are returned as follows:—

	1904-05.	1905-06.	1906-07.
	Lbs.	Lbs.	Lbs.
To United Kingdom	167,844,000	166,754,000	176,344,000
" Canada	12,607,000	15,019,000	14,494,000
" Australia and New Zealand	6,601,000	7,729,000	9,499,000
" Ceylon	1,293,000	2,101,000	4,825,000
" China, Hong Kong	1,201,000	1,364,000	1,401,000
" China, Treaty Ports	612,000	1,708,000	3,419,000
" Russia	9,332,000	9,988,000	13,761,000
" Germany	930,000	795,000	1,201,000
" Persia	3,136,000	1,102,000	929,000
" Turkey	4,372,000	3,846,000	3,713,000
" United States	2,237,000	2,176,000	1,749,000
" Other Countries by Sea	2,321,000	2,343,000	3,077,000
" " " " Land (chiefly Kashmir)	2,258,000	2,373,000	2,300,000
Total	214,784,000	217,297,000	236,732,000

In 1906, 20,806,000 lbs. were re-exported from the United Kingdom, and of this amount 8,250,000 lbs. were consigned to Russia. According to the British returns, the tea imported into the United Kingdom for home consumption or re-export has come from China, India, and Ceylon in the following proportions:—

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In the Year	From China.	From India.	From Ceylon.
1865	93 per cent.	2 per cent.	C per cent.
1875	86 "	18 "	0 "
1885	66 "	30 "	2 "
1895	16 "	46 "	32 "
1905	5 "	54 "	36 "
1906	4 "	57 "	33 "

The duty levied on tea imported into the United Kingdom was reduced from 6d. to 5d. with effect from the 14th May 1906. There was also a reduction in the German import duty, which from the 1st March 1906 was equivalent to 1½d. per lb., compared with 5½d. before that date. Prices of the principal grades of tea at the Calcutta sales showed a rise of about 8 per cent., and prices generally stood at a higher level than in any year since 1899.

Jute is chiefly grown in Northern and Central Bengal and the eastern districts of Eastern Bengal. Outside the Bengal provinces an appreciable amount is grown in Madras, where the fibre is obtained from a different species of jute, and the cultivation of the plant is also progressing in Nepal. High prices have recently encouraged jute cultivation in Behar, and several thousand acres were under the plant in 1906. The ryot in Bengal is highly susceptible to the influence of prices, and is reported to vary his cultivation from rice to jute and *vice versa* according to which product commands a better profit in the market. The high prices of recent times have unquestionably favoured jute as opposed to rice. 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 yield of the crop in a normal season is expected to average 15 maunds per acre. The season of 1907 was moderately favourable for jute. The figures for acreage and outturn in the Bengal provinces in recent years have been estimated as follows:—

Year	Acreage.	Outturn in Bales (of 400 lbs. each).
1891	1,403,445	5,717,400
1895	2,242,700	5,551,000
1900	2,093,403	6,526,000
1905	3,128,300	8,088,093
1906	3,482,900	9,127,400
1907	3,883,200	9,585,800

These figures do not include statistics for Cooch Behar, Nepal, Madras, and Upper India; the outturn of these tracts in 1906 was reported to be 140,000 bales.

The year under review was one of extraordinary activity and unprecedented profits. It has been computed that the cultivators received some £26·6 millions in payment for jute, and that of this sum about £10 millions was profit, due to the abnormal prices to which the raw material attained. For the 10 years ending with 1897-98 the average price per ton was £13 3s. 10d., the highest price obtained being £20 and the lowest £7 10s. Since then the sterling highest and lowest prices for medium jute per ton, and the highest and lowest rupee prices for the same quality per bale, at the commencement of any month have been:—

AGRI-
CULTURAL
PRODUCE.

	Per Ton in £.		Per Bale in Rs.	
	Highest.	Lowest.	Highest.	Lowest.
1899	£ s. d. 14 12 6	£ s. d. 11 5 0	Rs. a. 39 0	Rs. a. 28 8
1900	15 15 0	12 15 0	39 0	34 0
1901	15 0 0	11 2 6	36 8	30 0
1902	18 7 6	11 7 6	36 0	29 0
1903	14 15 0	12 5 0	37 0	28 8
1904	15 5 0	13 2 6	38 8	30 0
1905	19 10 0	16 5 0	46 8	39 0
1906	28 0 0	19 5 0	72 0	47 0
1907*	26 15 0	22 10 0	62 8	54 0

* For the first portion of the year; these prices were not maintained at the close of 1907, and there were symptoms of a fall to the level of 1905.

The total Indian consumption in 1906-07 is estimated at 15 million cwts. For details regarding jute manufactures in India reference may be made to Chapter XV. The fluctuations of the jute export trade during recent years have been as follows:—

Year.	Raw Jute.		Jute Manufactures.	Total Exports. Value.
	Quantity.	Value.	Value.	
	Cwts.	£	£	£
1901-02	14,755,000	7,865,000	5,807,000	13,672,000
1902-03	13,036,000	7,418,000	6,013,000	13,431,000
1903-04	13,721,000	7,812,000	6,313,000	14,125,000
1904-05	12,875,000	7,977,000	6,626,000	14,605,000
1905-06	14,480,000	11,417,000	8,299,000	19,716,000
1906-07	15,970,000	17,892,000	10,477,000	28,369,000

Of the raw jute exports in 1906-07, about 43 per cent. went to the United Kingdom, 22 per cent. to Germany, 13 per cent. to the United States, and 10 per cent. to France.

Prior to 1825 imports of jute into Europe were confused with hemp. In 1832 a Dundee manufacturer showed that it could be used as a substitute for hemp, and since that time jute has steadily gained in favour, although shipments were not large for many years. India has enjoyed so far a virtual monopoly in the production of the fibre. Jute of a satisfactory quality can be successfully grown in the United States and Brazil, but not at a price which enables it to compete with the Indian product. The recent rise, however, has stimulated experimental cultivation in Rhodesia, West Africa, and other parts of the world. The position of Indian jute in the past has depended primarily upon its cheapness, which has enabled it to defeat its possible substitutes, and has prevented the existence of any sufficient stimulus for competitive production elsewhere.

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

The area under sugar in India is estimated as follows for the provinces mentioned :—

AGRI-
CULTURAL
PRODUCE.
SUGAR.

—	Area in Acres.			Outturn in Tons.	
	Average of Five preceding Years.	1905-06.	1906-07.	1905-06.	1906-07.
Bengal - - - - -	461,400	421,600	423,500	426,700	419,300
Eastern Bengal - - -	—	201,500	199,900	188,500	193,500
United Provinces - - -	1,181,300	1,228,900	1,386,700	884,000	1,264,600
Punjab and North-West Frontier Province.	359,300	198,300	286,200	111,800	245,600
Madras - - - - -	50,000	60,700	52,500	114,500	100,400
Total - - - - -	—	2,111,000	2,348,800	1,725,500	2,223,400

These provinces ordinarily contain some 95·5 per cent. of the whole sugar cane crop of British India. Too much reliance, however, must not be placed on the figures given in this table. In many of the areas in which the largest quantities of sugar cane are grown no accurate records are available, and it is stated that sugar cane is often grown in small and irregular clumps whose extent is not easily estimated. The estimates of outturn have been based on the assumption that in India a yield of one ton per acre is *normal*. It is possible that this calculation, which compares unfavourably with the estimated yield of 4 tons in Hawaii, 3·44 tons in Java, and 2 tons in Cuba, leads to results somewhat below the correct figure. The season 1906-07 was generally favourable. The improved yield in the United Provinces and the Punjab, where the crop in 1905-06 was exceptionally poor, was the principal cause of the increased total production. To the sugar cane cultivated in British India must be added the extensive but uncalculated crops grown in Native States. In stating the total output account must also be taken of the production of palm sugar, which for Bengal and Eastern Bengal has been estimated at 163,000 tons. The total normal output of sugar products in India has been reckoned, somewhat hazardously, as being the equivalent of between four and five million tons of raw sugar. By no means all of this amount is ever converted into "refined" sugar; for a considerable quantity both of cane in the raw state and of the unrefined sugar or gur is consumed as food. The imports of sugar, including confectionery and molasses, during recent years are given as follows, the figures representing for the most part refined sugar :—

—	1900-01.	1901-02.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.
From—	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Austria-Hungary - - -	66,065	112,897	44,401	14,963	72,062	117,036	80,859
Germany - - - - -	20,100	28,857	7,284	365	8,824	35,636	100,070
Mauritius - - - - -	124,476	109,158	118,309	144,156	89,830	115,370	139,861
China - - - - -	24,372	9,138	28,430	17,449	14,250	6,535	2,568
Java - - - - -	11,262	16,033	28,683	66,777	100,167	96,463	206,762
Other Countries - - -	17,565	21,654	74,686	72,982	61,686	42,516	25,082
Total - - - - -	263,840	297,737	273,110	316,692	346,819	413,556	555,202

The imports from Austria and Germany were of beet sugar, and those from Mauritius, China, and Java of cane. The large increase in the total amount was no doubt due in part to the failure of the cane crop of 1905-06 in Northern India; but the imports must also have been influenced by the general decline from the prices which obtained in the preceding year.

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

A revised edition of "Notes on Sugar in India," by Mr. Noel-Paton, Director-General of Commercial Intelligence, was published during the year.

CO-OPERATIVE CREDIT SOCIETIES.

CO-OPERATIVE CREDIT SOCIETIES.

The latest reports on societies formed under the Co-operative Credit Societies Act of 1904 refer to the fifteen months preceding 30th June 1907. In September 1906 the Registrars of the societies in the various provinces met in conference, and conclusions were reached regarding the policy to be pursued during the early years of the movement in respect of a number of points of detail. It is, however, still too soon to say what measure of success the societies are likely to achieve. They are still for the most part somewhat artificial products, and the ability to continue in virtue of their own internal force, which is essential for the success of any co-operative movement, has only begun to be developed. It is difficult to know how far it is wise to bestow the fostering care of Government, and how far the societies should avail themselves of the services of well-wishing friends outside their own ranks, or of funds philanthropically provided. At the present stage also, when one failure would more than counterbalance a number of successes, it is necessary for the Registrar to pay a minute attention to the affairs of each society, which ought to give place eventually to experienced management on the part of the co-operators themselves. In spite of initial difficulties, however, the tables which follow and the notes on the working of the societies in the various provinces in which they have been established show that substantial progress has been made. No information is yet available as to how the societies have fared under the recent stress of scarcity and famine in Northern and Central India.

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. The 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. District Banks, which are of the nature of joint stock lending societies, exist in numbers, and as a regular part of the system, in the United Provinces only, and a few Central Societies exist here and in the Central Provinces. In addition a Central Bank has been founded in Madras with the object of financing village societies, and there is a city bank in Bombay with similar objects; these banks are less truly co-operative than the Co-operative Unions. 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 the business of co-operative credit. Grain banks have been started in Mysore, 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' Association may be mentioned, and there were three very successful co-operative stores in Madras.

Except in Madras, 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.

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. 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 in the following table, 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 higher rates are not infrequently charged, varying from 40 to 175 per cent.

CO-OPERATIVE CREDIT SOCIETIES.

Province.	Village Moneylenders.	Co-operative Credit Societies.	
	Rates per Cent. per Annum charged on good security.	Rate per Cent. charged on Loans to Members.	Rate per Cent. paid on Members' Deposits.
Madras	12 to 15	9	7
Bombay, excluding Gujarat	9 on large loans 12 to 15	9½	6½
Bombay, Gujarat	15 upwards 6 upwards to rich borrowers.	6½	3 to 4
Central Provinces	18 to 25	9½ to 12	7
Bengal	18 to 25	12½	6½ for six months or longer. 3½ for shorter periods.
Eastern Bengal	18 to 37½	9 to 18½, the ordinary rate being 12½	6½
Punjab	18 to 24	9 to 9½	5
United Provinces, Oudh and Meerut	12 to 18	12½	6½
" " other divisions	37½		
Burma	2 to 5 per month	15	9
Mysore	12	12	9

In many cases the moneylenders have not unnaturally disliked the movement; but the only reported instances of active hostility occurred in the Punjab and the United Provinces, and in Madras they actively assisted it in several cases. 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 following table shows the extent to which they depend on each of these various sources:—

		Year ending 31st March 1906.	15 Months ending 30th June 1907.
Capital	Loans from private persons	£ 9,369	£ 43,739
	Share capital	8,747	37,054
	Deposits by members	8,262	38,402
	Loans from Government	4,677	18,983
	Reserve	493	3,907
Total		£ 31,548	142,085
Loan transactions	Loans repaid to private persons	£ 1,357	£ 10,079
	Loans issued to members	22,696	158,931*
	Total	£ 24,053	169,010

* No returns are available of the loans repaid by members during the year.

Except in the Central Provinces and Bengal, in which all loans have been issued for productive purposes, loans are granted by village societies without restriction as to their employment. In Eastern Bengal half the amount

CO-OPERATIVE CREDIT SOCIETIES.

borrowed has been for payment of prior debt bearing exorbitant rates of interest. Cases were reported from Eastern Bengal and the United Provinces in which loans for marriages had resulted in more moderate expenditure than would otherwise have been the case; and there is a society in the Punjab which requires the submission of a schedule of expenditure to be scrutinised and amended, if necessary, before loans for marriages are granted. Such a system can evidently exist only in societies where members are either of the same caste or of castes of approximately the same social standing. It is reported, on the other hand, from the United Provinces, that the caste system is a hindrance to the progress of the movement, and that the lower castes cannot easily obtain the benefits of co-operation; other registrars deny that questions of caste have acted detrimentally so far as their provinces have been concerned.

On the 30th June 1907 there were 846 registered societies with a total membership of 91,343, of which 14 were central societies, 89 urban and 743 rural. The great advance which was made during the year under report becomes evident when it is remembered that in March 1905 there were altogether 35 rural and 6 urban societies, and in March 1906 237 rural, 37 urban, and 9 central societies, with a membership of 28,629. The apparent expansion of business is, however, somewhat exaggerated by the omission from the 1906 returns of societies which were actually working without having been registered. These figures, and the table which follows, do not refer to Mysore, in which an Act has been introduced similar to the British India Act.

Province.	No. of Societies.	No. of Mem- bers.	Receipts of the Year.	Dis- burse- ments of the Year.	Loans issued to Members during the Year.	Liabili- ties on Account of Members Deposits at close of the Year.	Sub- scription or Share Capital.	Reserve Fund.	
Burma	Urban (limited)* - 3	108	£ 428	£ 412	£ 363	£ -	£ 292	£ -	
	Rural (unlimited) - 37	1,925	12,099	12,217	11,188	107	2,959	903	
Punjab	Urban (limited) - 8	279	59	57	863	5	694	17	
	Rural (unlimited) - 174	17,254	20,213	17,816	17,510	7,494	6,295	-	
Bengal	Registered :-								
	Urban { limited, 4 - } 8	725	2,804	2,715	2,450	450	578	83	
	Rural (unlimited), 4 - } 165	6,908	7,691	7,462	6,006	833	136	735	
	Grain (unlimited) - 4	256	-	-	-	-	-	-	
	Unregistered. -								
	Rural (unlimited) - 16	654	190	182	132	117	-	49	
Grain (unlimited) - 24	6,770	-	-	-	-	-	-		
Eastern Bengal and Assam	Urban (limited) - 12	1,029	5,101	4,929	4,880	461	1,455	23	
	Rural (unlimited) - 48	2,424	2,375	2,111	2,048	1,081	-	21	
Coorg	Rural (limited) - 11	957	1,819	2,068	1,803	299	568	103	
Madras	Central (limited) - 1	43	5,854	5,986	5,898†	4,418	400	-	
	Urban { limited, 18 - } 21	3,533	44,845‡	43,520‡	12,580	8,991	2,278	150	
	Rural { limited, 12 - } 41	2,863	14,635	14,228	13,182	2,455	2,321	75	
Bombay	Urban { limited, 10 - } 20	1,945	10,012	9,478	7,637	1,618	2,265	78	
	Rural (unlimited), 4 - } 50	3,578	9,527	8,944	8,870	2,849	56	340	
United Pro- vinces	Central - - - 10 (161§)	2,669	10,786	10,981	7,904†	1,000	-	134	
	Urban and District 17 (1,539§)	24,751	57,732	56,266	47,860†	4,210	9,105	595	
	Rural - - - 130	16,339	18,097	16,729	14,776	2,111	-	174	
	Bood - - - 12	144	-	-	-	-	-	-	
Silkweaving - - 1	587	4,934	4,588	-	-	2,200	42		
Central Pro- vinces	Central - - - 3	49	654	620	600	45	-	18	
	Urban (limited) - 4	667	3,505	3,451	2,704	438	1,028	123	
	Rural (unlimited) - 63	2,870	3,995	3,772	3,492	1,084	2,098	236	
Ajmer	Rural (unlimited) - 8	186	79	56	10	15	-	2	

* Two of these are clerks' friendly societies, with monthly subscriptions from members.

† Including loans to other societies.

‡ These figures are deceptive, for comparison, since they include the turnover of three distributive stores; the sale proceeds of these stores amounted to £15,860

§ Number of affiliated societies.

CIVIL VETERINARY DEPARTMENT.

CIVIL
VETERINARY
DEPART-
MENT.
Horse, mule,
and donkey
breeding.

In those districts of the Punjab, Baluchistan, the United Provinces, and the Bombay Presidency 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 Civil Department being confined to questions connected with 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 now selected districts, partly from District Board funds, and partly from provincial revenues, with the assistance of grants from the Government of India, are controlled by the Department. Of these there were on the register, at the end of 1906-07, 59 horse stallions, 112 ponies, and 65 donkeys, a large proportion in each case being located in the United Provinces and the Punjab. The district stallions covered 10,240 mares in the year under report. A further supply of donkey stallions is urgently needed, and an officer of the Department was deputed to Europe to purchase the number required. Mules are also bred at the Government Cattle Farm, Hissar.

As regards cattle, the operations of the Department are directed towards improvement of the breeds, investigation of diseases, inoculation, and maintenance of veterinary dispensaries. There were during the year 20 Government bulls and 386 bulls owned by district boards, the greater number of them being in the Punjab, the only province which has as yet done much in the direction of keeping stud bulls. There were five provincial cattle farms, viz., two in Bengal, one in Bombay, and two in the Central Provinces, and proposals for the establishment of such farms in the United Provinces and elsewhere have been under consideration. The most important centre of cattle-breeding is the Hissar Government Cattle Farm, in the Punjab. The farm contained 19 herd bulls and 1,038 cows, selected with great care as good specimens of the Harriana and Nagore breeds, besides a large number of young stock and cultivation bullocks, and some mules, donkeys, and zebras. Ninety-nine bulls were sold from the farm during the year for work in the districts of the Punjab. They were carefully reared, pure-bred Harriana cattle, and are sure to improve rapidly the stock of the districts in which they are placed, as they are better than any stock obtainable in the open market. 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. Some progress was also made with sheep-breeding. A large number of cattle fairs and shows were inspected and favourable reports were generally given of the classes of animals shown. Prizes are offered out of both Imperial and local funds.

Cattle-
breeding.

Revised rules for dealing with glanders and surra were in force in Bengal and the Punjab. Eight hundred and seventy-five cases of glanders were reported from Bengal, but the disease does not seem to have been prevalent elsewhere. Bombay city and the neighbourhood suffered heavy losses from surra. Only 48 cases of anthrax amongst equines were reported in the whole of India.

Horse and
cattle
disease.

Among cattle, rinderpest continued to be very destructive, and spread throughout the Bombay Presidency, where it had appeared in the preceding year; 50,000 attacks and 25,000 deaths were reported, but it is stated that the actual losses were considerably greater. The available staff was insufficient to cope with the outbreak, but considerable progress was made in breaking down the opposition of the people to inoculation, which was performed in 40,000 cases. In the whole of India 214,000 cattle were inoculated against rinderpest, of which a considerable proportion was in the Punjab, where the Department is most developed. The value of the results obtained is undoubted. Anthrax was less prevalent than formerly, except in Madras, which was responsible for 12,000 cases out of a total of 16,000 for the whole of India. Inoculation, which seems to give almost complete immunity, was performed in 11,000 cases. There were 24,000 cases of hæmorrhagic septicæmia, chiefly in the Punjab and Madras. The use of preventive inoculation against this disease, which was first introduced in 1905-06, was greatly extended. There were 21,000 deaths from foot and mouth disease,

CIVIL
VETERINARY
DEPARTMENT.

which was widely prevalent. The preparation "Blacklegoids" was used with success against black quarter. Altogether 339,000 cattle were reported to have died from the various contagious diseases during the year. The sera for inoculation were prepared at the Bacteriological Laboratory, Muktesar. A number of papers on the subject of tropical diseases were published by the Department during the year.

Subordinate
Staff.

Fifty-four veterinary inspectors and 446 veterinary assistants were employed, against 30 inspectors and 417 assistants in 1905-06. Forty-one thousand six hundred and fifty-seven villages were visited by assistants on tour, and 212,000 cases treated. The veterinary hospitals and dispensaries, at which 268,000 animals were treated during the year, increased in number from 290 to 315.

Veterinary
instruction.

The number of students who graduated at the four veterinary colleges, viz., Punjab, Bengal, Bombay, and Madras, was 139, compared with 75 in the preceding year. At the end of the year there were 570 students under training at the four colleges and the Burma school. The buildings and equipment of the colleges were much improved during the year, especially those at Bombay. The demand for trained veterinary graduates still remains far in excess of the supply.

The total cost of the Department, both Imperial and Provincial, amounted during the year to £106,329, being an increase of £20,912 over the amount expended in 1905-06.

MINERAL
RESOURCES.

MINERAL RESOURCES AND MINING.

The following table gives a summary of the returns for mineral production in India during 1906. The estimate relates to all production for which returns were available, but as it is based in many cases on local value in a country where metallurgical industries are still in a rudimentary condition, it cannot serve for comparison with the output of other countries. The estimate serves, however, for the comparison of one year with another:—

Mineral.	1905.	1906.
	£	£
Gold - - - - -	2,416,971	2,230,284
Coal* - - - - -	1,419,448	1,912,042
Petroleum* - - - - -	604,208	574,238
Salt* - - - - -	441,892	420,901
Saltpetre† - - - - -	235,723	270,547
Manganese ore‡ - - - - -	248,309	435,268
Mica‡ - - - - -	142,008	259,544
Ruby, sapphire, and spinel - - - - -	88,340	96,867
Others - - - - -	98,469	113,127
Total - - - - -	5,689,948	6,312,818

* Spot prices.

† Export values.

‡ Very unreliable.

Although there were considerable variations in the production during the year, the total value of the recorded minerals of 1906 exceeded those of 1905 by £622,870, or an increase of 10·9 per cent.

COAL.

The details of the Indian output of coal are given below:—

	Coal produced in					
	1901.	1902.	1903.	1904.	1905.	1906.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Bengal - - - - -	5,487,600	6,259,200	6,361,200	7,063,700	7,234,100	8,617,820
Hyderabad - - - - -	421,200	465,400	362,700	419,500	454,300	467,900
Assam - - - - -	254,100	221,100	239,300	266,800	277,200	285,500
Rewah State (Central India).	164,400	171,500	193,300	185,800	157,700	170,300
Central Provinces - - - - -	191,500	197,000	159,200	139,000	147,300	92,800
Other provinces or states.	116,900	120,300	122,700	141,900	147,100	148,900
Total - - - - -	6,635,700	7,424,500	7,438,400	8,216,700	8,417,700	9,783,200

The colliery at Warora in the Central Provinces has been definitely closed, in consequence of a serious subsidence in March 1906; arrangements are being made for new mining developments in the provinces. The coal sources included under "other provinces" were in Baluchistan, the Punjab, and Rajputana (Bikanir). The exports of Indian coal, though still small compared with the production, have shown a tendency to increase in recent years. In the three years 1904-05 to 1906-07 the exports averaged 9 per cent. of the production, Ceylon and the Straits Settlements being the two principal markets. Of the coal left available for consumption in the country, 97 per cent. was Indian coal and 3 per cent. imported, the greater part of the latter coming from the United Kingdom.

MINERAL
RESOURCES.

For the three years 1904-05 to 1906-07 it is estimated that the average total amount consumed in the country may be divided as follows:—

	Tons.
Railway consumption - - - - -	2,700,000
Bunker coal - - - - -	1,000,000
Inland steamers (in Bengal, Assam, and Burma)	450,000
Jute mills - - - - -	500,000
Cotton mills - - - - -	610,000
Other forms of industrial consumption and domestic consumption - - - - -	2,965,000

The average estimated wholesale price of coal at the pit's mouth ranged from Rs. 3-6 in 1890 to Rs. 2-15 in 1906. 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. From the 15th November 1906 railway freights for distances of over 1,000 miles were reduced from Rs. 14-3 to Rs. 9-13 per ton. This change was followed by a continuous rise in price, due to the expanding commercial demand both for exports and for local consumption, further stimulated by the reduction of freights. The dividends declared by the different companies show that the trade was exceedingly profitable during the year.

The average daily attendance of persons employed in coal mines during 1906 was nearly 100,000, two-thirds of whom were men.

The production of iron ore in India is almost negligible, and amounted during 1906 to 74,106 tons, against 102,529 tons in 1905. The output is dominated by the quantity raised for the Barakar ironworks in Bengal, which is the only institution smelting on European lines. For the Barakar works the quantity raised in 1906 was returned as 69,397 tons, valued at about 2s. 11d. a ton. There was a considerable increase in the number of small native furnaces in the Central Provinces, the total for 1906 being 379, against 279 for 1905. So far as can be estimated from the available returns, the average daily attendance of workers in 1905 amounted to 2,060 and in 1906 to 3,269.

IRON.

The production of gold amounted to 581,545 ounces, valued at £2,230,284 in 1906, compared with 630,818 ounces, valued at £2,416,971 in 1905. The year 1906 marked the first interruption in the increase of gold production from the Kolar gold fields in the Mysore State, whence almost the whole of the Indian output comes, the value having fallen below that of 1905 by £195,821. Reef mining has been recently commenced at the Hutti mine in Hyderabad, the yield increasing from 3,809 ounces in 1903 to 13,784 ounces in 1906.

GOLD.

The mining of manganese ore in India only commenced some 15 years ago. Operations were first carried on 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. The ores worked are for the most exceedingly rich, as the high cost of transport renders the working of the lower-grade ores impossible. All the workings are superficial, and might be classed as quarries. The work of quarrying is mostly performed by hand, the rock being hand-drilled and blasted, or the ore dug out with crowbars. The labour returns for 1905 showed an average daily attendance at the quarries of 6,811, while in 1906

MANGANESE.

MINERAL
RESOURCES.

the total rose to 12,607, exclusive of the workers employed in Sandur and Mysore. 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 either in the United Kingdom, Germany, or Belgium. The output has increased very greatly during the last two years, the industry having been stimulated by the high prices resulting from the disorganisation on account of political disturbances of manganese mining in Russia, which formerly supplied more than half the world's output. In 1906 India was probably the largest producer of high-grade manganese ore, and supplied nearly half the total output of the world, which cannot much exceed a million tons. The figures for the Indian output in recent years are given in the following table:—

Year.	Madras.	Central Provinces.	Central India.	Bombay.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.
1898	60,449	—	—	—	60,449
1901	76,463	44,428	—	—	120,891
1904	53,699	85,034	11,564	—	150,297
1905	63,695	159,950	30,251	40	253,936
1906	117,380	320,759	50,073	7,517	495,729

No reliance is to be placed on the returns of estimated value, which have therefore been omitted.

MICA.

The returns of the mica output show a remarkable increase from a total of 25,600 cwt. in 1905, valued at £83,500, to a total of 54,200 cwt., valued at £258,800, in 1906. The returns for production are now in fair agreement with the more accurate figures obtainable for exports. The increase is largely due to the increased demand for small mica films. 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. In spite of the largely increased output, the average daily attendance at the mines rose from 15,244 in 1905 only to 15,723 in 1906. The mines are situated in Bengal, Madras, and Rajputana.

RUBIES.

The ruby industry in Burma has been prosperous during recent years, the yield of rubies, including small quantities of sapphires and spinel, rising to 326,855 carats in the year ending in February 1907, compared with 266,600 carats in the preceding year. 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, but accurate returns are not available.

PETROLEUM.

There was a slight drop in the production of petroleum in 1906 (140,553,000 gallons) compared with 1905 (144,798,000 gallons); but compared with 1904 (118,491,000 gallons) there was a large increase. About 2,900,000 gallons of oil are extracted in Eastern Bengal and Assam: and the rest of the product, with the exception of an insignificant amount in the Punjab, comes from Burma, the principal oilfields being at Yenangyaung, in Magwe district, and at Singu, on the left bank of the Irrawaddy. In the latter area the output was artificially restricted. The local value is estimated at about 1 anna (1d.) per gallon of crude oil. The number of workers employed on the Burma oilfields amounted in 1906 to no more than 1,837. There was a further fall in the imports of kerosene into India, as a result of the continued political troubles in the Russian oilfields. The imports from Russia fell from 71,995,767 gallons in 1902 to 42,256,738 in 1904, to 17,205,175 gallons in 1905, and to zero in 1906; the total imports during the same period falling from 81,958,387 gallons to 48,527,775 gallons. Exports of mineral oil from Burma to places outside India fell from 2,422,589 gallons in 1905 to 903,545 gallons in 1906. The figures both for imports and for exports were reduced by an agreement made between the Burma Oil Company and the producers in the Dutch East Indies.

SALTPETRE.

The value of the saltpetre industry is gauged most uniformly by the figures for exports, which increased from 313,122 cwt. in 1905, valued at £235,723, to 347,251 cwt. in 1906, valued at £270,547. The average export during the last five years was 370,936 cwt., valued at £266,936. The local

importance of the saltpetre industry is shown by the returns for labour, which show that in 1906 50,469 workers were employed in Behar, where most of the saltpetre is obtained. MINERAL RESOURCES.

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

The number of mines of all kinds coming under the Act in 1906 was 748, of which 307 were coal mines, situated chiefly in Bengal. They gave employment to an average daily number of 128,666 persons, of whom 83,053 were men, 39,582 women, and 6,031 children under twelve years old; 80,158 persons, including 24,921 women and 1,420 children, were employed below ground. The number of all persons employed was 19,079 more than in 1905.

Mining, particularly coal-mining, is a comparatively new industry in India. Miners of the second generation form a very small percentage of the mining population. Until recently, also, the workers have seldom depended solely upon mining for their livelihood. This period in the development of the industry is now passing away. There are signs that the evolution of a mining caste or class has already begun, and the Indian seems to be capable of acquiring considerable skill in most mining operations. Owing to the rapid increase of the mining population in the coal districts, all the land near the mines capable of raising crops will soon be under cultivation, and it will be no longer possible to combine the work of agriculture and mining. The demand for labour in Indian mining districts exceeds the supply, but the numbers of Indians who drift to the coal mines of Natal are evidence of the fields of recruitment which would be speedily opened by the offer of higher pay, shorter hours, and better housing.

There were 84 fatal accidents, causing 106 deaths, during the year 1906. Compared with the average for the five years during which the Act has been in operation, this is an increase of 20 in the number of accidents and 29 in the number of deaths. The increase is due to the expansion and activity of the industry and to the increasingly difficult and dangerous conditions of mining work. Most of the fatal accidents occurred in coal mines.

The only Mining Board under the Mines Act of 1901 which was at work during the year under report was that for Lower Bengal, which is by far the most important mining centre in India. The Board held four meetings during the year. The Mining and Geological Institute of India, which was inaugurated at the end of 1905, made good progress during the year. The mining branch of Sibpur College was finally organised, and a Mining Advisory Board appointed.

CHAPTER XI.

PUBLIC WORKS.

PUBLIC
WORKS.

GENERAL.

General.

During the year under review the Public Works Department was represented in the Council of the Governor-General, jointly with the Department of Revenue and Agriculture, by Sir Denzil Ibbetson, K.C.S.I.

Under the arrangements introduced in the previous year and explained in the Report for 1905-06, the Railway Board carries on the duties which formerly belonged to the Railway Branch of the Public Works Department. The Board was composed during 1906-07 of the members originally appointed to it, viz., Sir F. R. Upcott, K.C.V.O., C.S.I., Chairman, Mr. W. H. Wood, English Member, and Mr. T. R. Wynne, C.I.E.

The Department of Commerce and Industry, through which the Railway Board has access to the Government of India, was represented in the Council of the Governor-General at the beginning of the year by Sir Charles Lewis Tupper, K.C.I.E., C.S.I. He was relieved in the post at the end of 1906 by Mr. J. F. Finlay, C.S.I.

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 the Bombay and Madras numbers, but excluding that of the now separate Military Works Department, were considerably increased during the year.

The following statement shows the composition of the superior engineer establishment as it stood on the 30th June in 1906 and 1905 :—

	Public Works Department.			Public Works Department (Railway Branch).	Total.
	Government of India List.	Government of Madras List.	Government of Bombay List.		
Royal Engineer officers - -	14	1	2	34	51
Other military officers - -	4	1	—	2	7
<i>Civil Engineers :</i>					
Appointed from Europe - -	241	51	50	98	440
Europeans appointed in India -	111	6	6	34	157
Indians appointed in India - -	75	21	28	6	130
Total for 1906 - - - -	445	80	86	174	785
Total for 1905 - - - -	423	83	83	176	765

The upper subordinate engineering staff is largely composed of Indians. The numbers of this establishment were as follows :—

	Public Works Department.			Public Works Department (Railway Branch).	Total.
	India.	Madras.	Bombay.		
Europeans - - - -	135	48	31	33	247
Indians - - - -	333	130	185	43	691
Total - - - -	468	178	216	76	938

The operations included in this chapter 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 railway 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 1906-07 is compiled from the Finance and Revenue Accounts of the year :—

—	Receipts.	Expenditure.		
		—	Charged to Revenue.	Not charged to Revenue.
Railways - -	£ 26,276,288	Construction - -	£ 3,236	£ 7,915,041
		On Revenue Account -	23,962,746	—
Irrigation - -	3,538,260	Construction - -	97,598	797,627
		" from Famine Relief Grant.	356,460	—
		On Revenue Account -	2,768,705	—
Buildings and roads -	532,640	Military Works - -	•	•
		Civil Works - -	5,554,101	—
TOTAL - -	30,347,188		32,742,846	8,712,668

* Expenditure on account of Military Works now appears in the Finance and Revenue Accounts, under the head of "Military Services."

The expenditure charged against revenue includes the following items of "Interest on Debt" :—

Railways - - - - -	£ 5,039,985
Irrigation - - - - -	935,231

On the 31st of March 1907, £168,344,748 of permanent public debt had been incurred on account of railways, and £28,226,677 on account of irrigation.

The amount paid under the head of "Annuities in purchase of railways," which is included in the Railway Revenue Account, is £2,869,366.

RAILWAYS.

RAILWAYS.

Financial
results to the
State.

In the financial year 1906-07 there was a surplus of revenue over expenditure amounting to £2,313,542. The table below is taken from the Finance and Revenue Accounts of the Government of India for 1906-07 :—

	Imperial.	Provincial and Local.	England. (Sterling converted at £1 = Rs. 15.)	TOTAL.
REVENUE.				
Railways—	£	£	£	£
State railways—(Gross traffic receipts).	25,775,102	45,967	230	25,821,299
Guaranteed companies—(Net traffic receipts).	398,801	—	—	398,801
Subsidised companies—(Repayment of advances of interest).	25,916	—	30,272	56,188
TOTAL	£ 26,199,819	45,967	30,502	26,276,288
EXPENDITURE.				
Railway Revenue Account—				
State Railways—				
Working expenses	12,850,004	28,757	—	12,878,761
Share of surplus profits, &c.	396,300	—	—	396,300
Interest on debt	2,276,583	—	2,763,301	5,039,984
Annuities in the purchase of railways.	—	—	2,869,367	2,869,367
Sinking funds	—	—	148,896	148,896
Interest chargeable against companies on advances.	213,784	5,454	264,641	513,879
Interest on capital deposited by companies.	39,941	4,723	1,369,081	1,413,745
Guaranteed companies—				
Surplus profits, land and supervision.	41,702	—	—	41,702
Interest	—	—	584,751	584,751
Subsidised companies—				
Land, &c.	28,758	5,734	—	34,492
Miscellaneous railway expenditure—	38,936	1,933	—	40,869
TOTAL	£ 15,916,108	46,601	8,000,037	23,962,746
		Net gain	- - £	2,313,542

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.

Statistical
results of
working.

2. The statistical results of working the various classes of railways during 1907 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 5·91 per cent. on the total capital outlay on open lines, against 5·96 per cent. in the previous year :— RAILWAYS.

Class.	Length of Line open on the 31st December 1907.	Total Capital Outlay on Open Lines to the 31st December 1907, 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.
<i>5' 6" Gauge.</i>								
State lines worked by companies	Miles. 7,913·81	£ 104,857,267	No. 93,086,800	Tons. 27,868,000	£ 12,626,333	£ 6,329,200	£ 7,297,133	
State lines worked by the State	5,375·37	58,926,267	60,768,000	13,660,000	7,003,867	3,999,100	3,004,467	
Companies' lines guaranteed under old contracts.	9·5·02	9,072,000	11,737,000	1,809,000	1,049,067	667,867	381,200	
Companies' lines guaranteed under modern contracts.	32·04	193,133	329,800	88,000	24,800	12,400	12,400	
Assisted companies' lines	947·94	4,261,133	9,030,000	1,581,000	606,533	300,865	305,667	
Lines owned by Native States and worked by companies.	711·21	4,797,733	3,303,800	1,374,000	410,600	132,800	277,800	
Lines owned by Native States and worked by State railway agency.	201·68	798,067	3,201,000	468,000	185,067	71,867	63,400	
TOTAL FOR 1907	16,087·17	183,497,600	167,056,100	46,793,000	22,866,267	11,614,200	11,842,067	5·18
TOTAL FOR 1906*	16,765·46	174,884,867	165,664,300	41,768,000	21,498,267	10,373,533	11,124,734	6·38
<i>3' 3 1/2" Gauge.</i>								
State lines worked by companies	7,061·09	60,891,333	70,538,700	11,267,000	5,702,467	2,160,133	2,542,334	
State lines worked by the State	766·14	8,023,867	8,947,200	1,708,000	746,400	372,732	373,667	
District Boards' lines	103·30	319,524	1,881,000	284,000	41,867	22,733	19,134	
Assisted companies' lines	1,671·86	7,319,133	21,277,700	6,902,000	861,733	410,400	451,333	
Lines owned by Native States and worked by companies.	901·96	3,292,133	5,766,000	796,000	329,468	161,200	168,266	
Lines owned and worked by Native States.	1,305·93	2,103,067	4,864,100	805,000	418,267	199,867	218,400	
Lines in foreign territory	78·60	1,173,800	829,000	872,000	56,733	32,267	24,466	
TOTAL FOR 1907	12,883·68	70,822,267	114,106,700	22,221,000	6,189,933	4,359,333	3,800,600	5·87
TOTAL FOR 1906*	12,145·33	68,415,267	100,143,000	16,674,000	7,636,600	4,135,667	3,500,933	5·12
<i>Special (3' 6" and 3' 0") Gauges.</i>								
State lines worked by companies.	423·23	1,337,523	288,000	16,000	83,867	51,800	32,067	
State lines worked by the State	91·19	1,241,467	295,000	61,000	67,467	30,233	28,134	
Assisted companies' lines	396·33	1,176,688	1,637,300	229,000	170,800	94,600	76,200	
Unassisted companies' lines	23·27	70,733	630,300	32,000	7,267	4,867	2,400	
Lines owned by Native States and worked by companies.	372·41	662,900	1,445,900	167,000	60,933	34,000	26,933	
Lines owned by Native States and worked by State railway agency.	33·60	101,467	204,000	63,000	11,600	4,667	6,933	
Lines owned and worked by Native States.	22·37	103,734	21,400	11,000	6,533	3,400	3,133	
TOTAL FOR 1907†	1,322·48	4,694,400	6,421,900	579,000	408,467	232,667	176,800	3·74
TOTAL FOR 1906†	1,178·64	4,060,667	5,286,900	527,000	376,667	162,400	114,267	2·81
TOTAL OF ALL RAILWAYS FOR 1907.†	20,063·25	239,014,267	207,694,700	69,693,000	31,424,667	16,106,200	15,318,467	5·01
TOTAL OF ALL RAILWAYS FOR 1906.*†	20,089·63	247,360,600	271,063,100	68,869,000	29,411,634	14,671,600	14,739,934	5·96

* As corrected from later information.

† Excluding the Thaton-Duyinsak Light Railway.

It will be observed that, with an increase of 963·62 miles, or 3·31 per cent., in the open mileage, as compared with 1906, the gross earnings and working expenses increased by £2,013,133, or 6·84 per cent., and £1,434,600, or 9·73 per cent., respectively, resulting in an improvement of £578,533 in the net earnings.

There was an increase of 36,521,600 in the number of passengers and of 10,724,000 tons in the weight of goods carried as compared with the previous year.

3. The transactions of the Madras railway, the only old guaranteed line that was in existence during 1907, are shown in the following table, in which the rupee is converted into sterling at contract rates :— Guaranteed railway transactions.

RAILWAYS.

Period.	Total Capital Outlay.	Net Revenue.	Guaranteed Interest.	Interest in excess of Revenue.	Net Revenue in excess of Interest.	Surplus Profits.
	£	£	£	£	£	£
Half year ended the 30th June 1907.	12,792,725	290,621	290,978	357	—	—
Half-year ended the 31st December 1907.	13,086,919	234,601	294,651	60,050	—	—
Total for the year 1907.	13,086,919	525,222	585,629	60,407	—	—
Total for the year 1906.	12,651,632	567,072	584,751	17,679	—	22,917

Mileage opened.

4. The total railway mileage opened during the year was as follows:—

	Miles.
5' 6" gauge	320·70
3' 3 $\frac{3}{8}$ " "	458·45
2' 6" "	170·35
2' 0" "	12·76
Total	962·26
Add—	
Corrections of mileage	1·36
Net total addition to open mileage	963·62

Mileage sanctioned.

5. The additional mileage sanctioned for construction was:—

	Miles.
3' 3 $\frac{3}{8}$ " gauge	325·91
2' 6" "	34·94
Total	360·85

Mileage under construction.

6. The total mileage under construction or sanctioned for construction at the close of the year 1907 was:—

	Miles.	Miles.
5' 6" gauge—		
State lines worked by companies	898·68	
State lines worked by the State	301·75	
		1,200·43
3' 3 $\frac{3}{8}$ " gauge—		
State lines worked by companies	237·46	
State lines worked by the State	225·33	
District Boards' lines	749·47	
Assisted Companies' lines	228·31	
Lines owned by Native States and worked by companies	45·84	
Lines owned and worked by Native States	197·03	
		983·44
Special (2' 6" and 2' 0") gauges—		
State lines worked by companies	247·15	
State lines worked by the State	6·80	
Assisted companies' lines	70·50	
Lines owned by Native States and worked by companies	92·83	
Lines owned by Native States and worked by State railway agency	22·02	
Lines owned and worked by Native States	46·63	
		485·93
Total		2,669·80

7. The following is a brief abstract of important works completed and in progress during the year 1907. Further particulars will be given in the Administration Report on Indian Railways for 1907, which will be published as a Parliamentary paper.

RAILWAYS.
Important works completed and in progress.

Bengal-Nagpur Railway System.—The 5' 6'' gauge lines from Bhojudih to Gomoh (Hariharpur), 25·64 miles, and Kamptee to Ramtek, 14·24 miles, were opened to traffic during the year. Construction work was also in progress on the Vizianagram-Parvatipuram and Vizianagram-Raipur lines, on remodelling the Gondie station yard, relaying the track between Sini and Nagpur, strengthening the Damooda bridge and fitting 200 brake vans with vacuum brake gear.

The 2' 6'' gauge railways from Khirsadoh to Barkuhi, 5·05 miles, Purulia to Ranchi, 72·28 miles, were opened to traffic. Progress was also made in the construction of the lines from Gondia to Chanda and Brahmपुरi to Nagpur.

Bombay, Baroda, and Central India Railway System.—On the 5' 6'' gauge section extensive works were carried out at Kankra Khari station; and the restoration of the General Offices in Bombay, which were damaged by fire in 1905, was completed. Work continues in connection with the strengthening of the Nerbudda bridge in consequence of the heavier engines and rolling-stock now being built. The renewal, with 90-lb. rails, of the 69-lb. rails on wooden sleepers on the main line was commenced in view of the heavy traffic which is expected from the Nagda-Muttra railway. All passenger stock on the Bombay, Baroda, and Central India railway proper, not already so fitted, is being fitted with apparatus for intercommunication between passengers and guards and drivers.

Of the southern section of the Nagda-Muttra railway, *i.e.*, from Nagda to the Chambal river, the portion from Nagda to Morak, 101 miles, was opened for traffic on the 15th July 1907, and the remaining 39 miles were nearly completed. On the northern section, Kotah (crossing of the Chambal river) to Muttra, 200 miles, good progress was made on earthwork, bridges, and culverts. Rails were laid from Siwai Madhopur for 20 miles northwards to the Banas river.

On the 3' 3½'' gauge section of the Company's system the following works were completed:—the conversion of Fatehgarh, on the Rajputana-Malwa railway, into an engine-changing station; the improvement in the alignment of the line near, and entry into, Sabarmati station, with the view to rendering it less liable than in the past to damage by floods; the improvement and enlargement of Mhow Station; and the construction, on account of the heavy traffic at that point, of the Martindale over-bridge at the Lal Phatak level-crossing north of Ajmer station.

The remaining portion of the Jaipur (Siwai Madhopur) 3' 3½'' gauge railway, *viz.*, from Nawai to Siwai Madhopur, 40·66 miles, was completed and opened for traffic on the 17th October 1907.

Work continues on the construction of the lines from Manund Road, *viâ* Chanasma, to Bechradi, with a branch from Chanasma to Harij, 38·11 miles, and from Kheralu to Dhabora, 7·73 miles; also in connection with the renewal of all weak bridge girders on the main line between Delhi and Rewari and between Phulera and Ahmedabad, by girders equal to the stress of broad gauge standard loads, under a programme of expenditure over a series of years.

Eastern Bengal State Railway System.—On the 5' 6'' gauge section, the chord line between Tiljala (Gobra) and Kakurgachi, 2·26 miles, and the additional double line between Kakurgachi and Dum Dum Junction were opened for traffic on the 1st February, thus affording a direct route (avoiding Sealdah station) for the heavy coal traffic to the Kidderpore Docks. The erosion of the river bank at Goalundo rendered it necessary to remove the combined service ghats to Durgapur on the Ganges river. The new Chur line, Durgapur to Rajbari station, was completed and opened to the traffic of the combined service on the 1st July 1907. The remaining portion, Lalgola to Lalgola Ghat, 2·75 miles, of the Murshidabad branch project, was opened to traffic on the 15th July 1907.

On the Katihar-Godagari, 3' 3½'' extension, 105 miles, and on the remaining (unopened) portion of the 3' 3½'' gauge extension of 148·68 miles

RAILWAYS. from Golokganj to Gauhati, viz., 112·93 miles from Kokrajhar (at mile 35·75) to Gauhati (at mile 148·68), considerable progress was made in construction during the year.

Progress continues in the construction of the 3' 3½" gauge line from Forbesganj to the Nepal Frontier, about 7·40 miles.

East Indian Railway System.—The double line between Dhanbaid and Barakar, the Khurja-Hapur branch, and the new bridge over the Jumna river at Agra with the line from Agra Junction to Agra City (Balinganj), have been completed, and were opened to traffic. Construction work, which had been in abeyance for want of funds, on the Barharwa-Dhulian section of the Barharwa-Azimganj-Katwa Railway, has been resumed and is progressing satisfactorily.

The work of strengthening the girder bridges throughout the line has made satisfactory progress. All single line stations between Allahabad and Delhi have been interlocked, with the exception of Rasulabad which is in hand. The northern block of the new joint passenger station at Howrah has been completed with the exception of the electro-pneumatic interlocking; work on the southern portion of the station, as well as several other important works, are in abeyance for want of funds.

Great Indian Peninsula Railway System.—Of the 5' 6" gauge lines under construction it is expected that the Warora-Chanda-Balharshah extension will be opened for traffic early in 1908; the Harbour branch in March 1908; and the Mahim Chord connection, which forms part of the branch, probably towards the end of 1908.

Of the double line between Lonavla and Poona, 39 miles, the section Lonavla to Karla was opened in May 1907; the remainder is nearing completion and is expected to be opened in March 1908. The strengthening of the girders of bridges continues. The reconstruction of the Godavari and Kara Nala bridges has been completed; work on the Ganjal bridge is in hand. The Agra Goods Depôt at Balinganj (Agra City) was completed and Agra Road station was practically finished.

Of the Baran-Kotah railway, 40 miles, the first 14 miles from Baran to Antah have been completed and are expected to be opened for traffic during the first-half of 1908. The bridge (2 spans of 60', 11 of 100' and 4 of 150') over the Kali Sind river, and the great approach bank and training bund of the bridge, are well in hand. On the remainder of the line the formation, bridges and culverts are nearing completion. The whole line was temporarily opened on the berm in February 1907.

The Matheran Light railway, Neral to Matheran, 12·76 miles on the 2' 0" gauge, was opened for traffic in March, closed during the rains and re-opened thereafter.

Progress continued in the construction of the extension of the Gwalior light railways, 2' 0" gauge, from Sabalgarh to Sheopur, about 66·39 miles.

Madras Railway System.—On the 15th March 1907, the North-East line was afforded direct access to the Central station, Madras, by a chord line from Korukkupettai to a new station at Basin Bridge, and the loop line connecting Washermenpet with Basin Bridge was opened on the same date. The junction arrangements at Tirupattur and Morappur, excepting the signalling arrangements, were completed during the year. Alterations and additions to the Perambur Workshops, the strengthening throughout the system of certain spans of weak girders by the substitution of new steel girders, and the provision of additional waterways between miles 160 and 180 on the North-East line, were in hand.

The remaining portion of the Azhikal-Mangalore 5' 6" gauge railway, viz., from Kumbbla to Mangalore, 20·91 miles, was opened for traffic on the 3rd July 1907, thus effecting through connection from Azhikal to Mangalore. The Netravati Bridge on this extension was opened on the 4th November 1907.

Progress continues on the Coonoor-Ootacamund extension of the Nilgiri Railway, 11·75 miles on the 3' 3½" gauge, which it is expected will be opened up to Fernhill in April 1908.

Nizam's Guaranteed State Railway System.—The renewal, with new girders of the standard type, of the girders on all 4, 6 and 12 metre span bridges on the Wadi-Secunderabad section was completed.

North-Western Railway System.—The Shahdara-Sangla 5' 6" gauge chord railway was opened for traffic on the 10th April 1907. Progress continues on the first section of the Loi Shilman Railway, on the Chichoki-Burala section, of the Shorkot Road-Chichoki Railway, and on the Lodhran-Khanewal Railway all on the 5' 6" gauge. The conversion from the 2' 6" to the 5' 6" gauge of the Khushalgarh-Kohat section, 30·25 miles, of the Khushalgarh-Kohat-Thal Railway, and the construction of the new bridge over the Indus river at Khushalgarh, were completed during the year and opened to traffic on the 5th January 1908. The conversion to the 5' 6" gauge of the Kohat-Thal section of the line, and the construction of the Thal-Parachinar Railway on the same gauge, are still in abeyance.

The doubling of the line from Samasata to Khanpur, 76 miles, from Khanpur to Reti, 62 miles, and from Reti to Rohri, 70 miles, was completed.

The second wing of the new Central Offices and the new engine-erecting shops at Lahore were completed and taken into use.

Oudh and Rohilkhand Railway System.—The remainder of the Allahabad-Jaunpur railway from Mariahu to Zafarabad, with a temporary pile bridge across, and diversions at the approaches to, the river Sai, was opened to traffic in January 1907. The permanent bridge was opened for traffic on the 27th June 1907. The renewal of girders of the Ganges bridge at Rajghat on the Aligarh branch was commenced and is making good progress. Forty miles of the main line from Lucknow towards Saharanpur have been relaid with 90-lb. section flat-footed rails on wooden sleepers, in substitution of 75-lb. rails on pots.

Assam-Bengal Railway.—Proceedings in connection with the acquisition of land for the commencement of work on the Kalaura-Khooseara river section of the Kalaura-Sylhet branch, and construction work on the Akhaura-Ashuganj (Bhairab) branch on the same gauge, both of which were stopped for want of funds in 1906, were resumed during 1907, and it is expected that the latter branch will be opened for traffic in April 1909. Work has been commenced on the fourth jetty at the Chittagong port.

Bengal and North-Western Railway System.—On the open line of the Company's section, the 3 spans of 80' girders of the Babai bridge on the Nanpara-Katarnian Ghat branch, which were washed away during the rains of 1906, are being replaced by 4 spans of 60' girders.

Of the lines that were under construction on the Company's section the extension from Gorakhpur to Chhitauni Ghat (Bagaha), and those from Savan to Thawe and Daronda to Maharajgunj were opened to traffic in 1907.

Construction work on the first 53 miles of the Benares-Allahabad line was put in hand in March 1907.

On the open line of the Tirhoot section, the erection of the new Boor-Gundak bridge on the Eastern branch at Samastipur, in replacement of the previously existing pin girder bridge which was considered weak for heavy engines, was completed; and the two pin girder bridges over the Bagmatti and Korai rivers on the same branch are being similarly reconstructed. Considerable additional waterway was provided on the Samastipur-Darbhanga and Samastipur-Muzaffarpur sections during the year, as a protection against floods which caused heavy damages in 1906.

Of lines on the Tirhoot section that were under construction, the section of the Mansi-Bhaptiahi extension from Makhana Bazar to Bhaptiahi was opened to traffic in March 1907; the section of the Bettiah-Bagaha extension from Narkatiaganj to Bagaha in May 1907; the section of the Mansi-Bhaptiahi extension from Mansi to Makhana Bazar and the extension from Bairagnia to Narkatiaganj in December 1907. The branch from Saharsa to Budham Ghat is nearing completion.

Bengal Dooars Railway.—The reconstruction of the Ghatia bridge on the Eastern extension (which collapsed during the year) is in hand and will shortly be completed.

Burma Railways.—The Pegu-Martaban (Moulmein) extension was completed and opened for traffic on the 25th September 1907. Of the Henzada-Kyangin extension, 65·66 miles, the section from Henzada to Danbi was opened to traffic on the 15th April 1907. The remainder of the line is nearly completed.

With the exception of the arrangements at the stations, the doubling has been completed of the line between Togyauungale and Dabein on the main

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line, and between Hlawga and Wanetchaung on the Prome section. On the main line 26 miles, and on the Rangoon-Prome section 6 miles, of 41½-lb. steel track were re-laid with 60-lb. steel rails, and on the latter section an additional 1½ miles of similar track have been re-laid with 50-lb. rails. The north shore siding to the river bank at Henzada and the ferry arrangements, both there and at Tharawaw shore, have been completed.

Jodhpur-Bikaner Railway System.—Construction work has been commenced on the Degana-Hissar 3' 3¾" gauge extension, 197·03 miles.

Rohilkund and Kumaon Railway.—The line from Lalkua, *via* Kashipur, to Ramnagar was opened to traffic on the 20th April 1907; that from Moradabad to Kashipur on the 11th January 1908.

South Indian Railway System.—The renewal of certain spans of weak girders with metre-gauge standard requirements on the Madura-Tuticorin and Maniyachi-Tinnevely sections was completed. The re-arrangement of Egmore station at Madras is in hand.

Southern Mahratta Railway System.—The Sangli Railway, which was under construction during 1906, was opened to traffic on the 1st April 1907. The Bezwada-Masulipatam Railway is nearly completed. The construction of the Dhona (Kurnool Road)-Kurnool Railway, preliminary operations in connection with which were started in 1906, is well in hand.

Cutch Railway.—Progress continues on the construction of the 2' 6" gauge extension from Anjar to Bhuj, 25·38 miles.

Dholpur-Bari Railway.—The construction of this line, 19·25 miles, on the 2' 6" gauge, is nearing completion.

Dibru-Sadiya Railway.—The construction of the branch line, from Talap Station to Shaikhowa Ghat on the south bank of the River Brahmaputra, is in hand. The survey, earthwork, and the first four culverts are completed; about 3 miles of the permanent-way are finished, and work on the Dangri bridge is in progress.

Dwara-Therria Light Railway.—The construction of this line, 19·50 miles, on the 2' 6" gauge, which was suspended in June 1904 for want of funds, continues at a standstill.

Shahdara (Delhi)-Saharanpur Light Railway.—The construction of the main line was completed during 1907; the section of 54·64 miles from Delhi-Shahdara to Shamli was opened for traffic in May, and the remainder of the line on the 15th October 1907.

8. The following were the principal matters which received attention during the year 1907 :—

Government Control of Railways.—On the 1st January 1908 a new system was introduced under which the Government of India exercised its control over railways. The Consulting Engineer was abolished and railways placed under the direct control of the Railway Board. Extended powers of sanction and administration were delegated to Boards of Directors, with option to delegate their powers to their Agents in India.

Strikes and Board of Conciliation.—The year 1906 saw several petty strikes among different classes of employés, and during 1907 strikes again occurred on certain lines. The discontent on the North-Western and the Bengal and North-Western railways was removed without inconvenience to the public; but that on the Eastern Bengal State Railway, which resulted in the native drivers and firemen going on strike, was of a more serious nature and involved the temporary dislocation of goods traffic. In November 1907 the European and Eurasian drivers of the Howrah-Jhajha district on the East Indian railway submitted a long list of grievances, and they ultimately struck work and were joined by the traffic staff to some extent, the strike spreading over a large portion of the line. This strike was the most serious in the history of railways in India, and for a time completely dislocated traffic generally and the trade of Calcutta in particular. It was only terminated by the appointment by the Government of India of a special Board of Conciliation (based on the lines of the Boards recently introduced in England) to consider the representations of the men. The Conciliation Board dealt mainly with the questions of (i) higher pay or mileage allowance; (ii) extra pay for working overtime and on holidays; and (iii) improved leave rules.

Principal matters which received attention.

Re-arrangement of the Railways in Southern India.—The contracts of the Southern Mahratta and Madras railways having approached their period of termination, it was decided to take advantage of the opportunity and to re-arrange the railway systems of Southern India. Arrangements were, therefore, made for the Southern Mahratta Railway Company to take over, from 1st January 1908, the South Indian metre gauge lines north of Katpadi, and the existing Madras Railway, excepting the Jalarpet-Mangalore section and branches. The amalgamated undertaking has been called the "Madras and Southern Mahratta Railway," with head-quarters at Madras. The Jalarpet-Mangalore section of the Madras Railway and its branches were handed over to the South Indian Railway Company, and arrangements were also made by which that Company will exercise running powers over the Madras-Bangalore section.

Indian Railway Conference Association.—The Association held meetings at Simla from 23rd September to 7th October 1907, and, in addition to the ordinary questions before it for consideration, dealt specially with the question of the revision and simplification of the existing goods tariff. The Simplification Committee's report, showing in draft a portion of a simplified tariff drawn up on the lines decided upon by the Committee, which met at Delhi soon after their appointment in 1905, was considered and adopted. It was decided by the Association that the final report, when submitted, should be printed and circulated by the secretary for consideration. Meanwhile certain questions of principle connected with the preparation of the simplified tariff have been referred to, and are under consideration by, the Railway Board. During the year, the appointment of a "whole-time" secretary to the Association, with necessary office establishment, was sanctioned by the Secretary of State, who further authorised the Association being empowered to incur expenditure connected with its own working up to an annual maximum of Rs. 40,000. Mr. Ross Johnson was elected secretary to the Conference Association, and on return from leave in England assumed charge of his duties on the 23rd December 1907.

Communication between Passengers and Guards and Drivers of Trains.—Means of communication between passengers and guards and drivers have been fitted to many fast trains and its more extended adoption is being pressed on all lines.

Concessional Rates for Famine Traffic.—Owing to grave prospects of a serious fodder famine in the United Provinces, Central India, Rajputana, the Punjab and the North-West Frontier Province in consequence of the failure of the last monsoon, the railways at the request of the Government of India in October 1907 agreed to co-operate in the measures adopted by Government for the protection of cattle by quoting specially reduced rates for the carriage of bhoosa, grass, karbi, &c., between stations within the areas affected and from stations outside those areas to stations within them. The Government of India, however, realising that even greater assistance than this was necessary in order to effect the movement of fodder in quantities sufficiently large to provide for the safety of cattle within the famine area, decided that freight on consignments of fodder (excepting fodder for the Army Department), booked to stations in the provinces mentioned from places without them, should be recovered from the consignor or consignee at the rate of half an anna per four-wheeled wagon per mile and one anna per bogie wagon, and that the balance of freight calculated at the special reduced rates agreed to by railways, or at the ordinary tariff rates in cases where the rate had not been specially reduced, should be paid by Government.

Revised Rules for the Carriage of Military Traffic.—The revised rules for the carriage of military traffic by rail as recommended by the Indian Railway Conference Association were accepted by the Government of India and introduced, with effect from the 1st January 1908, as a tentative measure for a period of one year.

Committee of Enquiry as to the Provision of Funds for Expenditure on Indian Railways and the System of Working of the Railway Board.—In May 1907 intimation was received of the appointment by the Secretary of State of a committee to inquire into the provision of funds for expenditure on Indian railways and the system under which the Railway Board works. It was at first arranged that Sir James Mackay, chairman of the Committee, and

RAILWAYS. Sir Walter Lawrence, one of the members, accompanied by Mr. Brereton, director of Indian railway companies, should visit India in the winter to discuss matters with the Government of India and the Railway Board, and also to receive evidence on the subject of the enquiry from officials engaged in railway management and from representatives of the mercantile community. The deputation of these gentlemen was subsequently abandoned, since it was considered sufficient for the Committee to receive by letter the views of those interested in the subject in India. The Chamber of Commerce and other public bodies were accordingly directed to send any representations on the subject they desired to make direct to the secretary of the Committee at the India Office, London.

Provision of additional Rolling Stock to meet increased Demands of Traffic.—For the year 1907-08 the Railway Board made a provision of £3,786,670 for additional rolling stock. In view, moreover, of representations received by them from commercial bodies in connection with serious inconvenience caused to the trade owing to insufficiency of rolling stock, an additional million sterling was allotted for the purchase of broad gauge open and covered goods wagon stock, to be distributed among the various Indian railways (with the exception of the Nizam's Guaranteed State Railway). Contracts for the supply of 2,900 covered and 1,450 open goods wagons have accordingly been let in England. The majority of this stock is to be sent out in 1908-09, it being impossible to arrange for the delivery of such a large order in the current year.

Use of Local Manufactures for Railway Purposes.—The arrangement entered into by the Government of India in 1897 with the Bengal Iron and Steel Company, for the supply of 10,000 tons of pig iron and castings annually to State railways for a period of 10 years commencing from 1st April 1897, was not renewed.

Standardization of Locomotives.—Further standard designs of broad gauge mail, passenger and goods engines, prepared by the Engineering Standards Committee in England, were circulated for adoption on the various Indian railways.

Electrification of Railways.—Proposals for working the Kalka-Simla railway and the Nilgiri railway and its extension to Ootacamund by electricity, are still under consideration.

The Railway Board also received a report on the question of working the proposed Bhamo-Tengyueh railway with electricity, which is being considered.

Abolition of Bridge Tolls.—In February and July 1907 Government agreed to abolish tolls on the East Indian Railway Company's Tonse bridge and on the Jumna bridges at Delhi and Allahabad, and on the Oudh and Rohilkhand State railway Dufferin bridge over the Ganges at Benares, the bridge over the Ganges on the line between Lucknow and Cawnpore and the bridge over the Ramganga at Moradabad.

Rules to regulate the Transport and Importation of Explosives.—In July 1907 revised rules were promulgated for adoption on all railways in India.

Terms for Construction of Sidings to Kerosine Oil Installations within railway limits.—The form of agreement approved in July 1905 for the extension of State-worked railways into private premises for traffic from mills or other industries made it a condition that a sum of Rs. 200 per mile or part of a mile must be paid by the applicants for a siding to cover the survey charges entailed. It having been represented that this charge was inequitable in the case of the short sidings that are laid to kerosine oil installations within railway limits, orders were issued in February 1907 that it may be remitted in the case of such sidings.

Steamer Service between the Assam-Bengal Railway Terminus at Shahab Ghatta and the Islands of Sundip and Hatiya.—In November 1907 sanction was accorded to the concession given to Messrs. Turner, Morrison & Co. in connection with a steamer service to be established by them between the Assam-Bengal railway terminus at Shahab Ghatta and the islands of Sundip and Hatiya being transferred for a period of one year, in the following modified form, to the India General Navigation and Railway and Rivers Steam Navigation Companies, viz., the grant of a rebate of 10 per cent. from the earnings derived from the through traffic interchanged between the

Assam-Bengal railway and the Steamer Companies, subject to a maximum limit of Rs. 500 per mensem, but not subject to any minimum.

Flood Damages.—The Tharawaw branch of the Burma railways, 24 miles, *i.e.*, the link between the main line and the Bassein-Henzada branch, was closed to traffic from the 28th June 1907; two miles of line near the Tharawaw end were dismantled, and three large gaps of a total length of 800 feet were made in the railway embankment to pass an expected high flood of the Irrawaddy river, as it was feared that the railway bank would cause a heading up of the flood waters, throw them back into the river and endanger the bund, which protects the town of Henzada. Happily these fears were not realised, and the line was restored, diversions being put in at the sites of the gaps, and traffic over the branch was resumed with effect from the 5th November 1907. Floods breached the Bengal and North-Western railway between Pertabganj and Khanwa Ghât in several places, and the Mirchya river changed its course and encroached; the line will consequently have to be abandoned, in view of which an alternative line is under survey. The Bhikna-Thoree branch was closed on account of heavy floods in July, and re-opened for traffic in December 1907.

Chittagong Jetties, Assam-Bengal Railway.—Considerable loss of property was caused by fires, which occurred in October and December 1907, at the jetties at the double moorings at Chittagong.

Projects for New Lines.—No communication from the respective projectors having been received during the year in connection with the construction of the following lines, which were mentioned in the reports for the two previous years, it would seem that the projectors have abandoned the projects:—

	Gauge.	Miles.
(i) Rawalpindi-Murree Railway (Punjab)	3' 3½"	40
(ii) Extensions of the Dacca State Railway—		
(a) From Mymensingh, <i>via</i> Netrokona, to Bara Ari, with a branch to Gauripur (Eastern Bengal and Assam)	3' 3½"	36½
(b) From Singhjani, <i>via</i> Sherpur, to Nalitabari (Eastern Bengal and Assam)	2' 6"	25
(iii) Serajganj-Ullapara Light Railway (Eastern Bengal and Assam)	2' 6"	18

The proposals for establishing rail connection between Dholka and Ranpur, which were also mentioned in the two previous reports and which contemplated—

- (i) An extension, on the 3' 3½" gauge, of the Ahmedabad-Dholka railway from Dholka to Dhandhuka (Bombay), 41½ miles;
- (ii) The construction of a steam tramway from Dhandhuka to Ranpur (Bombay), 18 miles;
- (iii) Extending, as an alternative to (i) and (ii), the Bhavnagar-Gondal-Junagad-Porbandar Railway's 3' 3½" line from Ranpur, *via* Dhandhuka to Dholka;

have been negatived by the Government of India, as the parties interested therein, *viz.*, the Bombay, Baroda and Central India and Ahmedabad-Dholka Railway Companies and the Bhavnagar-Gondal-Junagad-Porbandar Railway Administration, were unable to formulate terms acceptable to each.

The proposals for the construction of the following light railways in Bengal, which were put forward in 1905, are still awaiting a decision on the proposals of the Bengal and North-Western Railway for extending the Tirhoot State Railway from Darbhanga to Khagaria:—

- (i) Samastipur-Rowsara Railway, 17½ miles, to be financed by the District Board of Darbhanga;
- (ii) Rowsara-Khagaria Railway, 44 miles, to be financed by the District Board of Monghyr.

The Darbhanga-Khagaria line has been surveyed by the Bengal and North-Western Railway and the project report is awaited.

The grant of a concession to the Amritsar-Patti Railway Company for the extension of their line from Patti to Kasur (Punjab), a distance of 30 miles, has been sanctioned by the Secretary of State, and the terms of the concession have since been communicated to the promoters.

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The Secretary of State has signified his willingness to grant a concession to the Barsi Light Railway Company for the portion (about one mile) of the proposed extension of their line from Tadwala to Latur (Nizam's Hyderabad and Bombay), 37 miles, which lies in British territory, and has authorized the company to enter into negotiations with His Highness the Nizam's Government for the portion (about 36 miles) which is in Hyderabad territory. The negotiations with His Highness' Government are in progress.

Proposals were received during the year from the Mysore Durbar for the construction by private enterprise of a 2' 6" gauge railway, 39 miles in length, from Taragapet (near Bangalore) to Chickballapur (Mysore). Revised estimates of costs have been called for and are awaited.

Definite proposals were made to the Government of Bengal during the year for constructing, under the provisions of the Bengal Tramways Act, an extension, on the 2' 6" gauge, of the Bukhtiarpore-Bihar Light Railway from Bihar to Silao (Bengal), 10 miles. They are under the consideration of the Local Government.

Negotiations are in progress between the Secretary of State and the railway companies noted below for the construction, on the 5' 6" gauge, of the following chord lines :—

- (1) The Southern Punjab Railway Company for a line from Kasur down the Sutlej Valley to Lodhran on the North-Western Railway (Punjab), 210 miles ;
- (2) The Delhi-Umballa-Kalka Railway Company for a line from Kaithal on the Southern Punjab Railway to Thanesar on the Delhi-Umballa-Kalka Railway (Punjab), 29 miles.

Proposals have been sanctioned by the Secretary of State for the construction of an extension, on the 3' 3½" gauge, of the Ahmedabad-Parantij Railway from Idar Road to Brahma-Khed (Bombay), 32 miles.

A detailed project was received during the year from the Agent, Rohilkund and Kumaon Railway Company, for a 3' 3½" gauge line from Pilibhit to Barmdeo (United Provinces), 38½ miles, and proposals for its construction by the Company have since been submitted to the Secretary of State.

The proposals, which were received towards the end of the year, for the construction, on the 2' 6" gauge, of a railway from Murtajapur to the Pisgaon coal fields (Central Provinces), 150 miles, by a Company to be domiciled in England, are under submission to the Secretary of State.

Consideration of the proposals for the construction of the Kumbakonam-Mannargudi Railway (Madras), 22½ miles, by the Tanjore District Board, is still in abeyance pending information from the Government of Madras as to the method by which it is intended to raise the necessary capital.

A proposal for the construction, on the 2' 6" gauge, of a steam tramway from Jalesar Road to Kasganj (United Provinces), 50 miles, having been received by the Government of the United Provinces of Agra and Oudh, the receipt of a draft order under the provisions of the Tramways Act (XI. of 1886) is awaited.

Preliminary proposals having been received by the Government of Bombay for the construction, by private enterprise, of a light railway on the 2' 6" gauge from Nadiad, *via* Kapadvanj, to Meghraj, with a branch to Godhra (Bombay), 112 miles, an estimate for the survey of the lines has been sanctioned in view to enabling the projectors to put forward definite proposals.

The project by the Rohilkund and Kumaon Railway Company for converting the Dudhwa branch 3' 3½" gauge line, 36·74 miles, into a permanent line and bridging the Sardah river was sanctioned, but was not taken in hand owing to a settlement not having been arrived at as to the terms under which funds were to be provided.

The northern route, *via* Radhanpur and Nagar Parkar, has finally been decided upon for the proposed Bombay-Sind Connection Railway, and a detailed survey is now in progress from Viramgam on the Bombay, Baroda and Central India Railway to Badin on the North-Western Railway.

In connection with a proposal of Messrs. Tata and Sons, of Bombay, for building iron and steel works near Sini, a broad gauge line from Sini to Gurumaishini has been sanctioned for construction when required. A detailed survey is now in hand for a line from Gurumaishini to join the main

line at Amda instead of at Sini, the former being expected to prove the better route.

The commercial value of a canal and harbour at Rameswaram and the probable cost of the necessary marine works are under investigation by the Marine Department and the Government of Madras. In the meantime a modified scheme for the closing of the Pamban Pass and the provision, as a substitute, of a shallow draft canal across Rameswaram island is under consideration.

Considering the large extension of the use of the 2' 6" gauge, the Railway Board have thought it desirable, after consulting the 2' 6" gauge railway administrations on the various dimensions to be adopted, to introduce a schedule of dimensions for this gauge on the lines of the broad gauge and metre gauge schedules of 1905, and following the numbering of chapters and items of those schedules.

Through Metre Gauge Connection between the Railways in Northern and Southern India.—The lines comprised in the scheme are—

- (1) from Khandwa, *viâ* Akola and Hingoli, to the vicinity of Nanded ;
- (2) from Hyderabad to Guntakal, *viâ* Kurnool and Kurnool Road.

His Highness the Nizam's Government have intimated their willingness to provide for the construction of the sections lying in Hyderabad territory, *viz.*, from Nanded to the British frontier and from Hyderabad to Kurnool, and to commence construction as soon as the work on the British section (Khandwa-Akola-Hyderabad frontier) has been started. The latter was included in the triennial programme, 1908-11, as one to be commenced in 1909-10; but, owing to the reduction of the grant for 1908-09 to meet probable outlay on famine relief, its commencement is likely to be further delayed.

Improvement of the Vizagapatam Port.—The question of improving this port so as to render it suitable for ocean-going steamers is under consideration.

Vijapur-Vadnagar Railway.—The detailed project for this line, the construction of which has been proposed by the Baroda Durbar and which, together with the Durbar's Kalol-Vijapur railway, will eventually form a chord between the Rajputana-Malwa and the Gaekwar's Mehsana railways, has not yet been submitted for sanction. The question of the routing of traffic over the projected chord after its completion, which has been raised by the Bombay, Baroda, and Central India railway and which has an important bearing on the matter, is, however, under consideration.

IRRIGATION.

IRRIGATION.

The nature of the climate and the inequalities of the rainfall will account for the great antiquity of the practice of irrigation in India. Many of the irrigation systems now administered by the officers of the Public Works Department are founded on the lines of old native works which have been restored and extended or re-modelled.

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 storage of water in tanks for the purpose of irrigation is very common in Southern India. 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 repairing and improving old tanks, and in constructing new works in Madras, the Bombay Deccan, and in Ajmere-Merwara.

In size the tanks vary from the small works formed by earthen embankments thrown across local drainages, often of only two or three square miles in area, to the costly reservoirs constructed by the Imperial Government such as the Periyar and Rushikulya Works, the reservoirs of which have surface areas of 6,395 acres and 7,900 acres respectively.

Canal irrigation, in which the water is drawn directly from a river, has been practised 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. Irrigation canals are of two descriptions,

IRRIGATION. viz., "perennial" and "inundation." The former are furnished with permanent headworks and weirs, and are capable of irrigating large tracts of country throughout the year, independently of the local rainfall. The magnitude of some of the works of this class, which are almost entirely due to British enterprise and skill, may be judged by a few instances. The Upper Ganges Canal, which has been in operation since 1854, and has cost £2,183,027, comprises 520 miles of main canal and 3,001 miles of distributaries, and in the year 1906-07 supplied water to 934,502 acres. The Lower Ganges Canal with the Fatehpur branch, also in the United Provinces of Agra and Oudh, with a capital expenditure of £2,717,139, has 665 miles of main channel and 2,959 miles of distributaries, and in 1906-07 irrigated an area of 924,026 acres. The Sirhind Canal in the Punjab, which was completed in 1887, has cost £1,661,437, and consists of 319 miles of main channels and 2,041 miles of distributaries, while the Lower Chenab Canal in the same province, which was completed in 1900, has cost £1,881,850, and consists of 427 miles of main and branch channels, and about 2,308 miles of distributaries, with an estimated irrigable area of 1,638,886 acres. In Madras the great deltaic irrigation systems of the Godavari, Kistna, and Cauvery have respective lengths of main channel of 503, 379, and 844 miles, and together irrigate upwards of 2,500,000 acres. The inundation canals, which are peculiar to the Punjab and Sind, are of a much simpler and less costly description than the perennial canals. They are for the most part simply earthen channels, made without the expensive machinery of masonry dams and sluices, and are supplied with water by the annual rise in May of the Indus and its affluents. They constitute a very useful class of irrigation works, and in some cases have produced most successful financial results. The irrigation from them is, however, to some extent precarious. If the annual flood from the melting of the snows of the Himalayas does not sufficiently raise the level of the water in the river, it is impossible to pass the necessary volume of water on to the fields or even to give any water at all to many of them.

The works to which the preceding paragraph applies 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 unfailling supply. 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 the Bombay Presidency, where irrigation is largely dependent on storage works.

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 1905-06 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 the results obtained from working the canals for which full accounts are kept for 1904-05, 1905-06, and 1906-7:—

	Capital Outlay (Direct and Indirect) to End of Year.	Gross Receipts.	Working Expenses.	Net Receipts.	Percentage of Net Receipts on Capital Outlay.	Area Irrigated.
Major Works - - -	£ 29,079,585	£ 3,383,827	£ 1,038,883	£ 2,344,944	8.06	Acres. 13,551,159
Minor Works . . .	4,250,079	377,899	153,269	224,630	5.28	2,348,399
Total for 1906-07 -	33,329,664	3,761,726	1,192,152	2,569,574	7.71	15,799,558
Total for 1905-06 -	32,094,250	3,220,047	1,147,003	2,073,044	6.45	16,815,927
Total for 1904-05 -	31,079,615	3,247,610	1,092,066	2,155,544	6.93	14,618,084

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.

IRRIGATION.
Bengal.

The general results for 1906-07 of working all the irrigation and navigation systems in Bengal 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.
1901-1902	5,167,553	147,136	103,432	43,704	0·84	844,024
1902-1903	5,220,323	168,431	95,709	72,722	1·39	800,440
1903-1904	5,229,813	163,191	95,648	67,543	1·29	809,331
1904-1905	5,281,000	173,319	95,953	77,366	1·46	800,227
1905-1906	5,353,895	176,597	102,382	74,215	1·38	813,405
1906 1907	5,432,579	188,927	124,472	64,455	1·19	904,087

* 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 work. The two protective works, the Dhaka and the Tribeni canals, were sanctioned in 1900-01, and are still in course of construction, the capital expenditure at the end of the year amounting to £31,081 and £152,482 respectively.

The financial results obtained from the working of the major and minor works, excluding the Tribeni and Dhaka canals, 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 - - - -	1,775,303	4,624	0·26	268,048
Midnapur - - - -	566,025	-1,020	—	61,042
Sone Canals - - - -	1,782,196	62,732	3·52	563,812
Hijili Tidal Canal - - -	174,344	1,179	0·68	—
Total Major Works -	4,297,868	67,515	1·57	892,902
Minor Works :—				
Calcutta and Eastern Canals -	604,861	3,066	0·51	—
Orissa Coast Canal - - -	298,635	-5,935	—	—
Saran Project - - - -	47,882	-150	—	1,965
Total Minor Works -	951,448	-8,019	—	1,965

The Orissa, Midnapore, Sone and Hijili Canals, although classed as productive works in the hope that they would prove directly remunerative, show as yet no prospect of fulfilling this expectation, which indeed is not likely ever to be realised. The working of the Sone Canals has shown little improvement since 1902-03.

The Calcutta and Eastern Canals, which up to 1902-03 were the most profitable of the canal works in Bengal, are navigation works designed to maintain communication between Calcutta and Eastern Bengal, through the Sunderbunds. The Orissa Coast Canal, also a navigation work, forms, with the Hijili Tidal Canal, a complete line of communication between Calcutta and Orissa; and in the event of famine in the latter district would be very useful as a means of importing food.

Besides the minor works mentioned in the foregoing statement, 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, which comprises about 472 miles of channel, is used for navigation purposes only.

The capital expenditure for the year amounted to £1,747 on major works (excluding protective projects), £32,803 on minor works and navigation, and £44,135 on protective irrigation works.

In the United Provinces of Agra and Oudh, the capital outlay on canals during 1906-07 was nearly £253,000, including £46,700 each on the Betwa and Dhassan Canals, and £75,500 on the Ken Canal, which was formally opened in December 1906. The three protective works, the Betwa, Ken and Dhassan Canals, have so far cost £697,350, more than half having been spent on the Betwa Canal, which is the only protective work at present in operation. The total loss on working this canal now exceeds £276,000, but the annual deficit, after paying expenses and interest on capital, is being steadily reduced, and was only £4,460 in the year under review. Productive works, which have cost in outlay £7,961,717, yielded in 1906-07 a net profit of £377,890, the enormous extension of irrigation in the spring of 1906 having raised the gross revenue to the record figure of £798,806. The total realisations of the year from all canals amounted to £839,432, and the net surplus accruing to the Local Government under the terms of the provincial contract was over £220,000. The length of working channels increased by 218 miles, and was nearly 14,000 miles at the end of the year. Relief should be experienced in the tracts most liable to famine, not only by the completion in the near future of the Ken Canal, but also by the construction of tanks in Bundelkhand, and by the progress of the Fatehpur-Sikri distributary extension of the Agra Canal, a portion of which was opened for irrigation during the year. The demand upon the canals in 1906-07 was restricted by the copious rainfall which occurred in both harvests, and the area irrigated—2,588,457 acres—though above the average for nine years, was less by nearly a million acres than it had been in the previous year of drought. The figures for sugarcane and cotton show a steady demand for water for these valuable crops.

IRRIGATION.
United
Provinces
of Agra and
Oudh.

In the Punjab the general results of the year's operations for all works are shown in the following table in comparison with the records of the five previous years :—

Year.	Capital Outlay to end of Year.	Area Irrigated.*	Assessed Revenue.*
	£	Acres.	£
1901-02	6,744,839	5,065,134	1,015,069
1902-03	6,998,734	5,256,040	1,066,436
1903-04	7,164,461	5,963,102	1,195,207
1904-05	7,292,993	5,858,199	1,231,641
1905-06	7,621,550	6,368,338	1,252,097
1906-07	8,120,936	6,088,629	1,213,021

* Includes Muzaffargarh Canals.

Taking the actual revenue collected during the year, the following table compares the individual results obtained from all the works for which full accounts are kept :—

Canals.	Length of		Capital Outlay to end of Year.	Net Revenue collected in Year.	Percentage of Net Revenue on Capital Outlay.
	Main and Branch Channels.	Distributaries.			
	Miles.	Miles.	£	£	
Major Works :—					
Western Jumna (including Sirsa Branch).	346	1,803	1,155,840	134,161	11·61
Upper Bari Doab	369	1,590	1,337,674	174,367	13·04
Sirhind (British portion)	819	2,041	1,661,437	141,256	8·50
Lower Chenab	427	2,308	1,881,850	453,372	24·09
Lower Jhelum	113	1,116	1,030,241	55,902	5·43
Upper Sutlej (including Lower Sohag and Para).	328	390	116,736	23,431	20·07
Sidhnai	68	131	87,095	23,556	27·05
Indus Inundation	668	107	136,896	7,135	5·21
Minor Works :—					
Shahpur (Imperial)	72	80	14,394	2,654	18·44
Ghaggar (British portion)	44	24	22,888	-1,559	—
	2,754	9,590	7,445,051	1,014,275	13·62

IRRIGATION. The financial returns for the various works in 1906-07 are considerably greater than those earned in 1905-06, due largely to the development of irrigation on new systems and to new colonies being settled. Large remissions, however, continued to be made on account of the partial failure of the cotton crop through attacks by boll-worm, and of the prevalence of plague in certain districts. None of the canals earned less than 5 per cent. The Sidhnai Canal showed a return of 27·05 per cent., the highest of any of the Punjab canals. It was, however, closely followed by the Lower Chenab with 24·09 per cent. and the Upper Sutlej with 20·07 per cent. The Lower Jhelum earned a return of 5·43 per cent., and for the first time showed an excess over its interest charges for the year.

On the Native States branches of the Sirhind Canal the area irrigated was 473,293 acres, as compared with 425,656 acres in the preceding year. The profit earned by these branches amounted to £90,844, giving a return of 9·65 per cent. on the total capital expenditure of £940,730 incurred up to the end of the year.

The capital expenditure for the year on works for which full accounts are kept amounted to £64,327, of which £33,925 was incurred on the Lower Jhelum Canal, £15,519 on the Indus Inundation Canals, and £5,599 on the Upper Bari Doab Canal. In addition, £249,631 was expended on the Upper Chenab Canal, £178,287 on the Upper Jhelum Canal, and £7,140 on the Lower Bari Doab Canal, which are still under construction.

The navigation operations on the Western Jumna Canal resulted in a profit of £4,419. The Sirhind Canal navigation was worked at a loss of £683.

At the end of the year under review, the accumulated net profits on the Lower Chenab Canal amounted (after defraying interest charges) to £2,257,729, while the capital invested to the close of the year amounted to £1,881,850. In other words the profits now exceed the cost of the canal by £375,879.

Burma.

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 three large irrigation canals, the Mandalay, the Shwebo, and the Môn. Of these, the Mandalay and Shwebo were the only works that earned revenue during 1906-07. The capital outlay on these two works to the end of the year amounted to £341,570 and £306,996 respectively, on which the net receipts of £13,151 and £4,295 gave returns of 3·85 and 1·4 per cent. 46,282 acres were irrigated from the Mandalay Canal as compared with 41,839 in the previous year, and 44,639 acres were served for the first time from the newly constructed Shwebo Canal. The results on the Mandalay Canal have not come up to expectations, owing mainly to the slow rate at which land covered by heavy jungle is being occupied and cleared for cultivation, and in a smaller degree to water-logging in the Aungbinlé Lake and on the Patheingyi and Tamokso distributaries. Drainage schemes are under consideration.

Work on the Ye-u Canal continued during the year, the capital expenditure to 31st March 1907 amounting to £41,478. On the Môn Canal progress was slow owing to insufficient arrangements having been made for obtaining labour; the capital outlay to the end of the year amounted to £114,540.

The various minor canal systems in the dry zone of Upper Burma supplied water to 246,733 acres, as compared with 287,766 acres in 1905-06. The net revenue from these works amounted to £8,267. The most important works during the year were carried out on the Nyaungyan-Minhla Tank, the Meiktila Lake, the Ngapyang Canal, and the Shwetachaung. With some important exceptions, these works were constructed before the annexation of the Upper Province, but they have since been much improved by the Public Works Department.

Central Provinces and Berar.

The generally plentiful rainfall of the year led to a decrease in the area under irrigation in the Central Provinces, but in Berar, where irrigation is mostly confined to garden crops, there was a small increase. Less than 5,000 acres were irrigated from State tanks, but important progress was made in familiarising the people with the irrigation policy of the Government, and

there is every indication that they are awaking to the value of irrigation. Altogether nearly £93,000 were expended on State irrigation works. The large Khairbandha tank was completed at a cost of £18,300, and a commencement was made on the Ramtek Reservoir, which is estimated to cost £86,670. There were in all 184 works of all kinds under construction, and 113 projects were under investigation or revision. In the Nagpur division work was, as in all departments, much obstructed by the scarcity of labour.

IRRIGATION.

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 Godaveri, Kistna, and Cauvery, to the small tanks and channels maintained by the Revenue Department.

Madras.

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 snows on distant mountain ranges.

There are at present in operation 9 major works and 28 minor works, for which capital and revenue accounts are kept, and numerous other irrigation and agricultural works, individually small, for which such accounts are not kept. Of the 28 minor works for which full accounts are kept, 24 are irrigation systems, and four are tidal canals intended for purely navigation purposes.

Two new protective major works, the Mopad Reservoir and the Bhavanasi tank, and two productive major works, the Nagavalli River project and the Divi pumping project, were under construction during the year. The Divi pumping project, referred to in the previous year's report, is an experimental scheme and, if successful, will pave the way for the introduction of similar schemes in other parts of India. It was recommended by the Irrigation Commission as a project of considerable importance. Its estimated cost is £120,400, and of this amount £51,464 was expended up to the close of the year under review.

In addition to the 28 minor works referred to above, eight others, belonging to the class for which full capital and revenue accounts are kept, are still under construction.

Of the irrigation works for which full accounts are kept, the length of completed main canal was 3,500 miles, and of distributary channels 7,713 miles. The area irrigated during the year ending 31st March 1907 by these works was 3,631,599 acres. The canals used for navigation purposes only had a total length at the end of the year of 316 miles.

Taking all the works for which full accounts are kept, the general results of the year's working compared with those of the four previous years will be seen from the following statement:—

Year.	Capital Outlay.*	Area Irrigated.	Net Actual Revenue.	Percentage of Net Revenue on Capital.
	£	Acres.	£	
1902-03	6,299,896	3,525,034	480,595	7.63
1903-04	6,401,661	3,498,472	451,026	7.04
1904-05	6,515,022	3,558,659	456,668	7.01
1905-06	6,648,111	3,682,907	484,645	7.29
1906-07	6,815,915	3,631,599	520,423	7.63

* Including expenditure on works under construction.

The net revenue recorded in the foregoing statement is that which has resulted from the outlay of Government capital.

The returns on capital outlay in the class of major irrigation works show slight increases under all the systems with the exception of the Godaveri and Cauveri delta systems. In the former case the percentage dropped from 19.75 in 1905-06 to 19.47 in the year under review, and in the latter from 24.82 to 22.90, both decreases being very slight. The only major protective work in operation—the Rushikulya project—showed a decrease from 1.14 to 0.60 per cent.

IRRIGATION. The results of the year's working for the major works in operation are shown by the following figures :—

Work.	Area Irrigated.	Capital Outlay.	Net Revenue.	Percentage of Net Revenue on Capital.
	Acres.	£	£	
Godaveri Delta - - - -	872,849	938,220	182,722	19.47
Kistna Delta - - - -	664,171	1,029,989	162,021	15.73
Pennér River Canal - - -	165,462	432,883	23,271	6.53
Kurnool-Cuddapah Canal - - -	43,156	1,462,382	8,907	0.61
Barur Tank - - - -	6,902	29,100	903	3.10
Cauvery Delta - - - -	983,106	237,522	54,338	22.90
Srivaikuntham Anicut - - -	44,431	108,524	7,724	7.12
Periyar Project - - - -	159,732	664,711	28,077	4.22
Rushikulya (Protective Work) - - -	103,324	337,275	2,013	0.60
Total - - - -	3,043,133	5,240,606	475,026	9.06

The minor works for which full accounts are kept irrigated an area of 588,466 acres and earned a net revenue of £45,360, equivalent to a percentage of 3.16 on the capital expended on them. The purely navigation works were in each case worked at a loss, the total sum involved amounting to £1,947.

Besides the works referred to in the foregoing paragraphs there is a large class of small works in Madras, partly maintained by the Public Works Department and partly by the Revenue Department, for which distinct capital and revenue accounts are not kept. The total irrigation revenue derived from these works in 1906-07 was £616,162, as compared with £556,398 in 1905-6; the area irrigated by them was 3,450,743 acres, being an increase of 147,364 acres as compared with the previous year. A plan for the systematic repair of some of these works has now been in progress for some years and is about two-fifths completed. Up to the 31st March 1907 an expenditure of over £632,500 had been incurred under this scheme, and approximately 55,640 square miles had been investigated.

The capital expenditure for the year on major works amounted to £150,384, of which £51,464 was spent on the Divi pumping project, £31,207 on the Periyar project, £19,743 on the Nagavalli River project, £18,580 on the Mopad Reservoir project, and £10,687 on the Godaveri delta system. The capital expenditure on minor works and navigation, for which full accounts are kept, amounted to £14,310, of which £2,822 was expended on the Hajipuram tank and £897 on the Berijam project.

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 fell from £322,184 to £316,667. Of the total amount £73,333 were spent upon works, about £145,000 upon repairs, and £86,667 upon establishment. The expenditure upon Famine Relief debitable to "Irrigation" was £15,329. The total area irrigated from the Deccan and Gujarát works for which capital and revenue accounts are kept was 108,787 acres, against 105,716 acres in the previous year. The gross assessed revenue rose from £59,555 to £63,144. The area irrigated by all classes of works in Sind was 3,487,653 acres, against 3,349,488 acres in the previous year and 2,923,928 acres in the year 1904-05. The gross assessed revenue amounted to £569,962, the corresponding figures for 1905-06 and 1904-05 being £543,425 and £443,153 respectively. The areas irrigated and the assessed revenue are the largest yet obtained in Sind. The increase of 138,000 acres of irrigation over the previous year's total, which was itself a record total, illustrates the eagerness with which facilities for irrigation are

seized by the cultivators in Sind and the necessity for increasing the means of irrigation. This increase of area is most satisfactory. IRRIGATION.

In Bombay the season was, on the whole, a good one, the rainfall being ample and fairly well distributed. In the Central Division, however, the late rains partially failed in some places, and in Dharwar the monsoon was weak, and several tanks were dry from April to June. Irrigation from the new tanks in the Panch Mahals and Kaira was small, as the tanks did not fill. In the Poona, Nasik, Ahmednagar, Sholapur, Belgaum, and Bijapur Districts, several canal and tank works were opened for famine relief purposes, but fortunately there was little scarcity and the number of workers was never large. Sanction was received during the year for the Godavari Canal project estimated to cost £636,700, and the works were commenced. Work on the Girna Left Bank Canal and the Waghad Tank in the Nasik and Ahmednagar Districts was in progress.

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.

The year was exceedingly prosperous and the inundation exceptionally favourable, in fact in the case of several canals the flow developed into floods accompanied by burst banks and flooded fields.

The area of cultivation under the Jamráo Canal decreased by 39,000 acres owing to the scarcity of labour. The crops under the Nasrat and Fuleli Canals were excellent and the Dád Canal worked well. The Indus River Commission carried out topographic and hydrographic surveys, and made a number of borings for the Sukkur weir.

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. This work was originally designed as a protective scheme, but was transferred from the commencement of 1906-07 to the class of productive works. Another major work, the Paharpur Inundation Canal, is in the course of construction as a productive work, and expenditure amounting to £34,415 had been incurred on it up to the close of the year. The project estimate, amounting to £1,216,016, for a third work, the Upper Swat River Canal, to take off from the Swat River at Chakdarah and to serve the large irrigable area lying north of the Kabul River, has been sanctioned, and preliminary work has been commenced. North-West
Frontier
Province.

The capital expenditure on the Lower Swat River Canal to the end of the year under review amounted to £280,724, and the net revenue for the year to £29,227, giving a return of 10·41 per cent. In the previous year the profit and percentage were £26,480, and 9·5 respectively. The area irrigated in 1906-07 was 151,460 acres, as compared with 158,808 acres in 1905-06, the decrease being due to ample rainfall throughout the rabi season, the demand for canal water falling off.

The minor works in operation include the Kabul River Canal and the Bara River Irrigation Works. The capital expenditure on the Kabul River Canal to the 31st March 1907 amounted to £66,652, and the net receipts for the year realised £3,229, equivalent to a return of 4·85 per cent. The total area irrigated during the year was 35,395 acres, against 31,668 acres in 1905-06; this is the highest on record, and is due to the opening of the Hazar Khani branch and to improved methods of irrigation.

The revenue management of the Bara River Irrigation Works is in the hands of the Civil Department, and reports of area irrigated and revenue earned are not available.

The two principal Irrigation Works in the province are the Shebo Canal and the Khushdil Khan Reservoir, both of which were in operation during the year under review. A third project, known as the Anambar Flood Channel, has now been completed at a cost of £3,680, but it has not yet been opened, as there are no colonists and consequently no land ready on which to put the water. Baluchistan.

The capital expenditure on the Shebo Canal and Khushdil Khan Reservoir at the end of 1906-07 amounted to £46,700 and £68,498 respectively, and the net gain for the year was £577 and £4,368, representing a return of 1·24

IRRIGATION. and 6·38 per cent., respectively. The area irrigated by the Shebo Canal was 2,371 acres, and by the Khushdil Khan Reservoir 6,633 acres. A loss of £192 was incurred on the Anambar Flood Channel, representing the expenditure for the year on the maintenance of the canal.

Coorg. The expenditure on irrigation in Coorg during the year was £2,616, against a grant of £2,533, the excess being due to the pushing on of the work at Devanur when labour was available. The major works completed were improvements to the Kudlur Hirikere and Doddakanagala tanks and the investigation of the Harangi project. Works in progress included the construction of a dam with channels on the right and left banks of the Kire hole stream at Devanur, and improvements to the Nagavala, Tavere and other tanks throughout the province.

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 Military Works which in previous reports were included with Civil Works in this section are now dealt with separately in the Finance and Revenue Accounts of the Government of India under the head of Military Services, and are consequently not now referred to in this chapter. The expenditure on Civil Works is chiefly met from provincial and local resources. The classification of the expenditure for 1906-07 is shown in the following table:—

	Imperial.	Provincial.	Local.	Total in India.	Expendi- ture in England.	Grand Total.
Civil Works, 1906-07	£ 650,139	£ 3,262,611	£ 1,572,593	£ 5,485,343	£ 68,758	£ 5,554,101
„ 1905-06	718,220	3,020,385	1,541,579	5,280,184	75,023	5,355,207

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 have recourse to the professional skill of the Public Works officers.

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

engal. In Bengal the expenditure in 1906-07 on Civil Works was as follows:—

	£
Imperial	160,494
Provincial	458,699
Local	299,887
Total	<u>919,080</u>

* The Imperial works undertaken during the year were not of great importance. Owing to the accommodation in Government House and its attached buildings being insufficient for present requirements, land and buildings were acquired in the vicinity in order to provide additional accommodation. As no room is available in any of the Imperial Secretariat buildings for the new Department of Commerce and Industry, land was acquired near the present Secretariat buildings for the purpose of constructing an office for that Department.

BUILDINGS
AND ROADS
(CIVIL).

Under Provincial works, the needs of the High Court and the Civil and Criminal Courts in the Province continued to receive attention. Good progress was made with the new Presidency Jail at Alipore, while materials were collected for constructing a District Jail at Howrah in place of the present sub-jail. Police training schools for constables were established at Bhagalpur and Purulia. Several works in connection with hospitals and dispensaries were constructed or in progress in Calcutta and at other stations. Adequate attention was given during the year to the housing of Government officials.

Under communications, the lighting of the Calcutta Maidan was improved at important road junctions. Metalling of the Tista-Rishi road was in progress and the survey of the Bengal-Tibet road was completed.

In the United Provinces of Agra and Oudh the outlay under the different heads of service was as follows :—

	£
Imperial - - - - -	56,423
Provincial - - - - -	362,628
Local - - - - -	230,751
Total - - - - -	<u>649,802</u>

United
Provinces
of Agra and
Oudh.

The quarters of the Imperial Cadet Corps at Dehra Dun were furnished and subsidiary buildings constructed. At Cawnpore the currency office made some advance, and a new Commissioner's Court was being built at Meerut. Large improvements and extensions were made at the Thomason College, Roorkee, the Medical School at Agra, and the new Agricultural College at Cawnpore. Over £6,700 was spent at Naini Tal and Allahabad on the construction of quarters for Secretariat clerks. The new civil hospital at Allahabad approached completion, and numerous dispensaries, schools, offices, jails, and police buildings were being constructed or improved. At Agra £5,000 was spent on archæological restoration. The most important bridge under construction was a new one over the Jumna at Agra, estimated to cost £126,670. The metalled roads under maintenance had a length of 6,070 miles, which was increased by 120 miles during the year.

Famine relief works costing £66,670 were carried on by the Public Works Department during the year.

In the Punjab the expenditure for the year on Civil Works was as follows :—

	£
Imperial - - - - -	47,252
Provincial - - - - -	333,561
Local - - - - -	91,693
Total - - - - -	<u>472,506</u>

The most important Imperial works completed during the year were additions and alterations to Ranbir Villa at Kasauli to adapt it for use as a Central Research Institute, construction of peons' quarters for the Imperial Secretariat at Simla, improvements and additions to Windcliffe and Knockdrin at Simla, a new postal Stock Dépôt at Lahore, and alterations to the Post Office at Ferozepore. In addition, the following buildings were in progress.

* These particulars relate to 1905-06, the details for 1906-07 not having as yet been received.

BUILDINGS
AND ROADS
(CIVIL).

viz., the addition of a third storey to the Central Library at Simla, quarters for the Superintendent of the Jhelum Colony at Sarghoda, a new office for the Accountant-General at Lahore, and stables for the General Post Office at the same place.

Under Provincial Civil Works, the new Public Works Secretariat Offices at Lahore, which were commenced in the previous year, were built up to roof level. An office at Delhi for the Commissioner, Delhi Division, the O'Brien High School at Mianwali, a Sessions House at Lyallpur, the District Jail at Campbellpore, an Assistant Commissioner's Court at Pindi Gheb, and a Court House at Sakesar were completed. The European clerks' cottages at Lahore were also completed and are proving very popular.

The expenditure on new roads continues to increase. A five-year programme for the construction of new feeder roads to railways was drawn up during the year, and an expenditure of £26,667 was incurred under it. The maintenance outlay continues very heavy, and it is likely to increase owing to the rapid extension of the road mileage and the increasing price of labour.

Boat bridges were maintained over the Jhelum at Khushab, the Ravi at Shahdara, and the Indus at Dera Ghazi Khan; the usual steam ferry service at the latter place was worked by the North-Western Railway during the hot weather. A boat bridge was constructed over the Phalku Nalla at Wazirabad, and the District Boards maintained certain other boat bridges over the Jumna and Beas.

Various miscellaneous public improvements were undertaken at Simla and Lahore, and waterworks, estimated to cost £28,700, were under construction at Ludhiana.

Famine relief works were opened at the beginning of the year in the Rohtak district owing to the failure of the preceding monsoon and winter rains. The labourers were employed on digging large tanks at Mandauthi, Bakhra and Mokhra, and on the excavation of kunkur for the Rohtak-Mahim and Thajjar-Bahadurgarh roads. All these works were closed by the end of August. The total expenditure to the end of the year amounted to £5,779.

Burma.

In Burma the total expenditure on Civil Works for the year was :—

		£
Imperial	- - - - -	543
Provincial	- - - - -	704,211
Local	- - - - -	122,066
Total	- - - - -	<u>826,820</u>

Progress was made with various important building operations in Rangoon. The Secretariat buildings were completed, and improvements were made in the old General Public Offices in Strand Road. Fair progress was made with the works in connection with the new General Hospital at Rangoon, and the erection of a new Chief Court was advanced a stage. The extension of the Currency buildings was in hand, and a commencement was made with the new Press building. Outside Rangoon new buildings for the use of the various departments of the Administration were in course of construction all over the country. In the Southern Shan States nearly £20,000 was spent in moving the Kengtung post to a healthier site at Loimwe, which is about 5,000 feet above the sea. Work on the Rangoon Town Lands Reclamation Scheme progressed satisfactorily, the outlay amounting to about £43,300. The Hlawga waterworks were completed and handed over to the Rangoon Municipality on 1st July 1906.

Central
Provinces
and Berar.

The amount of the expenditure for the year was :—

		£
Imperial	- - - - -	5,213
Provincial	- - - - -	328,479
Local	- - - - -	47,594
Total	- - - - -	<u>381,286</u>

The re-organisation of various departments and the formation of the new district of Drug necessitated a very heavy programme of construction, and almost one-half of the total expenditure on provincial works was devoted to original buildings. Unfortunately the outburst of activity coincides with a sharp upward rise all over the provinces in the cost both of materials and of labour, and also with a great dearth of the latter. Good progress has, however, been made. The inauguration of the station-house system in Raipur and Drug necessitated the construction of a large number of police buildings of all kinds in these districts. Excise reforms similarly involved the construction of several bonded warehouses. At Drug, buildings had to be provided for every branch of the Administration, quarters had to be provided for various officials, and it was necessary to open up many new roads to connect the headquarters of the new tahsils, and to give a more ready outlet to the produce of the district. The rapid growth of Nagpur has also thrown a great deal of work on the Department, both in the provision of accommodation and in the construction of new connecting links in the civil station. The largest individual work in hand during the year was the new Secretariat building at Nagpur. On original communications more than £53,000 was spent, special attention being given to the vast and hitherto almost roadless region of the Chanda Zamindaris, and also to the new district of Drug. Over £76,000 was expended on the upkeep of existing roads.

BUILDINGS
AND ROADS
(CIVIL).

The total expenditure in Eastern Bengal and Assam for 1906-07 was as follows :—

	£
Imperial - - - - -	5,763
Provincial - - - - -	321,274
Local - - - - -	177,796
Total - - - - -	<u>504,833</u>

Eastern
Bengal and
Assam.

Under Imperial works, land was acquired for Telegraph and Post Offices at Dacca, Patiya, and Comilla. Temporary extra accommodation was provided for the Accountant-General's Office, and a building for the Telegraph Sub-Divisional Office at Gauhati was completed.

In the class of provincial works, extensive repairs to the Government House at Shillong were in progress, and petty additions and improvements were carried out in the temporary Government House at Dacca. The staff quarters at Dacca were completed; a site was acquired for the Government House at Chittagong, and 762 acres of land were under acquisition for the new civil station at Dacca. The School of Engineering at Dacca was completed, while the Arts College, hostel, and subsidiary buildings in the same town were well advanced. A dispensary was built at Dimapur, and two male wards were added to the Lunatic Asylum at Tezpur.

Among miscellaneous public improvements, the most important were the acquisition of the site for the new civil station at Jorhat, improvements to the Gauhati waterworks and to the navigation on the Dhaleswari river, and the construction of four masonry wells in the Sylhet municipality.

Communications received attention in the Naga Hills and Surma Valley Divisions, where several new works were completed. Improvements to the Assam Trunk Road between Lakhimpur and Fakirganj, to the Dhubri-Kachugaon Road, to the North Trunk Road, to the Gauhati-Shillong Road, and to the Shillong-Charra Road were in progress. Several other new works were also in hand or under survey.

In Madras the expenditure for the year on Civil Works was as follows :— Madras.

	£
Imperial - - - - -	13,492
Provincial - - - - -	336,868
Local - - - - -	409,778
Total - - - - -	<u>760,138</u>

**BUILDINGS
AND ROADS
(CIVIL).**

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.

Among buildings completed during the year were the Gass Forest Museum at Coimbatore and the Pasteur Institute at Coonoor. The collector's office at Cocanada was nearly completed and that at Guntur was under construction. Structural alterations and improvements were also in progress at Government House, Ootacamund. The Central Record Office at Madras was also commenced.

Under the head of Communications a few important roads are in the hands of the Provincial Public Works Department, chiefly in the Nilgiris, Shevaroy's, and Eastern and Western Ghâts. Existing ghât roads were maintained, and the new road in the Palnis from Aiyampalayam to Tandigudi was practically completed. A proposal for a road to Kodaikanal *viâ* "Law's Trace" is now under consideration. The greater part of the road system of Madras, is, however, in the hands of the Local Boards, whose expenditure is not under the control of the Public Works Department. They maintain their own engineering establishments, though in some cases they employ the agency of the Public Works Department for particular works.

Archæological excavations were carried out during the year throughout the Presidency.

Bombay.

The expenditure on Civil Works in the Buildings and Roads branch in the Bombay Presidency for 1906-07 was as follows:—

	£
Imperial - - - - -	59,922
Provincial - - - - -	416,892
Local - - - - -	180,920
	<hr/>
Total - - - - -	657,734

The principal buildings completed during the year were the new Observatory at Alibag, a District Prison at Sukkur costing £18,374, the new Central Prison at Karachi costing £23,771, numerous land revenue and excise buildings, and additions to St. George's Hospital, Bombay, the Male Training College, Bombay, and the College of Science, Poona. In connection with the Agricultural College and Research Institute at Poona, an expenditure of £5,680 was incurred during the year on constructing Chemistry and main buildings, planting trees, constructing roads and buildings in connection with the Demonstration Farm, and payment of land compensation, against an estimate of £35,330. Progress was made with the construction of the new General Post Office, Bombay, the extension of the Central Telegraph Office, Bombay, new civil hospitals at Belgaum and Karachi, and numerous other buildings. A sum of £7,532 was spent in acquiring certain land at Parel required for the site of the new prison for the City of Bombay. Considerable expenditure was also incurred on the preservation of archæological antiquities throughout the Presidency.

During the year £41,300 was expended on original works connected with roads. Out of this £16,583 was provided by Provincial and £24,717 by Local Funds. The works undertaken included a number of new metalled and unmetalled roads in all divisions.

The Local Funds works, in addition to roads, consisted of school buildings and miscellaneous water supply and drainage works carried out through the agency of the Public Works Department. The construction of a light-house on the Dholera Bandar, estimated at £564, was continued, the expenditure during the year amounting to £400.

The Famine Relief works opened in the Central Division towards the close of the year 1905-06 were closed by the end of September generally. In the Southern Division the works started during 1905-06 were continued and some new ones were also opened. These works were mainly of the nature of improvements to roads and tanks.

The expenditure on Civil Works in Coorg was as follows :—

	£
Imperial - - - - -	20,004
Local - - - - -	2,732
	<hr/>
Total - - - - -	22,736
	<hr/>

BUILDINGS
AND ROADS
(CIVIL).
Coorg.

The principal civil buildings completed during the year were quarters for revenue officials at Ponnampet and Hudikeri, a 'segregation ward at Sidapur, police lines at Fraserpet and Bhagamandala, and a girls' school at Amnatti. Major works under construction were the Mercara and Virajendrapet hospitals, improvements to the Mercara High School and primary school, and police lines at Mercara Town, Virajendrapet, and Mercara taluk. The total expenditure on communications was £8,743 against a grant of £8,646, the excess being due to the execution of additional repairs to roads to keep them in good order during the monsoon and to the advantage taken of labour when available to push on with the works. An inspection bungalow at Sidapur, bridges on the Mercara-Kodlipet road, and the metalling of part of the road from the Cauvery to Virajendrapet were completed, while the Wynaad road and the metalling of numerous other roads were in progress. Excluding the usual outlay on the upkeep of bungalows, coolie lines, and bridges, the expenditure on account of repairs amounted to £6,787. The existing communications were maintained in good condition, the mileage under metalled and unmetalled roads being 162 and 54 respectively.

In the North-West Frontier Province, the expenditure for the year on Civil Works was as follows :—

	£
Imperial - - - - -	101,896
Local - - - - -	7,892
	<hr/>
Total - - - - -	109,788
	<hr/>

North-West
Frontier
Province.

The principal buildings completed during the year were a Court-house and Residence for the Assistant Commissioner at Nowshera, a new telegraph office at Nowshera, a Militia and Civil post at Miranshah, Militia posts at Tanai and Spinkai Kach, a new Civil post at Sarwakai, a Divisional Judge's Court at Dera Ismail Khan, and a Munsiff's Court at Bannu. Under communications, the Murtaza-Wana road was completed with all bridges and culverts, the road from Dera Ismail Khan to Zam Choudwan was opened to traffic, and a steel girder bridge over the Gomal River and numerous other bridges on the Dera-Tank-Murtaza were under construction. Boat bridges over the Indus at Dera Ismail Khan and Khushalgarh were maintained, the one at Dera Ismail Khan being replaced during the hot weather by a steam ferry service under the management of the North-Western Railway.

CHAPTER XII.

POST OFFICE AND TELEGRAPHS.

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, are given in the following statement:—

YEAR.	Receipts.	Expenditure.	Net Revenue.
	£	£	£
1904-05	1,575,980	1,519,813	56,167
1905-06	1,651,477	1,575,936	75,541
1906-07	1,751,146	1,602,933	148,213

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.	No.
1904-05	16,033	26,037	3,222	140,836
1905-06	16,775	27,107	3,376	151,871
1906-07	17,180	29,523	3,383	153,006
Increase in 1906-7 over 1905-1906	406	2,416	7	1,135

* Including the Bombay-Aden line.

YEAR.	Letters (including Postcards).	Newspapers.	Book and Pattern Packets.	Parcels.	TOTAL.
	No.	No.	No.	No.	No.
1904-05	697,707,867	27,073,187	29,592,010	4,341,267	678,930,481
1905-06	648,128,342	40,300,923	42,719,064	4,935,279	734,092,728
1906-07	683,707,568	44,048,368	46,631,568	5,231,244	779,656,868
Increase in 1906-07 over 1905-1906	23,480,626	3,647,322	236,508	45,654,263	

Since 1904 there has been a gradual transfer of the District Post Establishments to the Imperial Establishment. The process was completed by 1st March 1906, with the exception of some establishments in Baluchistan.

Of the total length of postal lines, 1,185 miles were political lines administered by the Imperial Post Office. The increase was greatest in Burma.

The general correspondence returns, of which a summary is given in

the margin, show an increase of 45 millions of articles (excluding money orders) carried by post in 1906-07, as compared with the figures for 1905-1906. Of the additional articles 21 millions were postcards.

The Rome Postal Congress.—The sixth Congress of the Postal Union was held at Rome in April and May 1906. Of the measures adopted the most important was a reduction of Foreign Letter rates, but this reduction did not take effect within the year under report. Another important result of the Congress is that statistics of foreign mails are in future to be taken once every six years, commencing with November 1907.

Improvements in 1906-07.—There were comparatively few changes during 1906-07; the regulations relating to postcards of private manufacture were revised, and the transmission of mails—especially the inland transmission of foreign mails—was accelerated in many cases owing to improvements in the train service.

The Parcel Post rates for a large number of foreign countries were reduced in October 1906 in consequence of India having consented to the reduction of a surtax specially conceded to her by the Washington Postal Convention of 1897.

Amount of Postal Matter dealt with.—The total number of articles received for delivery, including money orders, was over 800 millions, of which 95·06 per cent. were delivered, as compared with 95·09 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: postcards which infringe these rules are treated and charged as letters, in which case the addressees frequently refuse to accept them. In 1906-07 the receipts of postal articles (other than money orders) at the dead-letter offices were 7,642,026; of this number 5,592,354 articles were either delivered to addressees or returned to senders, and 2,049,672 could not be disposed of. This last figure is only 0·26 per cent. of the total number of articles given out for delivery, and a large proportion of the articles not disposed of were from their nature not capable of delivery.

The number of postal articles (excluding parcels) exchanged between India and England was 29,525,000 in 1906-07, as compared with 26,971,000 in 1905-06—an increase of 9 per cent.

The number of parcels exchanged with the United Kingdom rose from 333,749 in 1905-06 to 358,155 in 1906-07—an increase of 7½ per cent. The traffic with the United Kingdom formed about two-thirds of the whole foreign parcel traffic. In the exchange of parcels with other countries there

	* Parcels not exceeding		
	3 lb.	7 lb.	11 lb.
<i>Via Gibraltar</i>	1s.	2s.	3s.
<i>Via Brindisi</i>	2s.	3s.	4s.

was again a satisfactory development of the traffic in both directions, the number of parcels showing an increase of 12 per cent. On 1st January 1904 India adopted the "Triple Scale" rates of the cheap Imperial Parcels Post scheme for the interchange of parcels with Great Britain.* Similar rates have since been adopted by her for exchange with various other parts of the British Empire.

Insurance of Letters and Parcels.—The receipts from the insurance of letters and parcels were £16,974, as compared with £15,613 in the preceding year. The number of articles insured increased by 25 per cent., and their value by 31 per cent.

The average value for which each article was insured was, in the case of letters, Rs. 233, as compared with Rs. 232 in the previous year, and in the case of parcels, Rs. 310, against Rs. 283 in 1905-06.

The number of claims for compensation preferred in respect of insured articles was 50, as compared with 47 in the preceding year. Twenty-one claims were admitted, the loss being due in 19 cases to fraud or negligence on the part of the servants of the Post Office, in one case to accident, and in one to highway robbery. This involved the net payment, after deducting recoveries, of £312, or 1·85 per cent. of the total amount realised from insurance fees, against a percentage of 2·01 in the preceding year.

Value-payable Post.—The business of the value-payable post continues to show considerable progress. The number of articles sent was 5,943,385, and the amount declared for recovery by the Post Office from the addressees was over £4,333,000, the commission on which was £62,966. There was an increase of 3·98 per cent. in the number of articles, of 8·75 per cent. in the value specified for recovery, and of 8·84 per cent. in the commission realised. Calcutta was responsible for over a quarter of the entire business.

During the year under review 74,394 value-payable articles were despatched from India to Ceylon, as compared with 54,232 articles in the preceding year.

Money Orders.—The total value of money orders issued has risen from £22,707,000 in 1905-06 to £24,150,000 in 1906-07, and that of orders paid in India from £23,546,660 to £25,124,795. The amount of commission realised has increased by 6·69 per cent.

The rate of commission (1 anna for sums not exceeding Rs. 5) is remarkably low, considering that in India the Post Office undertakes the payment of the payee at his house.

The average value of all inland money orders shows a continued tendency to decline: in 1905-06 it was Rs. 16-14-3; in 1906-07 it was Rs. 16-13-7. This tendency, and a similar tendency in the case of value-

POST
OFFICE.

payable articles, shows that both systems are becoming popular among poorer classes.

The above figures include the special classes of money order for payment of revenue, rent, and miscellaneous Government dues. These as a whole amounted to almost the same total as in the previous year—viz., about £1,100,000.

The value of money orders paid and issued in Native States were respectively £152,891 and £189,870. The excess of the issues by the States over the payments is again mainly due to the large issues of the Gwalior State.

The number of telegraphic money orders issued in 1905-06 was 216,597 for £1,486,335, and in 1906-07, 260,948 for £1,627,325. The average value of a telegraphic money order was Rs. 93. 8. 8.

The foreign money orders for and from the United Kingdom, most of the British colonies and possessions, foreign European countries and most of their colonies and possessions, and Egypt, are issued in sterling. The value of these orders issued by India rose from £390,257 in 1905-06 to £397,688 in 1906-07, and of the orders paid in India from £654,908 to £673,501. Of the total sterling money order transactions, by far the larger part was with the United Kingdom and British colonies and possessions.

The average value of a sterling money order issued by India was £3 5s. 5d., and that of a sterling money order paid in India was £9 16s. 0d.

The money order transactions between India and China, Japan, Ceylon, and some British and foreign colonies in Africa and the East, are advised in Indian currency. The amount of such orders issued by India rose from £82,694 in 1905-06 to £93,430 in 1906-07, and the orders paid by India rose from £626,578 to £797,979—the increases occurring chiefly in the Federated Malay States, British and German East Africa, Ceylon, and Somaliland.

Savings Banks.—At the close of the year there were 8,049 offices performing savings bank business, against 8,071 in the preceding year. The number of accounts in the Post Office savings banks rose from 1,115,758 to 1,190,220, the total value of the deposits from £9,328,417 to £9,844,652, of which £9,602,541 is held at call and £242,111 subject to 6 months' notice of withdrawal. The new deposits amounted to £4,767,949, the withdrawals to £4,528,502, and the interest on deposits to £276,788. The average balance at the credit of each depositor was Rs. 133·99 as against Rs. 130·83 in the previous year. The table in the margin shows the number of depositors in different classes for the years 1905-06 and 1906-07.

Class of Depositors.	Average Number of Deposits.		
	1905-06.	1906-07.	Increase.
I. Professional -	362,868	383,873	21,005
II. Domestic -	194,583	206,221	11,638
III. Commercial -	43,291	47,015	3,724
IV. Agricultural -	19,573	23,822	4,249
V. Industrial -	38,589	42,366	3,777
VI. Indefinite -	456,854	486,923	30,069
Total -	1,115,758	1,190,220	74,462

The purchase of Government securities through the Post Office has been facilitated by revised rules introduced in August 1906, and during 1906-07 the total amount invested in Government securities by savings bank depositors through the agency of the Post Office was £149,200, against £111,800 in the preceding year; and the balance of securities held by the Comptroller-General on behalf of depositors at the close of the year was £277,200, compared with £188,200 on the 31st March 1906.

Pensions paid through the Post Office.—The total number of Native army pensioners whose pensions were paid through the Post Office in the Punjab and North-West Frontier Province during the year was 30,800.

Life Insurance and Annuities.—During the year under review 1,532 new policies of the aggregate value of £147,168 were granted by the Postal Insurance Fund. Of these 1,313 were Endowment Assurance Policies, of the total value of £125,605. Claims, amounting in all to £16,189, were paid on the death of insured persons. At the close of 1906-07 there were 12,651 active policies in existence (5,087 held by Post Office servants and 7,564 by servants of other Departments), and the aggregate sum insured was £1,247,900. Nine life annuities were purchased by local bodies for their servants under Article 807 of the Civil Service Regulations.

Offences.—During the year under review there were 24 cases in which the mails were plundered by highway robbers, of which 21 were in British territory and 3 in Native States. The figures for the preceding year were 17 and 6 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 373. The defalcations and losses amounted to £3,595, as compared with £2,456 in 1905-06. A sum of £1,592 was recovered from the offenders or their sureties; £612 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 42,185, against 38,505 in the previous year. In 32·34 per cent. of the whole number the complaints were ascertained to be well founded; 43·20 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. The increase in complaints, especially in groundless complaints, was due mainly to the enforcement of the rules laid down by Government as to postcards.

Foreign Mails.—No change of importance occurred during 1905-06 in connection with the Mail Services.

Sale of Quinine.—The arrangements for the sale of quinine through the agency of the Post Office are now in force throughout India; in the aggregate the supplies issued to post offices show an increase since 1905-06; this is, however, mainly due to change in the procedure introduced recently.

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 system, extending from Karachi to Teheran and Fao, for which, as usual, a separate account is given. The system now consists of 67,197 miles of line, 258,860 miles of wire, and 390 miles of cable.

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Among the events of interest during the year may be mentioned the visit of His Majesty the Amir of Afghanistan to India and of Their Royal Highnesses the Duke and Duchess of Connaught to Rangoon, Mandalay, and Calcutta; when special arrangements were made for the delivery of their telegrams and for the opening of camp telegraph offices at the principal places of halt on their respective routes. In view of the reduction in rates for British State telegrams exchanged between India and Europe which came into operation in 1905-06, the Government of India agreed to reduce to one-half, from 1st July 1906, the terminal rates on such messages exchanged between India and places served by the cable companies which carry these telegrams at half the ordinary rates. From 1st January 1907, the Indian transit rate was reduced to one-half for all British and Colonial Government telegrams transiting India. Another new feature of the year's working was the proposed introduction of telegraph forms with embossed stamps, which, it is hoped, will prove a convenience to the regular telegram-sending public.

A proposal to improve the existing service with Burma by laying a deep-sea cable between Madras and Cape Negrais was not proceeded with, pending the construction of the Sara Railway bridge, by which it is hoped to be able to obtain a land route to Burma, which would be more reliable and easy of maintenance than the existing lines.

The Committee appointed by the Government of India to investigate certain matters relating to the methods of working and the recruitment of the staff of the Indian Telegraph Department, and to submit proposals for the improved organisation thereof in all its branches, entered on their duties on 28th September 1906, and concluded their inquiry during the year under review. Their Report has since been issued, and is now under consideration. In connection with the work of this Committee, a telegraph traffic expert, Mr. Newlands, was lent by the General Post Office to advise and assist the Government of India in the reforms contemplated. Mr. Newlands

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proceeded to India in September 1907, and is expected to complete his special duty within 12 months from that date.

The results of working for the year 1906-07 are as follows. The gross receipts are the highest ever recorded, and exceed those of 1905-06 by £22,978. This increase occurs mainly under the head of message revenue, the number of telegrams during the year having increased by 8·85 per cent. and their value by 3·04 per cent. A satisfactory feature in the rise in value is the increase of £19,103 in the revenue from private telegrams, indicating as it does the appreciation by the public of the extended facilities for communicating by telegraph. As compared with the previous year, the working expenses have increased by £45,153, due chiefly to heavier repairs to lines which were executed during the year under review and to the expansion of the Department, a larger staff being required to cope with the work, which has steadily increased since the introduction of the reduced inland tariffs in January 1904. The net revenue for the year amounted to £194,385, representing a return of 2·95 per cent. on the capital outlay. This return is the lowest recorded since 1878-79, the year after the Department first showed a profit on its working.

Capital expenditure was increased during the year by £379,251. Of this amount £33,437 represents the outlay in the Public Works Department on telegraph buildings, and the remainder consists of expenditure on additions to the system (including apparatus and plant) comprising 2,856 miles of line and 16,108 miles of wire, including cable. The total capital outlay at the close of the year amounted to £6,583,756.

The number of telegraph offices open to the public at the end of 1906-07, including railway and canal offices, was 6,694, of which 5,327 were maintained by the Department. The net addition to the number of offices during the year was 271.

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

	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 1902-1903	£ 4,975,964	55,827	190,604	283	2,006	3,286	5,292
During 1902-03	328,812	1,003	9,663	-10	45	815	360
" 1903-04	244,820	2,862	11,771	25	76	363	439
" 1904-05	274,826	4,992	15,398	21	62	328	390
" 1905-06	380,474	2,699	15,776	34	120	122	242
" 1906-07	379,251	2,814	15,648	43	129	142	271
To end of 1905-07	6,583,756	67,197	258,860	300	2,438	4,556	6,994

* Excludes £6,961 cost of cable lines transferred to Military Works Department on the 1st April 1899.

A general view of the operations of the Department in 1906-07, in comparison with the results of the four previous years' working, 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.
1902-03	6,742,094	£ 737,211	£ 528,982	£ 208,229	28·24	3·92
1903-04	7,307,087	730,994	538,272	192,722	26·37	3·47
1904-05	9,098,345	765,274	546,914	218,360	28·53	3·75
1905-06	10,461,117	805,748	599,052	206,696	25·65	3·33
1906-07	11,385,166	827,744	644,205	183,539	22·17	2·79

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 1906-07 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 £195,712.

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The total number of paid telegrams sent in 1906-07 amounted to 11,385,166, as compared with 10,461,117 in 1905-06, showing an increase of 924,049, or 8·83 per cent. The increase in the value of these messages, however, amounted only to £18,103, or 2·93 per cent..

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.	1905-06.		1906-07.	
	No.	Value.	No.	Value.
Inland State - - -	857,606	£ 106,797	891,145	£ 107,075
Foreign State - - -	15,963	4,895	15,859	3,617
• Total State - - -	873,569	111,692	907,004	110,692
Inland Private - - -	8,496,677	355,240	9,308,342	377,832
Foreign Private - - -	1,090,371	149,492	1,169,820	146,003
Total Private - - -	9,587,548	504,732	10,478,162	523,835
Total State and Private	10,461,117	616,424	11,385,166	634,537

Inland private traffic continues to improve, the figures for the year showing an increase of 811,665 messages, or 9·55 per cent. in number, and £22,592, or 6·35 per cent. in value. The cheaper inland tariff introduced from 1st January 1904 still operates somewhat against the increase in value, which is proportionately less than that in number. The figures for the year are, however, the highest ever recorded.

The following statement shows the development of the revenue from inland private traffic for the last 10 years :—

	£
1897-98 - - - - -	263,573
1898-99 - - - - -	244,915
1899-1900 - - - - -	294,485
1900-1901 - - - - -	294,071
1901-02 - - - - -	278,106
1902-03 - - - - -	291,339
1903-04 - - - - -	303,705
1904-05 - - - - -	322,668
1905-06 - - - - -	355,240
1906-07 - - - - -	377,832

Foreign private telegrams (including press and foreign transit traffic) show an increase of 78,949, or 7·23 per cent. in number, with a decrease of £3,489, or 2·33 per cent., in the Indian share of their value. The decrease in the value is partly accounted for by the reduction of rates for foreign telegrams between India and Europe, which took effect from the 1st August 1905, and to the reduction by one-half of the Indian transit charges on British and Colonial Government telegrams transiting India from 1st July 1906. The revenue from foreign State telegrams transiting India is included under foreign private.

Foreign State telegrams decreased by 104, or 0·65 per cent. in number, and £1,278, or 26·11 per cent. in value. The decrease in the value is due to the reduction in the terminal rate for foreign telegrams, and to the decision of the Government of India to charge half rates on British, Indian, and Colonial

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Government telegrams between India and Europe from 1st August 1905, and to the further reduction in the rates for Government telegrams which came into operation during the year under review.

The subscriptions to the Telegraph Department for telephone and similar services rendered during the calendar year 1906 amounted to £17,769, being an increase of £2,245 over the figures of the previous year. The average annual subscriptions for the past five years amount to £14,273.

The gross receipts of the telephone companies during 1906 amounted to £41,574, being an advance of £2,913 over those of the previous year. Their average annual earnings during the past five years amount to £36,411.

Communication with Europe *via* Suez was maintained uninterruptedly throughout the year, but some of the traffic had to be diverted *via* Teheran, as one of the Bombay-Aden cables was interrupted from 23rd June to 8th October, and another developed a bad fault on the 30th June which reduced the speed of working until it was removed on the 9th October. The repairs to these two cables had to be delayed owing to the monsoon, which was the most severe experienced for many years. The Teheran route was interrupted for 108 hours, against 513 hours in the previous year. The Turkish route was interrupted for 725 hours, as compared with 920 hours in the previous year.

The proportion of international traffic to and from India, exclusive of transit traffic, over the several routes to Europe for the year 1906-07 was as follows :—

	Per Cent.	
	No.	Words.
Indo-European :—		
<i>Via</i> Teheran	44·52	47·59
<i>Via</i> Turkey	1·54	1·20
Persian Gulf, <i>via</i> Karachi	1·17	1·74
Red Sea :—		
<i>Via</i> Suez	52·77	49·47
Total	100·00	100·00

The bulk of the transit traffic was, as usual, carried *via* Suez.

Communication with Siam over the Moulmein-Bangkok line *via* Kanburi was interrupted for 24 days, as against 74 days in the previous year, beyond but was not interrupted within the Indian frontier. The line from Moulmein to Raheng *via* Myawaddy was interrupted for 19 days, as against 45 days in the previous year.

The land route to China was interrupted beyond the Indian frontier for 76 days, against 83 days in the previous year. There was only one interruption, lasting four hours, within the Indian frontier.

Wireless telegraphic communication between Diamond Island and Port Blair, and between Saugor Island and the pilot steamer at the Sand Heads, was maintained throughout the year. Some trouble was experienced during May and June on the Diamond Island—Port Blair section, due to atmospheric disturbances; the installations at Saugor Island and the pilot steamer were scarcely affected by these disturbances.

In November, experimental wireless installations were set up on the North-West Frontier at Peshawar and Landikotal. These were entirely successful, and demonstrated the possibility of communicating by wireless telegraphy through intervening ranges of mountains running up to 6,700 feet above sea level, and between places situated at widely different relative elevations. The distance between these places is about 24 miles.

INDO-EUROPEAN TELEGRAPH DEPARTMENT.

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 two sections. The first, designated the Persian Gulf Section, extends by cable from Karachi to Bushire, Jask to Muscat, and Bushire to Fao, where a connection is made with the Ottoman Government line, and by land lines along the Mekran Coast from Jask to Gwadur, and thence to Karachi; while the second, called the Persian Section, consists of land lines running from Bushire to Teheran. The system comprises 1,949 knots of cable, 1,428 miles of line, and 3,584 miles of wire.

INDO-EUROPEAN TELEGRAPH DEPARTMENT.

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

Under the terms of a Convention dated 16th August 1901 between the United Kingdom and Persia, the construction of a line, known as the Central Persia line, from Kashan to the Indian frontier, 798.75 miles, was commenced in December 1902 and completed in March 1907.

The line which was commenced on 14th September 1905 from Karachi to Panjgur was completed on 25th June 1906, and a combined post and telegraph office was opened at Panjgur on 2nd October 1906. The line to this point is 301.93 miles in length. A route has now been selected for the extension of this line to Nok Kondi, where it will join the Indian line from Quetta to Robat.

The administration of the Indo-European Department, which in 1888 was amalgamated with the general telegraph system of India, was re-transferred to London in 1893, and placed under the direct orders of the Secretary of State. It has been found convenient to maintain separate accounts for this Department, partly for the sake of comparison with previous years, and partly because the conditions under which the Indo-European lines are worked and the influences affecting the traffic are completely different from those prevailing on the Indian telegraph system generally.

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.
1902-03	£ 872,730	£ 99,158	£ 59,853	£ 39,305	4.50	60.36
1903-04	913,320	107,173	61,749	45,424	4.97	57.61
1904-05	931,438	112,907	71,845	41,062	4.40	63.63
1905-06	957,491	111,082	59,457	51,625	5.39	53.52
1906-07	988,204	102,674	72,104	30,570	3.09	70.22

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

During the year under review the capital expenditure amounted to £30,713, of which £17,846 was incurred on the reconstruction of the line from Teheran to Ardistan, £9,376 on the India extension of the Central Persia telegraph line, £2,935 on the Central Persia line proper, and £189 on the Henjam to Bundar Abbas telegraph line. The total capital expenditure at the end of the year amounted to £988,204.

The gross earnings of the Department show a decrease of £8,408 as compared with 1905-06, which was due to the extent of £5,741 to a falling-off in trans-Indian traffic.

Notwithstanding the efforts made to keep down expenditure, working expenses increased during the year by £12,647, due mainly to the increased

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cost of the maintenance and repairs of cables, which exceeded that for the previous year by £11,972.

The net result is a profit of £30,570, or 3·09 per cent. on the capital outlay. This return is less than any that has been earned by the Department since 1891-92.

The number of messages forwarded during the year amounted to 259,355, being an increase of 22·91 per cent. as compared with 1905-06.

Under the Joint Purse Agreement, the share of the Department was £4,926 less than last year, being £107,961, as against £112,887 in 1905-06. This was principally due to the falling-off in trans-Indian traffic mentioned above. The amount paid into the Joint Purse for the year under review was £70,408.

The Departmental receipts from the Australasian Message Fund for 1906-07 amounted to £6,016, being £9 less than in 1905-06, and a decrease of £219 on the receipts for 1899, on which the original Australasian Message Fund was based.

Interruptions aggregating 4 days 1 hour 57 minutes occurred on the Indo-European Company's lines between Teheran and London. There was only one interruption stopping traffic between Karachi and Teheran; this occurred in the Persian section in February 1907, and lasted for 10 hours and 7 minutes. On the Turkish route interruptions occurred between Fao and Constantinople lasting 38 days 2 hours 20 minutes. The working of this route continues to be unsatisfactory. The Fao-Bushire cable was interrupted for 2 days 4 hours 55 minutes during the year. Acts of wilful damage show an increase of 222 as compared with 1905-06, aggregating 746, and involving an amount of krans 14,094. Of this sum krans 4,242 were collected locally; the balance has been deducted from the Jask Royalty.

CHAPTER XIII.

EDUCATION, LITERATURE, AND THE PRESS.

EDUCATION.

EDUCATION.

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. :—

- (1) 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.
- (2) 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.
- (3) Colleges, the students in which, having passed the matriculation examination of a University, are reading for the further 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 1903-04.

The following review is based on quinquennial reports received from the various local governments for the period from 1902-03 to 1906-07. As comparison is made between the circumstances of five years ago and those of the present time, the figures given are of necessity more general than those given in previous reports of a single year's work. Detailed statistics are, however, to be found in the Statistical Abstract relating to British India (Cd. 3724).

The quinquennium from 1902-03 to 1906-07 was a period of great progress in the educational system of the United Provinces. The most urgent needs felt at the beginning of the period were satisfactorily met. Thus there was a large rise in the number of primary schools and in their attendance; and by the increase in the number of normal schools from four to six the training of teachers for primary schools was greatly advanced, the prospects of teachers were materially improved, the inspecting staff was considerably increased and reorganised, and the pay of subordinate officers enhanced: Some impetus was given to female education, though progress in this direction was retarded by the conservatism of the people and the want of competent teachers.

At the end of 1906-07 there were 606,174 scholars under instruction, as compared with 452,773 five years before. Expenditure rose from £216,561

EDUCATION. to £308,502. The percentage of scholars to the population of school-going age increased from 11·70 to 15·33 in the case of boys and from ·6 to 1·16 in the case of girls.

The most important event in connection with collegiate education was the enactment of the Universities Act, involving the extension of the jurisdiction of the University, the remodelling of the Senate, the Syndicate, and the Faculties, and the complete revision of the regulations. Among many useful reforms those relating to the better inspection of colleges and the residence and discipline of students may be mentioned. A further important change was that which aimed at the introduction of more practical work into the course for the degree of Bachelor of Science.

There was a large increase in the number of students in the secondary stage. High schools increased in number from 101 to 108, and pupils attending them from 10,220 to 24,460, of whom 21,344 were learning English. The great defect in secondary education at present is the manner in which English is taught, and this became more apparent with the large increase in the number of pupils.

Attendance at primary schools rose from 324,699 to 418,480 in boys' schools and from 14,456 to 22,486 in girls' schools. Yet the advance in the extension of primary education cannot but be considered slow, the percentage of boys attending primary schools to the population of school-going age being still only 11·1.

Technical education has received considerable attention. The Thomason Civil Engineering College, Roorkee, the Industrial School at Lucknow, and the Agricultural School at Cawnpore, all underwent extension and development.

The progress of Muhammadans was not so great as that of the rest of the community, and they are very backward in female education. There was, however, a satisfactory increase of their number at colleges.

The continuous decline in the number of private schools is to be regretted. Five years ago they numbered 6,071, attended by 84,278 pupils, whereas now they number only 4,570 with an attendance of 69,277.

Punjab.

In the Punjab the quinquennium was a period of great activity in the department of Public Instruction. Expenditure on education increased by about £133,333, a thousand new teaching establishments were opened, and the roll of scholars rose by fifty thousand.

In particular, the facilities for primary education were greatly developed, in consequence largely of the grant of £20,000 per annum made by Government in 1905. Nine hundred new primary schools for boys and 200 for girls came into existence; and 40,000 more boys and 7,700 more girls are now receiving this stage of education than in 1901-02.

The number of secondary schools decreased largely owing to the abolition of inefficient unaided schools, which could not satisfy the Recognition Rules, and to the destruction of the high and middle schools at Kangra and Dharmasala in the earthquake. There are now 33 Government secondary schools (all Anglo-Vernacular), against four in 1901-02, this being due to the Government having taken over one Municipal Board school in each district in 1905, and to the conversion of Vernacular into Anglo-Vernacular schools. As the result of these changes, there has been a fair improvement in attendance.

The development of female education was a prominent feature of the quinquennium. Rapid progress in this branch was not to be expected in view of the many difficulties to be encountered, but there was a most satisfactory increase in the number of female schools and an obvious growth in the interest shown by all classes alike in the importance of the education of girls. Five new secondary and 216 new primary schools for girls were opened, and there were, at the end of 1906-07, 37,283 girls under instruction.

With regard to special education, the most notable points are the development of the female medical school at Ludhiana and of the Mayo School of Art at Lahore. The Government School of Engineering, though not yet organised on a satisfactory basis, obtained employment for 50 per cent. of its passed students.

There was an encouraging advance in the education of Muhammadans, and it appears that the leaders of the Musalman community are beginning to make some response to the efforts of Government to stimulate this section of

the people in a desire for the advantages of the public educational institutions. EDUCATION
There were 134,238 Muhammadans under instruction at the end of 1906-07.

Other noteworthy features of the quinquennium were the reinforcement of the inspecting staff, the creation of chairs for chemistry and biology at Lahore, the establishment of a school for engineering, and the marked increase in the interest taken by local bodies in the cause of education. An important change was effected in collegiate education by the passing of the University Act of 1904 and the consequent arrangements for the re-organisation of the Punjab University and for the periodical inspection and affiliation of colleges.

In the North-West Frontier Province the quinquennium was characterised by steady progress in almost every direction. It appears that the old private village schools, in which instruction goes little further than the teaching of religious books by rote, are now declining in popular favour, and that the people are learning to appreciate the more intelligent education offered by Government schools. So great, indeed, was the increase in the number of public institutions that, in spite of a decline of 99 in the number of private schools for boys, the decrease in the total number of institutions was only five, while the attendance in institutions of all kinds increased by over 9 per cent. Although the attendance of Hindus showed an increase of 24 per cent., that of Muhammadans, who at the 1901 census constituted 92·12 per cent. of the total population, showed a small decline. North-West
Frontier
Province.

As regards female education, though the active opposition of earlier days shows signs of disappearing, the advance in the case of Muhammadans has been very slow as compared with Hindus and Sikhs, the increase in the number of Muhammadan girls under instruction being actually smaller than the increase for other religions despite the great preponderance of the Muhammadan population.

Expenditure on education increased by over 60 per cent., the allotment from Imperial funds being more than trebled, while the expenditure from all other sources rose by less than 50 per cent.

Much difficulty was experienced in obtaining an adequate supply of trained and qualified teachers, but it is hoped that, in the case of primary schools, this difficulty will be solved by the Peshawar Normal School, opened in 1906.

Between 1902-03 and 1906-07 there was, in Burma, change and advance Burma. in almost every department of education. Substantial progress was made, especially in primary education: the numbers of schools and scholars increased, the salaries of masters were raised, and the curricula were revised.

The state of collegiate education was, however, scarcely satisfactory. Neither of the two colleges showed great progress in the five years. The average daily attendance at the Rangoon College was 126 in 1901-02, rose to 161 in 1905-06, and fell to 104 in 1906-07. The figures of the Baptist College rose from 13 at the beginning to 20 at the end of the quinquennium. The total number of students who took the degree of B.A. during the whole period was 34. Reasons for this lack of interest may be found in the undermanning of the teaching staff at the Rangoon College, and in the restriction of the curriculum to the old B. or scientific course, in which the choice of subjects is limited to physics and chemistry.

Progress in secondary education was satisfactory. The expenditure from Provincial Funds was more than doubled, and stood at £26,666 in 1906-07 as compared with £11,666 in 1901-02. The number of secondary schools directly managed by Government increased from 3 to 20, with a daily average attendance of 2,500. The total number of pupils receiving secondary education on the 31st March 1907 was 8,825 boys and 1,107 girls, as compared with 5,739 boys and 735 girls five years before.

The fact that there is an indigenous system of primary education in the monastic schools closely interwoven with the religion of the people and their daily life puts primary education on a different footing from secondary education in Burma. The extent to which the indigenous system has been brought into relation with the Education Department is shown by the fact that, out of 4,925 aided primary schools for boys, 2,369 are monastic schools. It is estimated, however, that there are some 15,000 monastic schools yet unregistered, which receive no assistance or guidance from the Education

EDUCATION. Department. A noticeable feature of the period is the extent to which Government undertook the direct management of primary vernacular schools. There was only one such school in 1901-02; at the end of 1906-07 there were 24 for boys and 4 for girls. The percentage of the male population of school-going age under instruction increased by 3 per cent.

Social customs do not form such an obstacle to female education in Burma as in the rest of India. There are, however, no indigenous schools for girls, and female education depends entirely on lay schools. Considerable progress was made during the quinquennium in this branch. Secondary schools for girls increased from 39 to 65, primary from 323 to 473, and the total number of female scholars from 36,755 to 58,665. Four-fifths of this total still attend boys' schools.

A satisfactory feature of the quinquennium was the improvement in the supply of trained teachers.

Central
Provinces
and Berar.

Although the progress of education in the Central Provinces was not checked by famine during the period from 1902-03 to 1906-07, as it was in the previous quinquennium, yet it was to a great extent retarded by plague and local scarcity. Nevertheless a distinct advance was made, and the way was prepared for further improvement. It is impossible to make any useful comparison of the figures at the end of 1906-07 with those at the end of 1902-03, owing to the territorial changes caused during the intervening period by the amalgamation of Berar with the Central Provinces and the transfer of the Sambalpur District to Bengal. It is clear, however, that there was a satisfactory increase in the percentage of children of school-going age who actually attended school. Nearly one-tenth of the total number under instruction were aborigines and low-caste boys; and the difficulties arising from the association at school of high-caste with low-caste boys continued, though in many places the objection was overcome.

As far as can be judged, expenditure on education increased in the Central Provinces by 32 per cent., and in Berar by 20 per cent., while the superior inspecting staff was more than doubled.

An important feature in connection with collegiate education was the affiliation of colleges with the Allahabad University. It is disappointing to find that there was practically no increase in the number of students at the colleges, in spite of the greater prosperity of the province and the addition of Berar. This may be attributed chiefly to plague, to the old system of fees, and to the fact that the colleges teach only as far as the B.A. and B.Sc. standard. Considerable improvements in building, personnel, &c. have been effected at both the Jubbulpore College and the Morris College; the Hislop College continued to do excellent work.

The development of secondary education was a prominent feature of the quinquennium. The demand for it increased and is still growing. In fact, the provision of buildings was not able to keep pace with the increase in the number of scholars, and several of the schools suffered from overcrowding. An obstacle was the difficulty of obtaining suitable teachers, and English appears to have been the worst-taught subject.

There was also a steady rise in the number of primary schools, which now make up nearly nine-tenths of the total number of schools. The number of pupils increased in greater proportion than the number of schools, and there was a great improvement in the average daily attendance. The proportion of villagers who can read and write is still, however, very small.

In regard to the training of teachers results cannot be said to be satisfactory. The only institution for training secondary teachers is the Training Institution at Jubbulpore, and in 18 years only three trained teachers were provided for each school. There are four normal schools for training primary teachers, but in their case, owing to the poorness of the material sent up, much of the time was devoted to general instruction to the detriment of training in teaching.

A marked feature of the period was the increased attention paid to technical education, and two students were selected from the province for Government technical scholarships in England.

There was a satisfactory advance in female education, which was greatly due to the appointment of a female inspecting staff; and the Jubbulpore School was very successful.

The education of Muhammadans made slow progress, owing to the importance attached by them to religious education, and consequently to the necessity for separate schools. EDUCATION.

On the whole, the conduct of pupils in colleges and schools was good, though there were a few outbreaks of disorder owing to political influences. It does not appear that the influence of masters was as strong as it should be, their interest in the boys not always extending beyond the mere teaching in class.

The record of education in Coorg during the period is one of all-round progress, in spite of the evil effects of plague during part of it. There were 119 schools with 4,865 pupils at the close, as compared with 99 schools with 4,758 pupils at the beginning, of the quinquennium. Total expenditure advanced from £2,666 to £3,266. Satisfactory progress was made in female education. At the end of 1906-07 there were five girls' schools, as compared with one in 1901-02, and the number of girls under instruction rose from 975 to 1,118. Good work was done by the training school at Mercara. Coorg.

The period from 1902-03 to 1906-07 was characterised in Madras by considerable activity in educational matters, and many reforms were carried out as a result partly of the natural expansion of administrative progress in the sphere of education, and partly of the recommendations made by the Educational Conference held at Simla in 1901, and in pursuance of the educational policy formulated by the Government of India in 1904. The total expenditure on education rose by £120,000 to £650,060, of which increase 18 per cent. came from Provincial revenues. Madras.

During the quinquennium the total number of institutions, public and private, rose from 26,491 to 28,734, and their attendance from 861,641 to 1,007,118. Government institutions numbered only 378, against 419 in 1901-02, although their strength rose from 25,673 to 28,453. The percentage of scholars to population of school-going age rose from 25·6 to 29·8 in the case of boys and from 4·4 to 5·7 in the case of girls.

The passing of the Indian Universities Act of 1904 modified in many respects the constitution of the Madras University, and the forming of new regulations under the Act effected important changes in the courses of studies and the examinations in Arts. In 1905 a Committee appointed by the University carried out an inspection of the affiliated colleges.

One of the most important educational events was the payment to aided schools of the full grants admissible under the Grant-in-Aid Code. From 1902-03 Government were enabled, with the help of a special assignment from the Government of India, to pay the grants at maximum rates. The primary and lower secondary examinations were abolished, the primary examination being replaced by an inspecting officer's examination *in situ*, and an elementary leaving school certificate was instituted. As a result, the old term "primary" used in the classification of schools became obsolete. The Code introduced a sharp distinction between elementary and higher education, and the majority of the old lower secondary schools became primary schools. Under the present Code the term "secondary" denotes schools designed to impart instruction which will fit a student for a collegiate course.

As regards female education, the Government girls' schools were reorganised, the teachers better paid, and the accommodation improved. There was a satisfactory increase from 130,432 to 164,706 in the number of girls under instruction, but there was little advance in the indigenous education of girls.

Improvements were made in the system of training teachers in the training schools. These increased in number by two, with an increase of 506 in attendance.

Schools for technical and industrial education increased, but the condition of this branch cannot be considered satisfactory. A considerable number of Government scholarships were available, but in no year of the quinquennium was the full number awarded.

In spite of special facilities and concessions offered to Muhammadans, there has been but little progress in their education, especially in the higher stages.

The record of educational work in Bombay for the quinquennium 1902-03 to 1906-07 was one of satisfactory progress in the face of adverse conditions. Bombay

EDUCATION. There were serious epidemics of plague in 1902-03 and 1904, and the remaining years were not free from this disturbing influence. In all, there were some 26,000 deaths among school-going pupils from this cause. Nevertheless, under practically every head an advance was recorded. The number of secondary schools rose from 494 in 1902-03 to 517 in 1906-07, and of the pupils in them from 48,533 to nearly 58,000; primary schools at the end of 1906-07 numbered 10,842 with 579,629 pupils, against 8,987 with 513,211 pupils at the close of the preceding quinquennium; the pupils in training schools increased from 848 to 1,332; and the total number of persons under tuition throughout the Presidency rose from 639,868 to 720,547.

The chief causes to which the results are due appear to have been a slowly increasing desire for education among the masses, the careful work performed by the inspectorial staff, and the grants made by the Government of India for both primary and secondary education. In addition to these grants, help was accorded to the University and aided colleges; the reduction of expenditure due to famine and plague at the commencement of the period was made good by a grant of £51,851, and a permanent assignment of £11,133 was made for the advancement of technical education.

With regard to the collegiate institutions of the Presidency, these were in a tolerably flourishing condition. The number of students at the Elphinstone College was higher than ever in 1906-07; the Deccan College and the Fergusson College added to their popularity, the one by an increased accommodation, the other by the provision of a chemical laboratory and six new scholarships. A new and commendable departure was initiated by St. Xavier's College in sending its Natural Science pupils on a tour through Northern India and Rajputana. The Gujarat College showed a deficiency in staff and equipment, and the Samaldas College at Bharnagar in accommodation and facilities for the teaching of science.

The increase in the percentage of boys in the secondary stage of instruction may be ascribed to the general improvement in the system of teaching. More practical methods have been adopted, and the judicious introduction of inter-school matches and tournaments have given to secondary school life elements of interest which were lacking in previous years.

As in secondary, so in primary education, the Northern Division has lagged behind the rest of the Presidency; for whereas the percentage of boys in primary schools throughout the whole Presidency rose during the quinquennium from 22.3 to 24.9, the number in this stage of education in the Northern Division has fallen by 2,131. Speaking as a whole, however, the progress made during the five years is matter for congratulation. Local Board schools increased from 3,940 to 5,196, and the number of their pupils rose by nearly 50,000. Municipal schools show an increase of 188 from 717, and they have now a larger attendance than in the years immediately preceding the outbreak of famine. A further satisfactory feature is the considerable increase of girls' schools and girl pupils. At the same time, though the total number of female scholars has risen from 93,063 to 108,716, the circumstance of female education are not entirely satisfactory. The European schools still need an increased staff, and the Anglo-Vernacular schools are hampered by unsuitable curricula and indifferent accommodation.

The total number of Muhammadans under instruction has increased from 23,684 to 28,216, while the number in secondary schools has nearly doubled. Their schools, however, still suffer from deficiency of staff. A hopeful feature of the period was the awakening of interest among leading Muhammadans to the educational needs of their community.

The extension and improvement of vernacular training colleges has led to their increased popularity, and there is evidence that the deep-rooted social prejudices which have hitherto militated against the recruitment of native schoolmistresses are gradually being undermined.

There was a considerable advance in technical education, the Government grant permitting of extension of equipment and improvement of apparatus.

The growing popularity of the hostel system is shown by the increase of 43 in the number of these institutions.

Bengal.

In Bengal the quinquennium was a period of great activity and development. In nearly every branch of education existing arrangements were overhauled, and expenditure largely increased.

The whole course of collegiate education was affected by the passing of the Universities Act of 1904 and the promulgation of the revised regulations of the Calcutta University in 1906. Heavy expenditure is needed for the proper development of colleges according to the new ideals, and the funds available are insufficient to do more than ensure bare compliance with the regulations. During the quinquennium there was a decrease of one college and of 1,354 students, but expenditure rose by £7,846, the whole being borne by public funds. EDUCATION.

A marked feature of the period was the steady increase in the number of English secondary schools accompanied by a decrease in the number of secondary vernacular schools. The number of boys attending the former rose during the period by 2,337 to 122,937; attendance at the latter decreased by 11,291 to 24,350. Expenditure on secondary education increased by some £20,000. It appears that the standard of efficiency of the majority of teachers in these schools leaves much to be desired.

The expansion of primary education was one of the most satisfactory features of the period under review. The number of schools increased from 32,024 to 33,954, and the number of pupils from 818,537 to 953,455. At the end of 1906-07 out of every 1,000 boys of school-going age there were 253 actually at school; the corresponding figure for 1901-02 was 217. Total expenditure on primary education increased by £30,000 during the quinquennium, the expenditure in 1906-07 being £170,051, of which public funds contributed £59,650.

The work done hitherto by training institutions has been far from satisfactory, and the whole question of the training of teachers is now under revision. The great difficulty, especially in the case of female teachers, is to find suitable candidates and induce them to take up the profession and undergo the necessary training.

As regards technical education, progress was made in engineering and mining at the Sibpur Engineering College and the Behar School of Engineering at Patna, but in other subjects results were disappointing. The commercial classes attached to the Presidency College failed to attain popularity, the agricultural classes at the Sibpur College attracted only an average of 23 students during the quinquennium, and the "B" classes attached to Zillah schools proved a failure.

At the end of March 1907 there were 121,195 girls and women in public educational institutions, being 1 in every 33 girls of school-going age, as against 1 in every 58 at the end of March 1902. The total expenditure under this head in 1906-07 was £36,453, of which public funds contributed £18,708. The scheme of zenana instruction by house to house visitation failed of success owing to the absence of proper teachers.

At the close of the period there were 184,355 Muhammadans under instruction in institutions of all kinds. This shows a satisfactory increase of 23·2 per cent. during the quinquennium.

In Eastern Bengal and Assam there was a considerable increase during the quinquennium in both the number of schools and the number of pupils. Public schools increased by 2,711, and pupils reading in them by 137,841. Private institutions showed a large increase in number, but there was a slight decrease in the pupils attending them. There were 11 Arts Colleges at the end, as at the beginning, of the quinquennium, but the number of pupils fell from 1,673 to 1,197. The total expenditure on education was £234,247 in 1901-02 and £341,605 in 1906-07, fees accounting for £103,987 of the former and £123,445 of the latter. Eastern Bengal and Assam.

Since the creation of the new province much has been done to advance collegiate education. The Dacca College is being provided with new buildings, and its staff has been strengthened. Improvements in accommodation and increase of staff are being effected also at the Rajshahi College, at the Chittagong College and at the Cotton College, Gauhati.

Secondary education experienced a check during the quinquennium. Twenty-five new high schools were opened, but the total number of pupils at the end of the period (about 47,000) was practically the same as at the beginning. This was partly due to the introduction of the vernacular scheme of education, and political excitement may perhaps be held responsible to some extent. It is noticeable that the falling off in secondary

EDUCATION. education is confined to Hindus, the number of Muhammadan pupils in high schools having risen from 7,220 to 8,869.

There are now over 600,000 boys in primary schools or classes, the number having risen by about 80,000 during the last five years. The quality of primary education in this province does not, however, appear to be satisfactory. The defects of the indigenous schools are notorious, and the difficulties of finding funds to train and support teachers, to provide buildings and equipment, and to maintain an adequate system of inspection for the enormous number of primary schools have proved insurmountable. With the aid of subventions from Imperial and Provincial Revenues improvements have been and are being made. The primary schools of Assam are more efficient than those of Eastern Bengal.

The successful development of schools of engineering has been an encouraging feature of the period, but little progress has been made with industrial education.

There are 80,000 girls under instruction, an increase of 33,000 since 1901-02. The figures show progress, but only about one girl in thirty is attending school.

More than half the population being Muhammadan, the backwardness of Muhammadan education is a serious matter. This backwardness lies especially in the domain of higher education, as in elementary instruction they are little behind the Hindus. Every attempt to encourage this section of the community is being made, and the zeal for education which has arisen among them gives hope of steady progress in the future.

Breaches of discipline in connection with the agitation attending the formation of the new province have been of rarer occurrence during 1906-07, but the tone of some institutions is still very unsatisfactory.

LITERATURE.**LITERATURE AND THE PRESS.**

	English.	Bi-lingual (English and another language).	Sanskrit.	Arabic.	Ferian.	Urdu.	Hindi.	Bengali.	Punjabi.	Marathi.	Gujarathi.	Tamil.	Telugu.	Burmese.	Kanarua.	Assamese.	Urdu.	Bi-lingual (Oriental) in a Classical and Vernacular Language.	
Madras	499	•	129	4	—	—	—	—	—	—	—	425	365	—	44	—	21	Polyglot, 8.	
Bombay	88	80	80	6	13	80	48	—	—	228	299	—	—	—	15	—	—	91 (mostly Gujarati, Hindi or Marathi and Sanskrit).	
Bengal	317	•	26	1	7	25	116	929	—	—	—	—	—	—	—	—	20	331	
Punjab	127	•	18	27	25	708	125	—	523	—	—	—	—	—	—	—	—	—	
Burma	8	23	—	—	—	—	—	—	—	—	—	3	—	89	—	—	—	—	
Eastern Bengal and Assam.	7	10	6	—	—	—	—	69	—	—	—	—	—	—	—	—	41	—	
Central Provinces.	5	—	—	—	—	—	24	—	—	17	—	—	—	—	—	—	—	3	
Mysore	5	•	—	—	Total number of publications in Oriental languages, 56.											—	—	—	4.
																			*Total number of Bi-lingual, 6.

Note.—The figures for Madras include 498 periodicals, and those for the Punjab 176 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 1,701.

The above table gives concisely the number of publications registered throughout India in European, 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, Kodagu, and Sourashtra (in Madras); Javi, Kutchi, Magadhi, Marwadi, and Gurumukhi (in Bombay); Bodo, Lepcha, Manipuri, Mundari, Musalmani-Bengali, Oraon, Pahary, and Santali (in Bengal); Kashmiri, Pashtu, and Balti (in the Punjab); Pali, Sgau-Karen, Shan, Chin, Peguan, and Talaing (in Burma); Lushai (in Madras and Bengal); Sindhi (in Bombay and the Punjab); and Khasi (in Bengal and Eastern Bengal and Assam).

Madras.

Of the total number of publications (1,440) registered in Madras for the year 1906, 496 were periodicals. Of the 460 returned as of a religious nature, none can be said to have risen above the ordinary doctrinal or

polemic level. Considered as a whole, the year's publications showed an increased literary activity, which was, however, somewhat restricted in its nature. The number of books which indicate real intellectual progress, originality of conception, or power of healthy assimilation evidenced by the native mind, is exceedingly small. There were few publications of a political nature, perhaps owing to the fact that the Swadeshi movement was not so strong in Madras as in other parts of India, but Dr. Miller's dissertation on *Coriolanus*, as illustrative of Indian politics of to-day, may be mentioned. A bold attempt at Shakespearean criticism was made by R. Venkatasubba Rau, whose *Othello Unveiled* aims at explaining difficulties and inconsistencies which have hitherto escaped the notice of scholars or been imperfectly dealt with by them. The *Brief Biographies of Twelve Standard Tamil Poets*, by Diwan Bahadur V. Krishnamachariar, contains a valuable essay on Tamil literature. Under the head of Language and Philosophy the majority of the publications were of an educational nature, and none deserve notice except, perhaps, an ingenious attempt made by L. A. Venkatachala Aiyar in *Swasthi Lippi* to formulate a common alphabet for all Indian languages. There were no noteworthy books on Law and Medicine, and Science was represented mainly by Government publications. In the province of History, however, there was a work of original research. In his *History of Vijayanagar* B. Suryanarayana Rau shows great pains taken to obtain information first hand, but little capacity for sifting authorities and weighing evidence.

In Bombay during 1906 the number of publications registered was 1,695, an increase of 419 on the figures for last year. Of these, 661 were periodicals. There is not much that is of value in the vernacular literature, and a striking feature is how little it reflects the main interests of the times, though there are occasional references to Japan, boycotting, and Swadeshi. Among dramatic pieces there were fairly good translations of *Measure for Measure* into Gujarati and of *The Tempest* into Marathi, but no original work of interest. In the sphere of Fiction the most noteworthy production was a theosophical romance, *The Himalayan Saint Sacramogogo*, by a Parsi named Ghadiali. There was also a series of novels, comparable to the modern English society novels, exhibiting the extravagance and immorality of the Parsi "smart set." The most important historical work was Rao Bahadar G. C. Wad's second volume of the Poona Daftar diaries, a book indispensable to students of Marathi history and administration. Under the heading of Language, the appearance of another part of Mr. Ranade's English-Marathi dictionary is noteworthy. In *The State of India* Mr. K. G. Ghamat grumbles at the manners of Anglo-Indians and the indifference of Government to education. There were a few collections of Marathi verse which show little originality and are overweighted with pedantry. In Philosophy, Mr. Phadha continues his account of Spencer's *Principles of Sociology* in Marathi; and Mr. P. A. Wadia's *Political Philosophy of Burke*, in the same language, deserves notice. A work on *Zoroaster and Zoroastrianism* in English and the theosophical writings of Mr. Vaidya were, perhaps, the chief religious publications of the year. Under the heads of Voyages and Travels, there is a fairly comprehensive account of Nepal by a Marathi writer.

There was in Bengal in 1906 a remarkable fertility in almost all the domains of literature. Political, social, and industrial questions attracted the best talent of the province, and in the treatment of these subjects a greater and more sustained intellectual vigour was displayed, showing itself principally in the expression of a desire for increased political power and industrial improvement, but also in the higher and quieter walks of literature. In the field of Drama interest centres in historical and other works written in support of the Swadeshi movement. In *Durgadas* Babu Dwijendra Lal Ray employs the story of Aurangzeb's war against the Rajputs as a means of stirring his countrymen up to seek for larger political rights, while in *Mir Kasim* and *Kedar Ray* the authors, speaking on behalf of Hindus, make overtures to the Muhammadans with the object of inducing them to make common cause against the powers that be. In the sphere of Fiction the boycott movement is encouraged by alleged stories of oppressions committed on the weaving classes in the time of Warren Hastings; and in Poetry the character of Seraj-ud-daula is portrayed in a favourable light and the English held up to opprobrium. The journal *Bhandar* inculcates a "creed of India"

LITERATURE. by the adoption of which men shall be obliged to regard themselves as Indians, as distinguished from residents in different provinces of India, and shall devote themselves to the interests of the country at large while preserving their own special religious beliefs. An important contribution to Bengali fiction was made by Babu Rabindra Nath Tagore in his novel *Naukadaubi*, which is distinguished for its general culture and for the masterly way in which delicate problems of every-day life are handled. There were two interesting works of historical research, one giving the history of Bengal from the accession of Kasim Ali Khan to his defeat by the East India Company, and the other the history of Raja Pratapaditya of Jessore. The year was rich in both philosophical and religious productions, the most notable of the latter being an original work by Babu Viresvar Pande entitled *Dharmasastra-tattva o Kartavya-Vichar*. This work is a defence of the Hindu religion and an inquiry into the downfall of the Hindu races, and the author counsels Hindus to eschew Western habits of luxury and to resuscitate the indigenous arts and manufactures of the country.

Eastern
Bengal and
Assam.

In Eastern Bengal and Assam the most notable feature of the year as regards literature was the considerable number of publications devoted to the Swadeshi movement. These, with some exceptions, were moderate and sensible in tone, advocating industrial and social reform and a more practically useful system of education. There were also writers opposed to the movement, and some were found even to defend the Partition. An interesting publication was *The National Problem and its Solution*, a series of essays published by Jagadish Chandra Ghosh, which may be regarded as an expression of the tenets of the moderate Congress party. A new history of the Province whitewashes Seraj-ud-daula and describes the Black Hole of Calcutta as a myth invented by Holwell and resuscitated by Lord Curzon. There is little worthy of note among Assamese publications. Among Bengali works there are several poems dealing with the present condition of the Indian people, some not without merit. *Priti-Pushpanjali*, a poem on various subjects, by a Hindu widow, may be noticed. There was no religious work of great value during the year. Under the head of Biography may be mentioned a collection of biographies of Europeans, in which the author takes the opportunity to descant upon political subjects. A deplorable characteristic of the year's work is the continued production of "keys" to the simplest primers.

United
Provinces.

The number of publications registered during 1906 in the United Provinces shows an increase of 15 per cent. in that for 1905. The total output of religious works during the year was enormous, and constitutes a record, but there was perhaps less than usual of any interest or value. An exception must be made in favour of the Reverend Ahmad Shah's controversial *Studies in the Quran*, the purpose of which is to show the indebtedness of the Quran to the Bible. There was a large output of verse during the year, mainly consisting of historical epics in Hindi, but little of it can be styled true poetry. Two volumes of the *Mahabharata* were produced in Nepali by a band of Nepalese scholars at Benares. A book of verse, called *Banita Bandhu*, by a lady member of the Arya Samaj, contains a trenchant attack on Indian men for their treatment of women, and occasionally rises to the height of true poetry. Fiction increased, the old-fashioned stories of adventure gradually giving way to short stories and novels dealing with the common experiences of every-day life, many of which are disfigured by the most shameless indecency. The Arya Samaj showed great literary activity during the year, its productions consisting mainly of virulent pamphlets against Government, and songs, to be sung by women, some of which are said to be marked by gross indecency. There was a falling-off in historical publications, but there were a few books of considerable interest, as, for instance, the *Asar Khair* of Muhammad Saïd Ahmad. There were two histories of the Russo-Japanese War, one in Urdu and one in Hindi, and a Hindi treatise on the training of women in Japan. Biographies were few and commonplace. A treatise entitled *Plague in India* by Rai Bahadur Lala Baij Nath, assisted by Major Vasu, I.M.S., is a useful and practical work.

Punjab.

Religion was again the favourite subject in the Punjab. Noteworthy productions were the *Brahma Darshan*, an exhaustive exposition of the

religious beliefs of the Hindus, and the *Rama Updesh*, or the teachings of Rama, by the late Swami Ram Tirath, which is remarkable for its earnestness and sincere sympathy. The year was fruitful in translations. Further parts of the translations of the *Mahabharata* and the *Ramayan* were issued, and the *Sātyrth Prakāsh* was creditably translated into English by Dr. C. Bhargava. There was no original historical work of any note during the year, the only remarkable productions being the continuations of the Urdu versions of the *Tamaddun-i-Islam* and *Ibn-i-Khaldūn*. There was some diminution in the production of novels, and the decline was most marked in the case of novels of merit. In the sphere of Poetry there were signs of the growth of a new spirit infused by the Swadeshi and other movements of the times. The *Bharat Darpan*, perhaps the most important poem of the year, examines the present social and industrial condition of the Indian people, and preaches sincere love of country, religion unhampered by petty caste prejudices, and unity of purpose. There were several good pieces of poetry for the young, written by ladies. In Philosophy a remarkable work was the *Sankhya Darshan*, the so-called atheistic system of Indian philosophy, with a lucid Hindi commentary. LITERATURE

The figures for Burma show a steady growth in religious literature, and a paucity of work on other subjects. The religious productions deal only with Buddhism, are intended solely for the edification of students of Buddhism, and are neither polemical nor proselytising. The dramatic works have no literary merit, and are for the most part vulgar and obscene. Works on astrology, astronomy, and medicine have no scientific value, being merely reproductions of old treatises. The fiction is negligible. Burma.

In the Central Provinces 50 publications were registered during 1906. None of these were worthy of special notice. No publications were registered in Coorg during the year. Mysore registered 66, as against 59 in the previous year. Among these a long religious poem on the Virasaiva faith and a good translation of the *Arabian Nights' Entertainments* alone deserve mention. Other Provinces.

CHAPTER XIV.

EMIGRATION AND MIGRATION.

EMIGRATION.

EMIGRA-
TION.

Emigration from India, so far as it is brought under the cognisance 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 for the protection of Indian immigrants. A similar protection was extended by Act X. 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.

Calcutta.

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 rose from 8,157 in 1905 to 13,276 in 1906. The number supplied during the year was 13,362. The results of the recruiting operations indicate that, as in the previous year, there was not much difficulty in securing recruits, owing no doubt to the continuance of scarcity in the recruiting districts. An Ordinance was passed by the Government of Fiji laying down that in future the right of an emigrant to a free return passage to India should be forfeited unless exercised within two years from the date when it accrues; otherwise there was no alteration in the terms offered to intending emigrants. The number of recruiting licences granted was 768, as compared with 870 in 1905, and of these 43, or 5·6 per cent. of the whole, were subsequently cancelled. Although the number of recruiters was smaller, the number of emigrants (23,366) recruited by them was larger than in the preceding year. This number was contributed by the different provinces in the following proportions:—United Provinces, 73·82 per cent.; Bengal, 11·39 per cent.; Bihar, 6·26 per cent.; Central Provinces, 3·70 per cent.; Punjab, 3·06 per cent.; Ajmere, 1·74 per cent.

The number of emigrants admitted to the Calcutta depôts was 19,414. Of the remainder, 2,862 were rejected subsequently to registration as unfit to emigrate. The percentage of deaths in the depôts was ·68 as compared with ·24 in the preceding year, and the percentage of rejections decreased from 10·6 to 9·4. The percentage of desertions increased from 2·49 to 2·54. After deducting casualties of all kinds, there remained 14,827 emigrants available for despatch to the colonies, of whom 14,035 actually embarked during the year, as against 9,322 in the previous year. They were distributed as follows: Demerara, 2,337; Trinidad, 2,514; Mauritius, 619; Natal, 3,866; Jamaica, 835; Fiji, 2,594; Surinam, 1,270. The total number shipped included 3,718 women and 679 returned emigrants who re-emigrated. The death rate on the ships carrying emigrants was 1·75 per cent., 11 out of the 184 deaths which occurred being due to cerebro-spinal fever, 100 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 5,718, and their ascertained aggregate savings amounted to upwards of £60,818. The average savings per head varied from £32 4s. 7d. in Fiji to 10s. 4½d. in Mauritius. But 1,071 adults—18·7 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 Demerara, Natal, and Jamaica, and a slight decrease as regards Trinidad, Mauritius, and Fiji. 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. EMIGRATION.

The numbers of emigrants embarking from Madras for Natal and Fiji respectively were 7,994 and 879. The corresponding figures for 1905 were 6,498 and 1,731. More than half the emigrants to Natal were from Madras and Chingleput and North Arcot districts. Madras and North Arcot and Tanjore districts supplied more than half the number for Fiji. No emigrants went to Trinidad, Mauritius, or the Seychelles, and there was no emigration to the French colonies during the year. Two thousand three hundred and eighty-six emigrants returned from Natal with savings amounting to £18,922 and 268 returned from Mauritius with £147. Madras.

As regards non-regulated emigration, the number of emigrants to the Straits Settlements increased from 40,900 to 52,306, most of whom started from ports in the Tanjore district. There was a continued increase in the number of passengers to Burma and Ceylon, the increase in the former case being mainly due to reduction in steamer fares.

The number of emigrants leaving Bombay under agreements made under the Indian Emigration Act showed a large decrease from 256 in 1905 to 52 in 1906. Of these, 30 were engaged for railway work in British Central Africa. One hundred and eighty-six former emigrants returned to Bombay. At Karachi, there was a large increase in the number of Punjabi emigrants from 252 to 901, 861 of whom left for service on the Uganda Railway. Forty-eight emigrants returned to Bombay, having served their time. There was a further increase to 2,000 of emigrants to South Africa from Surat and to 310 from Broach, in spite of the restrictions imposed in that country. Remittances from Africa to Surat are estimated at nearly £26,666. Bombay.

MIGRATION.

The Assam Labour Enquiry Committee submitted its Report during the year under review, and its recommendations are receiving the attention of Government. Among them may be mentioned the encouragement of *sardari* recruitment, the abolition of local contract, and the withdrawal of the right of private arrest. MIGRATION.
Assam.

Assam imports from the other provinces of India the greater part of the labour force employed on tea-gardens, in the oil refinery at Digboi, in coal-mines, and in a few saw-mills in Upper Assam. The total labour population directly dependent on these industries numbered 684,208 at the end of June 1907, the year for which labour statistics are tabulated now ending at this date. The number of labourers engaged under Act VI. of 1901 showed a further decline of 6,941 to 69,841, while the number classed as "non-Act" labourers rose from 600,625 to 614,367. Of the total labour force in the province 61.25 per cent., including almost all of the "Act" labourers, were employed in the Assam valley, and the remainder in the Surma valley. There was a falling off in immigration, the total number of labourers and their dependants imported during the year being 25,617, against 31,830 in 1905-6, in spite of facilities afforded by Railway Companies and arrangements made for the stimulation of *sardari* recruitment. The importation from Madras alone showed an increase, while those from Chota Nagpur, the Sonthal Parganas, and the Central Provinces showed the largest falling off.

Of the 6,009 adults imported during the year under the Act, 3,060 were recruited by *sardars* and 2,949 by contractors; the corresponding figures for 1905-6 being 9,443, 5,482, and 3,961.

The number of deaths which occurred during the journey increased from 58 to 96, of which 73 were due to cholera.

Coolies travelling to the Brahmaputra valley made use of one of the two railway routes *viâ* Dhubri or *viâ* Chandpur and Tinsukia. Most of the immigrants to the Surma valley were conveyed by the Assam-Bengal railway. There was a small increase of those who passed through the river depôts.

MIGRATION. The number of complaints of fraud and irregularity in recruitment was 89, as compared with 74 in the previous year. Fraud or irregularity was proved in 21 cases.

Among the Act coolies, the average rate of wage for men on the total labour force increased from 7s. 8½d. to 7s. 9½d., and for women from 6s. 3½d. to 6s. 8½d. The average wage earned by non-Act men was 6s. 8½d., compared with 6s. 7½d. in 1905. The average earnings of women rose from 4s. 9½d. to 4s. 11½d., and of children from 2s. 11½d. to 2s. 11½d.

The registered rate of mortality fell from 25·77 per mille in 1905-6 to 24·12 per mille in 1906-7. The mortality among Madras coolies was the highest, being 30·88 per mille, the figures for the Central Provinces falling from 31·18 to 30·31. Coolies from Chota Nagpur and the Sonthal Parganas had a death-rate of 23·53 per mille, while in the case of those from the plains of the United Provinces and Bengal there was a decrease from 25·8 to 22·89. There was a considerable decrease in deaths from cholera. The number of cases recorded of complaints laid by coolies against managers of ill-treatment unconnected with re-engagement was 2, as in 1905-6. Miscellaneous complaints filed by coolies declined from 162 to 157, and 452 applications for discharge certificates were made, certificates being granted in 297 cases. Cases in which managers were the complainants in criminal proceedings increased by 3 to 14. The number of desertions was 2,525, or 206 less than in the preceding year.

Burma. The number of emigrants who arrived in Burma during the year under review rose from 239,000 to over 360,000. On the other hand the number of emigrants who left the country also increased from 176,000 roughly to 320,000. The net addition to the population from this cause (40,718) was below the figure of the previous year (62,837). The increased activity was probably due, partly at any rate, to the continued prevalence of reduced passage fares.

Madras. The number of passengers arriving at the several ports of the Madras Presidency during the year was 294,919, of whom 120,684 came from Ceylon and 135,354 from Burma.

Bombay. Owing to the general improvement in agricultural conditions, the tide of emigration flowed less strongly than in the preceding year. There was the usual influx of labourers from the Deccan, Poona sending 115,000; but their stay was only temporary. The horde of Marwaie wanderers who infested Sind last year were got rid of during 1906-7 owing to the favourable harvest in Rajputana, while a similar cause accounts for the return of over 1,000 Cutchi labourers to Cutch and the comparatively small amount of immigration from that district into Sind.

CHAPTER XV.

TRADE AND MANUFACTURES:

TRADE.

(Detailed information regarding the Trade of British India being annually furnished in a separate Parliamentary Paper, a brief Review only is given in the present Chapter.)

TRADE.

The total trade of British India with other countries by sea and land during the five years ending on the 31st March 1907, was valued as follows :—

—	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.
BY SEA.	£	£	£	£	£
Imports :					
Private Merchandise	52,525,272	56,548,862	64,452,192	68,722,713	72,205,055
Government Stores -	4,687,504	5,179,320	5,156,305	6,019,781	5,956,410
Total Merchandise	57,212,776	61,728,182	69,608,497	74,742,494	78,161,465
Treasure, Private -	16,837,152	21,295,508	22,018,353	13,947,526	18,133,990
" Government	82,085	4,388,564	4,320,430	7,153,150	11,585,884
Total Treasure -	16,919,237	25,684,072	26,338,783	21,100,676	29,719,874
Total Imports -	74,132,013	87,412,254	95,947,280	95,843,170	107,881,339
Exports :					
Private Merchandise :					
Indian Produce and Manufactures -	83,919,801	99,755,597	102,760,848	105,459,482	115,388,249
Foreign ditto -	1,957,108	2,217,458	2,248,715	2,352,540	2,322,693
Government Stores :					
Indian - -	346,702	331,705	111,503	53,542	51,660
Foreign - -	40,788	40,013	26,969	24,850	20,280
Total Merchandise	86,264,399	102,344,773	105,148,035	107,890,414	117,782,882
Treasure, Private -	5,873,341	5,364,782	5,392,377	4,299,838	3,808,672
" Government	565,084	4,596,339	5,634,834	6,013,499	3,497
Total Treasure -	6,438,425	9,961,121	11,027,211	10,313,337	3,812,169
Total Exports -	92,702,824	112,305,894	116,175,246	118,203,751	121,595,051
Total Sea-borne Trade	166,834,837	199,718,148	212,122,526	214,046,921	229,476,390
BY LAND.					
Imports - - -	4,580,733	5,229,592	5,711,753	6,266,261	6,609,306
Exports - - -	3,870,514	3,964,335	4,501,241	4,903,864	5,178,598
Total Trade by Land	8,451,247	9,193,927	10,212,994	11,170,125	11,787,904
Total Trade by Sea and Land	175,286,084	208,912,075	222,335,520	225,217,046	241,264,294
Imports of	10,480,812	15,722,951	15,311,572	10,787,339	25,907,705
Exports of	18,570,811	24,893,640	20,227,966	22,366,098	13,713,712

TRADE.
Imports.

The large and steady increases in the value of imports during recent years continued in 1906-07, and all previous figures were again exceeded. The bulk of the cotton goods imported was somewhat reduced, on account partly of their high price, partly of the dearness of food-grains and the consequent contraction in some districts of the people's purchasing power, and perhaps also as a result of the *swadeshi* movement; but the value was not far short of the record figures of 1905-06, and the bulk was greater than in any of the years preceding 1905-06. There was a further increase in the imports of sugar from 7,700,000 cwt. to 9,700,000 cwt., of which 5,900,000 cwt. was cane sugar, chiefly from Java and Mauritius. The increase was probably partly due to the failure of the cane crop in Northern India. There was a small decline in the quantity of metals imported, in spite of the rise in value. The mineral oil imports show only a slight recovery from the low figures of 1905-06, on account of the rapid development of the Burma oil industry, and the continued disturbances in Russia. Owing to the large and increasing number of railways owned by the State, the imports of railway material fall largely outside the table, which includes only private merchandise. If the Government imports are included, the value of railway material imported was £5,662,000, compared with £4,493,000 in the previous year.

Imports.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.
	£	£	£	£	£
Cotton woven goods -	18,766,000	19,246,000	23,706,000	26,012,000	25,130,000
Cotton yarns - -	1,532,000	1,428,000	1,658,000	2,284,000	2,149,000
Silk, raw and manufactured	1,456,000	1,618,000	1,902,000	1,742,000	1,595,000
Woollen goods - -	937,000	1,440,000	2,051,000	1,617,000	1,368,000
Metals - - -	5,331,000	6,153,000	6,213,000	6,028,000	6,698,000
Hardware and cutlery -	1,248,000	1,468,000	1,486,000	1,417,000	1,675,000
Machinery and millwork -	1,869,000	2,235,000	2,685,000	3,283,000	3,860,000
Railway material - -	1,074,000	935,000	940,000	1,082,000	2,772,000
Liquors - - -	1,180,000	1,218,000	1,249,000	1,345,000	1,238,000
Provisions - - -	1,227,000	1,352,000	1,444,000	1,590,000	1,616,000
Sugar - - -	3,303,000	3,957,000	4,602,000	5,183,000	5,825,000
Mineral oils - - -	2,310,000	2,300,000	2,217,000	1,491,000	1,618,000
Chemicals, medicines, dyes	1,333,000	1,502,000	1,498,000	1,541,000	1,610,000
Apparel - - -	1,188,000	1,331,000	1,493,000	1,478,000	1,408,000

Exports of
Indian
Merchandise.

Among exports of Indian merchandise the outstanding feature was, as the following table shows, the unprecedented value of jute, both raw and manufactured. The table below brings out clearly the immense preponderance amongst Indian exports of raw agricultural produce, and the figures consequently fluctuate widely according to the character of the season. This is most marked in the case of wheat. The steadiness in recent years in the value of rice exports has not been accompanied by a corresponding steadiness in the quantities shipped. Attention may be called to the growing importance of the exports of lac; this is principally due to the continuous rise of price as a consequence of the activity in the electrical industry, and the demand for high-class varnishes. It has been alleged, however, that the high level of prices has induced reckless gathering prejudicial to succeeding crops. The trade in indigo showed a slight improvement; but it is impossible to say at present whether the lowest point of depression due to the competition of the synthetic dye has yet been reached. Further details in regard to the trade in some of the principal agricultural products have been given in Chapter X.

Exports of Indian Produce.	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.	TRADE.
	£	£	£	£	£	
Raw cotton -	9,838,000	16,251,000	11,623,000	14,228,000	14,652,000	
Cotton yarns -	5,693,000	5,894,000	6,544,000	8,258,000	6,931,000	
Cotton piece goods -	978,000	1,087,000	1,218,000	1,359,000	1,181,000	
Raw jute -	7,418,000	7,812,000	7,977,000	11,417,000	17,892,000	
Jute manufactures	6,000,000	6,307,000	6,624,000	8,296,000	10,456,000	
Wool, raw -	777,000	918,000	1,261,000	1,410,000	1,618,000	
Rice and rice flour -	12,597,000	12,723,000	13,080,000	12,425,000	12,353,000	
Wheat and wheat flour	3,321,000	7,746,000	12,399,000	6,115,000	5,227,000	
Oilseeds -	9,922,000	9,677,000	9,607,000	7,073,000	8,681,000	
Tea -	4,908,000	5,705,000	5,644,000	5,898,000	6,572,000	
Coffee -	881,000	912,000	1,107,000	1,171,000	664,000	
Opium -	5,345,000	6,980,000	7,082,000	6,315,000	6,205,000	
Indigo -	804,000	717,000	556,000	391,000	467,000	
Hides and skins -	5,623,000	5,957,000	6,604,000	9,171,000	10,230,000	
Lac -	1,205,000	1,787,000	1,988,000	2,068,000	2,247,000	

In comparing the trading interests of various countries with India much care is necessary; for in the case of imported goods, the countries containing the ports from which the goods were shipped direct to India were formerly credited with the trade, and exported goods are credited to the countries containing the ports at which the goods are discharged, whether destined for that country or not. From the figures as they stand, the trade with the United Kingdom in 1906-07 constituted 42 per cent. of the total trade in merchandise on private account. Taking imports and exports separately, about 67 per cent. of the total import trade and 27 per cent. of the export trade was conducted with the United Kingdom. In consequence, however, of the re-exports of Indian produce, the value of the amount retained in that country is lower by about one-third than the figure given above. The proportion of the trade which is assignable to the British Empire cannot be stated except in a misleading form; since the figures for the Straits Settlements and Hong Kong, which are chiefly distributing centres, are very important items, and most of this trade is re-shipped to foreign countries. Of the other Colonies, apart from Ceylon and Mauritius, the largest trade was done with Australia (£2,055,000).

Trade by countries.

The value of India's trade in private merchandise with some of the chief countries, imports and exports combined, for the last five years, is as follows:—

	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.
	£	£	£	£	£
United Kingdom -	56,442,000	64,204,000	70,784,000	72,969,000	79,812,000
China -	12,128,000	13,360,000	14,420,000	15,510,000	13,689,000
Germany -	8,225,000	11,827,000	12,026,000	12,742,000	16,586,000
United States -	6,499,000	6,890,000	7,478,000	10,181,000	12,131,000
France -	7,047,000	7,650,000	7,576,000	7,536,000	8,408,000
Japan -	4,446,000	6,494,000	7,279,000	7,490,000	5,813,000
Belgium -	5,371,000	7,117,000	7,946,000	7,324,000	7,680,000
Straits Settlements -	6,731,000	6,481,000	6,340,000	5,976,000	6,280,000
Austria-Hungary -	3,847,000	4,692,000	5,804,000	5,948,000	8,194,000
Ceylon -	3,489,000	3,608,000	3,823,000	4,242,000	4,907,000
Italy -	2,836,000	3,959,000	3,695,000	3,966,000	4,546,000
Russia -	2,064,000	2,191,000	1,504,000	583,000	574,000

TRADE.

The notable decline since 1905 in the trade with Russia is due to the falling off in imports of oil, owing to the disturbances in the Russian oil districts. Germany has, for the first time, taken the second place; this may be due in part to improved methods of registration, there being a decrease in the exports to Holland. It may still be noted that much of the trade attributed to Belgium belongs to Germany.

Provinces and Ports.

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

	Imports (percentages).				Exports (percentages).			
	1903-04.	1904-05.	1905-06.	1906-07.	1903-04.	1904-05.	1905-06.	1906-07.
PROVINCES:								
Bengal and Eastern Bengal.	39.7	39.0	40.7	39.1	39.2	40.9	43.7	46.9
Bombay and Sind	41.7	42.1	43.9	43.8	40.5	39.4	37.1	34.6
Madras - - -	8.9	8.8	7.5	8.4	9.9	9.4	9.6	9.9
Burma - - -	9.7	9.2	7.9	8.7	10.4	10.3	9.6	8.6
	100	100	100	100	100	100	100	100
CHIEF PORTS:								
Calcutta - - -	39.5	39.7	40.4	38.9	37.4	38.0	41.9	44.4
Bombay - - -	35.3	34.1	35.4	35.1	31.9	28.0	30.0	25.7
Karachi - - -	6.5	8.0	8.4	8.7	8.7	11.4	7.1	8.9
Madras - - -	7.2	7.8	6.1	7.1	3.3	8.2	3.6	3.8
Rangoon - - -	9.5	9.0	7.8	8.4	8.8	8.2	8.1	6.9

The value of the exports from Calcutta was swollen by the high price of jute. The aggregate foreign trade of Bombay showed a small decrease in absolute amount; the heavy falling off in exports was due to the decline in wheat, cotton twist and yarn, and opium. As a result, Calcutta was in the year under report still further ahead of the port of Bombay, the combined value of the export and import trade in private merchandise of the former rising from £72,882,000 in 1905-06 to £80,324,000 in 1906-07, and of the latter falling from £56,673,000 to £55,592,240.

Treasure.

The net import of gold, which was exceptionally small in 1905-06, increased from £305,000 to £9,904,000, the highest figure on record; including the production in the country the amount absorbed was £12,055,000. The net import of silver reached the unprecedented total of £16,003,700. The amount of silver coinage struck in the mints showed a further increase over the high figures of 1905-06. The average price of silver in London in 1906 was 30½d. per oz., the highest since 1893.

Land trade.

The trade across the land frontiers is only about 5 per cent. of the trade carried by sea, but it is progressive, and has now attained substantial dimensions. The gross totals of imports and exports together, including treasure, for the last six years are given in the margin. The trade with Afghanistan showed a marked increase, the visit of His Majesty the Amir causing exceptional facilities for communication. The most important item is the trade with Nepal, which, however, declined slightly during the year. The figures given under the heading of land trade include a considerable trade with such regions as Kashmir and the Shan States, much of which can scarcely be called trans-frontier trade. Taking the frontier trade as a whole, the chief items were, among imports, grain and pulse, chiefly rice, to a value of £1,060,000, and timber (value £700,000), and, among exports, cotton, cotton yarn, and cotton goods (value £2,338,000) and sugar (value £236,000).

	£
1901-1902	9,578,000
1902-1903	8,451,000
1903-1904	9,158,000
1904-1905	10,218,000
1905-1906	11,227,000
1906-1907	11,788,000

Coasting trade.

The combined import and export trade in merchandise and treasure carried on by coasting vessels is said to have represented a value of £34,820,000 during 1906-07, which is 15.5 per cent. more than in 1905-06. This figure is calculated 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 improvements were in Bengal coal, in gunny bags, which were sent from Calcutta to Burma and Bombay, and in rice, a large amount of which was exported from Burma to Bengal.

The following statement gives the numbers and tonnage of steamers and sailing vessels with cargoes and in ballast in Indian ports which entered from and cleared to all countries :—

TRADE.
Shipping
and freights.

—	No.	Tons.	Average Tonnage.
1902-03	9,089	10,926,560	1,202
1903-04	9,530	12,559,260	1,318
1904-05	9,798	13,881,336	1,417
1905-06	9,269	12,598,321	1,359
1906-07	9,329	13,775,436	1,477

In 1906-07 5,944 of these were steamers with an aggregate burden of 13,469,417 tons. The entries from and clearances to the United Kingdom were 3,121,861 tons, as against 3,140,281 tons in 1905-06.

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

—	1902-03.	1903-04.	1904-05.	1905-06.	1906-07.
British	4,257	4,772	5,633	4,838	4,920
German	325	393	339	387	371
Austro-Hungarian	142	134	156	162	159
Norwegian	116	173	141	174	195
French	157	143	94	105	67
Italian	54	63	74	85	76

Freights were low in 1906 on account of the cessation of the abnormal demands in the Far East caused by the war. By March 1907, there had been an appreciable rise. 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. The Calcutta ship ton is one of 50 cubic feet, while that recognised at Bombay and Karachi is of 40 cubic feet.

—	1903.	1904.	1905.	1906.	1907.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Calcutta—Rice	0 15 0	0 17 6	1 0 0	0 15 0	0 17 6
Wheat	0 15 0	0 17 6	1 0 0	0 15 0	0 17 6
Jute	0 17 6	1 0 0	1 2 6	0 17 6	1 0 0
Linseed	0 17 6	1 0 0	1 2 6	0 17 6	1 0 0
Tea	1 11 3	1 11 3	1 16 3	1 13 9	1 15 0
Bombay—Wheat and seeds	0 15 6	0 16 0	0 15 0	0 13 6	0 14 6
Cotton (to Liverpool)	0 15 6	0 16 6	0 15 6	0 14 6	0 15 0
Karachi—Wheat	0 15 0	0 16 0	0 15 6	0 14 0	0 13 0

MANUFACTURES.

MANUFACTURES.
Cotton mills.

There were at the end of the year 1906-07 in British India and Native States 217 cotton mills containing 59,400 looms and 5,546,300 spindles, and giving employment on an average to 211,100 persons a day. Of these, 106 were exclusively spinning mills, 10 were exclusively weaving mills, and in the rest both spinning and weaving were carried on. The capital invested, including an estimate for 26 mills worked by private proprietors, for which accurate returns are not available, was £11,330,000 (paid-up capital and debenture loans); 152 of the mills containing 71 per cent. of the spindles and 79 per cent. of the looms, are located in the Bombay Presidency, while there are 13 mills in the territory of Native States and in French possessions in India.

MANUFACTURES.

The out-turn of yarn in recent years in British India, excluding the mills in Native States or foreign territory, is shown in the marginal table. In

—	Counts Nos. 1 to 25.	Above No. 25.	Total.
	Lbs.	Lbs.	Lbs.
Average : 1896-97 -	423,906,900	20,082,800	443,989,700
1900-01			
1901-02 -	527,448,600	32,556,200	560,004,800
1902-03 -	523,565,000	35,247,000	558,812,000
1903-04 -	515,203,400	40,987,400	556,190,800
1904-05 -	510,075,100	45,873,300	555,948,400
1905-06 -	610,602,900	45,015,900	655,618,800
1906-07 -	581,378,000	49,175,300	630,553,315

1900-01 there was a great decline in low-count yarns, due partly to the famine in India, and partly to the collapse of the Chinese market. In 1901-02, with the passing away of these causes of depression, and a reduction in the prices of raw cotton following on larger crops, the mills resumed operations with great activity, but the high price of the yarn in the year 1903-04 made profitable business difficult, several mills being either

closed or worked short time. The latter half of the following year, however, saw a complete revolution of the conditions affecting the spinning industry, caused by the fall in the price of raw cotton and the large off-take of the principal markets, so that all the spindles were brought into full use, and a state of unusual financial prosperity was created ; this prosperity was, on the whole, maintained during 1906-07. The mills of the Bombay Presidency produced nearly 75 per cent. of the yarn, Bengal 7 per cent., Madras 5 per cent., the United Provinces about 5 per cent., and the Central Provinces 4 per cent. The continued increase in the production of yarns of counts above number 25 was noticeable, the production of these counts being 8 per cent. of the total ; the Bombay mills especially spun an appreciable quantity (9 per cent. of their output in 1906-07) of the higher counts. The out-turn of finer yarns, numbers 31 to 40, in Indian mills increased from 12½ millions of pounds in 1901-02 to 17 millions in the year under report. The Bombay mills also spun an appreciable quantity of yarns of No. 40 and upwards, using Egyptian or other imported cotton.

The imports of yarn from the United Kingdom and other places are about 6 per cent. of the total production in India. The figures are as follows :—

—	Nos. 1 to 25.	Above No. 25.	Total.
	Lbs.	Lbs.	Lbs.
Average, 1896-97 to 1900-01	5,654,200	38,315,500	43,969,700
" 1901-02 to 1905-06	3,571,800	29,095,600	32,667,400
" 1906-07	2,538,600	32,070,900	34,609,500

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

—	Grey.	Other Kinds.	Total.
	Lbs.	Lbs.	Lbs.
Average : 1896-97 to 1900-01	80,557,484	11,205,460	91,852,949
1901-02 -	96,210,200	19,756,000	115,966,200
1902-03 -	95,645,500	21,639,100	117,284,600
1903-04 -	106,515,100	25,361,100	131,876,200
1904-05 -	124,363,200	28,378,600	152,741,800
1905-06 -	126,687,400	29,912,900	156,600,300
1906-07 -	129,599,300	29,402,200	159,001,500

Bombay mills, which in 1906-07 produced about 85 per cent. of the total output of British India ; Madras, the Central Provinces, and the United Provinces each contributed about 5 per cent. These goods are mainly unbleached grey fabrics ; only in Madras did any considerable proportion of the weaving consist of finer goods, and there these fabrics were 52 per cent. of the production. It is to be observed, however, that there is a very

decided tendency to increase the output of the finer fabrics.

Jute mills.

Jute fabrics were formerly produced by hand for the clothing of the poorer classes, and when its use for this purpose was checked by the importation of cheap European cotton goods, a demand arose for the manufacture of gunny bags for the export of grains. The hand-loom export trade culminated in 1856-57, in which year the first mill on record in the neighbourhood of Calcutta was established. Since that time the record of the jute industry has been one of uninterrupted and increasingly rapid progress, the number of looms in the Calcutta mills having doubled in the last decade.

The number of jute mills in 1906-07 was 44, containing about 25,000 looms and 520,000 spindles, and employing a daily average of nearly 167,000 persons. The exports, the principal destination of which is the United States, rose from 201,000,000 gunny bags and 575,000,000 yards of gunny cloths, with a value of £6,626,000 in 1904-05, to 258,000,000 gunny bags and 696,000,000 yards of cloths, with a value of £10,477,300 in 1906-07. The rise in value is principally due to the extraordinary increase in the price of raw jute, which rose in the same period from Rs. 36½ to Rs. 65½ a bale. All the mills, with the exception of one at Cawnpore, which was not worked during the year, and one in the Madras Presidency, are in Bengal, and most of them are in the vicinity of Calcutta. The paid-up capital employed by these mills, excluding one which had not reported its capital, was £7,780,000, including debentures issued; of which nearly 3 millions are sterling capital. About £600,000 was added to the paid-up capital and debentures during the year under report.

MANUFACTURES.

There is now considerable activity in the manufacture of jute in Germany and the United States; but the principal centre outside India is at Dundee, where a capital of some £5,000,000 is employed in the industry, although the number of looms is only about half of the number running in Bengal. It is questionable how far there is actual competition between the two centres. 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. While in 1906-07 the value of the Calcutta exports was four times that of the exports from the United Kingdom in 1906, it has been estimated that the consumption of raw material at Calcutta was sixteen times that at Dundee.

There were six woollen mills at work at the end of 1906, containing 759 looms, and 27,100 spindles, employing 3,400 persons, and producing goods valued at £232,120 in the year. The fabrics consist chiefly of blankets, serges, and cloths worn by the Army and the police, and an admixture of Australian wool is used. The quantity and value of the woollen goods produced have advanced to a considerable extent in the last 10 years; but in 1906 the production fell off considerably, though the value was more nearly maintained on account of the high price of wool. The produce of Indian mills represents only a small share of the total trade in woollen goods. There are in various places factories for the weaving of carpets and rugs, but though these industries are in the aggregate extensive they are individually small, and the weaving is done in hand-loom. The exports of Indian carpets and rugs during the year were valued at £137,500.

Woollen mills.

There were eight paper mills at work in India, employing a daily average of 4,700 hands, and producing in 1906 about 47½ million lbs. of paper, valued at £420,700. Most of the foolscap, blotting paper, notepaper, and envelopes used in Government offices is now obtained from the Indian mills; but the development of paper-making in India has been checked by the competition of cheap wood-pulp paper from Europe, and the industry has not shown much progress in recent years. Forty-five per cent. of the total value of the paper used in India is produced in the country, and 55 per cent. is imported. 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.

Paper mills.

In 1906 there were 25 breweries at work, which produced during the year about 5½ million gallons of beer. The Commissariat Department bought nearly half of this malt liquor for the use of European soldiers, and the rest is consumed also mainly by Europeans—soldiers or civilians. The largest brewery is at Murree in the Punjab Himalayas, and its output was about a million gallons. More than one third of the whole production is brewed in the Punjab. Indian beer is sold for the most part at prices varying from 12 annas to one rupee a gallon. The quantity of beer imported into India during the year was about five million gallons.

Breweries.

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, such as municipalities, port trusts, and railways. Among these were 16 printing presses and 14 railway workshops, 10 canal and engineering workshops, and a considerable number of military arsenals and factories.

Other industries.

MANUFACTURES.

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 factories created by the cotton industry exist principally in Bombay, those relating to the jute industry in Bengal and Eastern Bengal and Assam; while rice mills and saw mills are mainly concerned with the exploitation of the two principal products of Burma—rice and teakwood. The number of works engaged in the principal industries, together with the number of persons employed, is given in the following table:—

	No. of Works in 1906.	No. of Persons employed.	
		1906.	1905.
Cotton presses	962	94,894	84,664
Cotton mills	217	211,156	212,720
Jute presses	126	23,639	20,304
Jute mills	44	166,895	144,879
Rice mills	92	12,756	13,939
Sawmills	62	7,731	8,517
Iron and brass works and foundries	74	26,123	24,001
Indigo factories	196	102,148	80,043
Tile factories	86	15,645	12,628
Printing presses (private)	88	14,828	13,548
Printing presses (Government and municipal)	14	7,524	6,087
Dockyards	11	9,170	10,411
Railway open lines	34	391,865	373,252
Railway workshops	87	87,419	78,781
Government arsenal, arms, and ammunition factories	14	16,037	13,159

The progress of the tea industry and also that of the coal industry have been noticed in Chapter X.

The average number of men, women, and children shown in a table below to have been employed in 1906 in the factories coming under the Factories Act is 690,712. If to these be added the figures given in the report of the Chief Inspector of Mines, relating to all mines coming under the Mines Act, namely, 128,666, a total of 819,378 results.

FACTORIES ACT.

FACTORIES ACT.

The law respecting factories in India is Act XV. of 1881, as amended by Act XI. of 1891. The changes introduced by the latter into the previous law 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 their employment at night-time was 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 1½ hours;

A rest period during work was prescribed for all labourers.

In December 1906 the Government of India appointed a small Committee to conduct a preliminary inquiry into the conditions of factory labour in textile factories in India.

The specific points referred to the Committee were as follows:—

(1) Whether the working hours of adult males should be limited, and whether the physique of operatives is affected by long hours.

(2) Whether before children are allowed to work in factories certificates of age and fitness should be required.

- (3) Whether the minimum age of children should be raised beyond nine. **FACTORIES ACT.**
- (4) Whether, as the result of employment as adults of persons between the ages of 12 and 14, there has been physical deterioration requiring the creation by law of a special class of workers known as young persons.
- (5) Whether a separate staff of Medical Factory Inspectors should be entertained.

The Committee were also at liberty to put forward recommendations for the amendment of the existing law and practice, if they were of opinion that the present hours of work of operatives are excessive, that the conditions of factory labour are otherwise injurious or oppressive, or that abuses exist in connection with the employment of children or young persons. The Chairman was Commander Sir H. P. Freer-Smith, R.N., late Superintending Inspector for Dangerous Trades in England, and there were two other members. The Committee's report was submitted in April 1907, and was presented to Parliament (Cd. 3617). It is not necessary to enumerate here the definite suggestions put forward by the Committee as the result of their inquiries. They pointed to a number of important reforms, and their conclusions are now forming the basis of investigation by a representative Commission, which is expected to report by June 1908.

STATISTICS OF FACTORIES IN INDIA, INSPECTED UNDER THE FACTORY ACT DURING THE YEAR 1906.

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 Stoppage.		Fatal.	Serious.	Minor.	Total.
Bengal - - -	120	210,018	31,864	24,323	266,205	156	-	24	-	24	228	660	963
United Provinces -	154	40,613	5,316	1,490	47,509	126	26	2	2	9	54	65	128
Punjab - - -	183	22,330	3,395	1,160	26,875	126	40	11	2	9	33	238	279
North West Frontier Provinces.	1	28	22	-	60	1	-	-	-	-	-	1	1
Burma - - -	219	29,901	652	312	30,865	195	19	5	-	6	89	58	152
Central Provinces and Berar.	218	21,768	12,798	1,610	36,176	170	147	1	10	2	57	78	137
Madras - - -	57	37,595	2,040	2,483	42,108	76	6	3	1	-	24	289	313
Bombay - - -	478	159,258	44,710	8,459	212,427	323	144	2	13	25	137	1,367	1,529
Eastern Bengal and Assam.	99	16,506	787	709	18,002	57	-	43	-	1	13	7	21
Ajmere - - -	4	8,678	203	96	8,979	2	2	-	-	-	4	26	40
Total, 1906 -	1,722	546,693	102,798	41,223	690,712	1,252	384	100	29	66	738	2,739	3,563
Total, 1905 -	1,545	501,227	92,431	37,978	632,636	1,123	306	96	23	111	499	2,643	3,252
Total, 1904 -	1,449	464,721	85,221	35,818	567,560	1,004	314	116	23	91	586	2,363	2,900

The steady increase during recent years in the number of factory operatives in India appears from the table in the margin, which gives the average total number employed daily in each of the last five years.

1902	527,617
1903	553,422
1904	537,560
1905	632,636
1906	690,712

The total number of factories registered under the Act rose from 1,600 in 1905 to 1,855 in 1906. The increase was most marked in the Central Provinces and in Bombay, where 137 and 40 new factories respectively were brought within the Act's operation. In the case of the Central Provinces, however, the actual increase was 9 only, and the large nominal increase was due to imperfect registration in previous years. The increase in Bombay and the United Provinces was due to the expansion of the cotton industry. The advance in the case of Burma is ascribed to the increase in the number of rice and saw mills, while that in Eastern Bengal and Assam

FACTORIES
ACT.

was due to the erection of new jute mills. The decrease in the number of operatives in the Punjab is noticeable, and probably resulted from the fact that many cotton gins and presses remained closed owing to the failure of the cotton crop during two successive years.

The members of the Jute Association in Bengal agreed not to work with artificial light for six months from the 1st January 1906. The agreement was not renewed at the end of this period; but it is reported that the operatives do not work long hours, and that even with electric light the different batches seldom work for more than 8½ hours each. As the result of a resolution passed at a conference of Indian and Ceylon Chambers of Commerce inquiries were instituted regarding the supply of labour in the United Provinces and in Bengal. It seems that, though there is a shortage in the supply of skilled artizans who require to be trained, there is no real deficiency in the amount of labour potentially available, and that no difficulty in that direction need be anticipated, if the condition 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 coolies prefer to return home.

As in previous years, there were but few instances reported of the infringement of those provisions of the Act which relate to the working hours and the employment of women and children. The local governments report that inspection work was, on the whole, satisfactorily performed, although some factories escaped inspection altogether during the year. There was a small increase in the number of accidents reported, but this increase was not disproportionate to the increase in the number of operatives, the proportion of accidents to operatives being 1 in 193 compared with 1 in 194 for the year 1905. The condition and general health of the labourers is reported to have been satisfactory.

CHAPTER XVI.

FRONTIERS AND NATIVE STATES.

FRONTIER STATES.

FRONTIER
STATES.

The seasons in Baluchistan during the year under review were favourable, the harvests were good, and the area of land under cultivation increased. The public health was generally good, but there was a considerable increase in the number of cases of malaria. The Province was practically free from plague. As in the preceding year precautionary measures were taken against the disease. A segregation camp was kept open at Hirok in the summer, and at Sibi in the winter; and observation camps were maintained on the Seistan trade route. The Provincial receipts for the year amounted to £198,700 and the expenditure to £220,800, as against £200,500 and £209,000 respectively in the preceding year. The grant for Civil Works for the year amounted to £32,300. Progress was made with the work of Land Survey and Settlement. The work of Settlement in the Nasirabad Tehsil was finished in April 1907. The important Quetta revision settlement work was commenced, the original settlement having expired on the 31st March 1907. The total value of the Foreign land trade with Afghanistan and Persia amounted to £186,600, showing a decrease of £17,100 as compared with the preceding year. The decrease was in a measure due to the plague conditions existing in Seistan. The work of the Police was generally satisfactory, and crime was normal. The two drilled and disciplined corps, viz., the Zhob and Makran Levy Corps, were maintained at the same strength as in 1905-06. The total strength of the district Levies, excluding the Zhob and Makran Corps, was 2,270. The conduct of these Levies was generally satisfactory. The Province is still in a backward stage as regards education, but the progress initiated in recent years was maintained.

Baluchistan
and the
Persian
Frontier.

The administration of the Kalat State was generally satisfactory. In the summer of 1906 some disturbance of the peace was caused on the borders of Las Bela and Jhalawan by a conflict between the Mengals and the Jamots in the course of which several tribesmen were killed. The disputes of the tribes were referred for settlement to the Sibi Shahi Jirga in February 1907, and an award was given by the Jirga which was subsequently confirmed by Government. The Political Agent has since visited the district, and steps are being taken for the better control of this remote and backward part of the country. In October 1906 an amicable settlement of the long-standing Phailawagh land case in the Sibi District was arrived at between the Marri and Bugti tribes. Hostile opposition was, however, offered by one section of the Marri tribe to the demarcation of the land in dispute, which was undertaken by the Political Agent, and it became necessary to provide him with a military guard. The Marri Chief was able to arrest a number of men who participated in these demonstrations. They were subsequently convicted by a Jirga and sentenced to imprisonment.

A few offences of a fanatical nature occurred during the year. The most serious of these resulted in the death of a Government mule driver in charge of a Government tonga, who was shot dead on the Harnai-Loralai road on the 12th December 1906. The necessary measures were taken to effect a settlement.

No incident of a serious nature involving the peace of the border occurred in the Chagai and Quetta Pishin Agencies. In the Zhob Agency the general attitude of the tribes, with the exception of the Sheranis, was satisfactory. On the 14th May 1906 the Political Rest House and Dâk Bungalow at Shinghar were burnt by certain Sherani malcontents. The offenders were followed by parties of the Zhob Levy Corps, and shots were exchanged, but they eventually made good their escape across the border.

On the 29th September 1906 a patrol of the Zhob Levy Corps, escorting mails between Mir Ali Khel and Moghal Kot, were ambushed by a party of

FRONTIER STATES. raiders. Two Sowars of the escort were killed and three wounded. The raiders evaded pursuit and got away into the Wana Agency, North-West Frontier Province. It is believed that the raiders consisted of a party of Waziris under Mianji, the notorious Mahsud outlaw, and Anji, his brother, together with ten or twelve Sheranis.

The Khoidad Khel section of the Suleman Khel tribe, Wana Agency, caused some anxiety in January and February 1907, in consequence of the flight, across the Gomal border into the Province of Baluchistan, of the widow of the late Khoidad Khel Chief with a young man of the tribe. The Khoidad Khel as a tribe were greatly incensed. They assembled on the border and demanded that the guilty pair should be given up to them. Having regard to the policy always adopted with regard to refugees their demand was not complied with. The tribesmen then took up a threatening attitude, crossed the border, and cut the telegraph wires in the Zhob Agency. The Political Agents in Wana and Zhob met, and subsequently a settlement was arranged with the Khoidad Khel, under which they paid for damage done to the telegraph line. The offending tribesman was ordered to find security for £200 to keep the peace.

A tribal dispute, in which two factions of the Jogezi tribe, the Ishak and Nawab Kahols were concerned, occurred in the spring of 1906. On the 1st May an affray in connection with this dispute took place at Killa Saifulla, in the Zhob Agency, in which Sardar Bahadur Nawab Bangal Khan on the one side was killed, and Sardar Bahadur Akbar Khan and Baran Khan, on the other side, were wounded. The case was referred to a special Jirga, convened at Quetta on 1st September 1906, and in July 1907 a settlement was effected.

North-West Frontier Province.

The relations with the tribes on the North-West Frontier during the year under review were on the whole peaceful. The Peshawur and Kohat districts, however, continued to be the scene of the depredations of gangs from Afghan territory in which the Zakka Khel Afridis took a principal part. In view of this, following on the misbehaviour of the tribe referred to in last year's Statement, it was decided not to summon this section for their allowances in the winter. The border of Lower Kurram was the scene of some disorder owing to the incursions of raiding parties from Khost; while in Upper Kurram the Khani Khel Para Chamkanni were the cause of some annoyance.

In Waziristan the position of affairs was as follows:—At the beginning of the year the Mahsuds petitioned for pardon for the murder of Captain Donaldson. Their prayer was granted on the understanding that Pashakui, the only one of the abettors of the murder, still at large, should be surrendered, if found in Mahsud country, and, failing his surrender, a sum of £6,666 should be deducted by way of fine from the Mahsud allowances. A grant of land in British territory to the Mulla Powindah was also sanctioned, together with a redistribution of the Maliki allowances. In spite of a settlement effected on the above basis, affairs in the Mahsud county remained in an unsatisfactory condition.

In the North the border was peaceful, except for the dispute between the Khan of Dir and his brother, which still continued; and the usual family feuds between the rulers of Nawagai and Bajaur. In Chitral the administration of the Mehtar was satisfactory, and the people were contented and prosperous.

Climatic conditions in the Province were favourable. The autumn harvest of 1906 and spring harvest of 1907 were both above the average. The year as a whole was therefore prosperous, and land revenue was collected without difficulty. The public health, however, was seriously affected by an epidemic of malarial fever, which prevailed throughout the Province during the closing months of 1906, and business was further disorganised by an outbreak of plague in the spring of 1907.

The work done by the Frontier Militia Corps was satisfactory. The Kurram Militia showed a marked improvement in discipline. In Southern Waziristan it was found necessary to discharge the Mahsuds in the Militia, owing to the refusal of the tribe to accept the principle of tribal responsibility for the conduct of individual tribesmen. The work of the Police was generally satisfactory. Difficulty was experienced in obtaining suitable

recruits for the force in spite of the improved remuneration now offered. The steady diminution of serious crime observed in the three preceding years was continued during the year under review. FRONTIER STATES.

The survey of the Mullagori, Shinwari, and Shilman country of the Khyber Valley and Lashora Hills was completed in June 1906, and the duplication of the Khyber Road was nearing completion at the end of the year. Work on the railway under construction, from Jamrad to the Kabul river, progressed smoothly and without interruption.

No administrative changes took place in the Kashmir State during the year under review. Kashmir. The seasons were generally favourable, but the public health was not entirely good. Cholera broke out in the Kashmir Valley in November 1906, and up to June 15th, 1907, there were 14,131 cases and 7,819 deaths. Plague again visited the Province of Jammu, and though not so severe as in the neighbouring districts of the Punjab, 4,790 cases occurred and 2,928 deaths were recorded between the 1st of January 1907 and the end of May.

The financial position of State was sound. The revised figures show that the actual expenditure in 1905-06 was £670,000, and the receipts £660,000. The budget estimates for 1906-07 were as follows :—Expenditure, £699,600 ; receipts, £693,000. The actuals for the year 1906-07 have not yet been reported.

The total budget grant for the Public Works Department for 1906-07 was £316,300. Amongst other irrigation works in hand, the works in the Runbir Canal were pushed on, and the portion from the head at Akhnoor to Jammu was practically completed. The work of carrying the canal beneath the Tawi River, in order to reach the irrigable country on the south, was commenced. On the carrying out of this important work the success of the canal largely depends. A survey of the Jhelum Valley was made during the year for the purpose of determining finally on the alignment of the projected Kashmir Railway. Good progress was made with the works in connection with the electric power scheme, referred to in last year's Statement.

The seasons were not altogether favourable to sericulture, but the industry was thriving, and good prices were realised for the silk turned out, which finds a ready market in Europe.

The administration of the Poonch Naqua was satisfactory, and the State enjoyed a prosperous year. In Leh, Gilgit, and other dependencies of Kashmir no events of importance occurred during the year under review.

The *personnel* of the Nepal Government remained unchanged during the year under review. Nepal. Maharaja Sir Chandra Shum Shere Jang, Rana Bahadur, G.C.S.I., continued in office as Prime Minister. His Excellency the Commander-in-Chief in India paid a visit to Nepal in November 1906, and a most cordial welcome was extended to him by the Prime Minister and the Nepal Durbar.

The trade returns show some falling off in the volume of trade. The following are the figures :—

	1905-06.	1906-07.
Exports	£ 2,219,000	£ 1,981,000
Imports	1,028,000	923,800

As regards exports, the most important decrease appears in grain and jute. This is attributed to the partial failure of the autumn crops in Terai. The principal imports affected were cotton piece goods, twist and yarn, and salt. The fall in value of the two first-named articles is attributed partly to the fact that prices ruled high during the year, which tended to reduce importation, and partly to depression of trade from the bad harvest. The decrease in the value of the salt imported is partly accounted for by the reduction in the duties charged and the consequent reduction in price.

FRONTIER STATES.
Sikkim and Bhutan.

The seasons in Sikkim were favourable, and the crops were plentiful. The ryot consequently enjoyed a prosperous year, but the market was affected by the scarcity prevailing in Eastern and Southern Bengal, and the price of food grains in Sikkim was high. There were a few cases of small-pox of a mild type, but the public health was generally good. The finances of the State were satisfactory. The reserve fund amounted to £8,600. The gross total revenue during the year was £13,700, and the expenditure amounted to £14,200.

Friendly relations with the Bhutan State were maintained during the year under review. The Political Agent, Sikkim, who made a tour in the State in May and June 1906, was received with every mark of respect and attention. The State was satisfactorily administered by Sir Ugyen Wangchuk, K.C.I.E., the Tongsa Penlop.

Frontier Tribes of Eastern Bengal and Assam.

Information as to the Native State of Manipur is given on p. 187.

The frontier tribes of Eastern Bengal and Assam were generally well-behaved throughout the year, and no serious disturbance of the peace occurred. The blockade instituted against two sections of the Mishmis, owing to the murder in 1905 of three British subjects, was maintained during the year under review. Relations with the Naga Hill tribes were friendly, but several inter-tribal raids occurred during the year. In the Garo Hills there was some unrest in connection with an agitation to recover for the Garos possession of a large tract of country which has for years formed part of a zamindari in the Goalpara District. Two outrages were committed on the southern border of the Lushai Hills District during the year under review. The offenders in both cases were men of Zongling, a village about seven miles south of the southern border of the district. In one case a man named Raiawanga and his wife and son were carried off from a revenue paying village, presumably within the border. The man was strangled on the way. The wife and son subsequently effected their escape. In the second case a boy, eight years old, was seized and carried away from the village of Siata in order to enforce payment of a claim made by the Zongling people against the Siata villagers. The boy having been released, action to obtain redress was postponed until the cold weather. In connection with these incidents the whole question of the arrangements on the southern boundary of the Lushai Hills District may probably have to be considered.

In the Khasi and Jaintia Hills there were many disputes during the year between the various Chiefs as to the boundaries of their States. These matters were almost all settled by local enquiry. No incident of political importance occurred. Measures were taken to fix the number of guns held by the different States, and the Chiefs were reminded that ammunition can only legally be obtained from the licensed vendor in Shillong on a permit signed by the Deputy Commissioner.

BURMA.
The Chin Hills.

The most noticeable event of the year under review in the Chin Hills and adjacent frontier tracts was the massacre of twenty-seven Shandus by Kons at the village of Bahe in the unadministered territory north of the Hill District of Arakan. This incident occurred in December 1906. Measures were taken to protect the Northern Arakan Frontier in case the Shandus might attack the Kons and follow them into administered territory. The Shandus were, however, prevailed on not to make reprisals pending the orders of Government; and measures for a settlement of the case were deferred till the cold weather.

Apart from the feeling of unrest caused by these disturbances, the year was uneventful in the Chin Hills, and relations between tribes in the administered and unadministered tracts were satisfactory. Crime in the district was light. Agricultural conditions were for the most part satisfactory. New crops and new methods of cultivation were commending themselves to the people. A Chin Civil Police Force was instituted during the year. A large number of unlicensed guns were withdrawn from the northern tribes.

The Kachin Hills.

In the Kachin Hills District, relations with the trans-frontier tribes under Chinese control continued on the whole to be satisfactory. The comparative immunity from disturbance enjoyed on the Chinese frontier was not shared by that part of the Myitkyina District which borders on unadministered territory. On the eastern section of the northern administrative boundary of

that district several raids of a serious nature were committed during the year by Kachins from across the N'Maikha. The gravest outrage was a preconcerted attack on the temporary military police post at Anche by Kachins from the Sana tract west of the Malikha. The post had been forewarned, and the attack was easily repulsed. The general condition of the people in the administered Kachin area was prosperous, and no difficulty was experienced in collecting the year's tribute. The experiment of enlisting Kachins in the Military Police Force continued to give satisfactory results. Steps were taken to regulate the possession of firearms in the hill tracts in the east of the Myitkyina District.

FRONTIER
STATES.

Conditions on the external frontier of the Northern Shan States continued normal during the year under review. The annual conference between the local officers and the Chinese authorities of the adjoining prefectures of Yünnan took place in December 1906, and an amicable settlement of many pending cases was arrived at. The internal condition of the five States which form the charge of the Superintendent of the Northern Division was one of undisturbed tranquillity, and the people were prosperous and contented. Economic conditions were on the whole satisfactory. The rainfall was normal and the rice crop was above the average. The cultivation of tea continued to extend in the Western States. Among adverse agricultural occurrences the chief were the continued mortality of cattle from rinderpest and a plague of caterpillars. Both imports into and exports from Burma increased in value. The increase under the former head is attributed to heavier extraction of forest produce. So far as could be judged the financial position of the several States continued to be satisfactory.

Northern
Shan States.

The external frontier of the Southern Shan States remained undisturbed throughout the year. The construction of permanent boundary pillars on the Chinese frontier proceeded smoothly and rapidly, the work being facilitated by the ready co-operation of the Chinese officials. Cordial relations existed with the French officials beyond the Mekong. No incidents of importance occurred on the Siamese frontier. The internal political affairs of the 38 States which form the charge of the Superintendent of the Southern Division were generally satisfactory and call for but little comment, except in the case of Mawmai, where a series of incendiary fires has been attributed to the dissatisfaction with financial reforms instituted by Hkun Nè, who was appointed administrator on the death of the young Chief in November 1906 and the succession of his brother who is a minor. The rainfall in the Southern Division was irregular, and agricultural conditions were not favourable. The only crops which were moderately successful were potatoes and cotton. There was no fresh outbreak of cattle disease, but in some districts the outbreak of the previous year had not yet been stamped out. Rules were recommended to the Chiefs with the object of preventing a recrudescence of the disease. Trade was adversely affected by the prevalence of plague in Burma, and the heavy mortality of the previous year among beasts of burden. Nevertheless the volume of trade with Burma is reported to have shown a considerable increase, which is attributed chiefly to larger imports. The year was comparatively free from serious crime, while ordinary crime was dealt with more successfully than in the past. Amongst Public Works, the principal work of the year was the completion by the Sawbwa of Yawnghwe of a navigable canal from Yawnghwe Lake to Mawlihsat, a point on the railway to the Southern Shan States, the construction of which is under consideration. Good progress was made during the year in locating the proposed line, and a final survey has now been commenced. Useful work was done by the Chiefs in most of the States in road-making and communications.

Southern
Shan States.

The rainfall in Karenni was irregular and unsatisfactory, and the price of food-stuffs was very high. The trade in lac and cutch flourished, and on the whole the condition of the people was prosperous. The State of Kantarawadi sustained a great loss in the death of its Sawbwa Sarolawi. He had administered the State with ability and success for many years. He has been succeeded by his step-son Hkun Nan.

Karenni.

NATIVE
STATES.

Hyderabad.

NATIVE STATES.

The report on the administration of the Hyderabad State for the year 1906-07 was not available when the present Statement was prepared.

The following information in regard to the affairs of the State during the year 1905-06 was given in last year's Statement:—

"Their Royal Highnesses the Prince and Princess of Wales visited the Hyderabad State during their tour in India.

"No changes of any importance in the personnel of the administration took place during the year under review. The Maharaja Peshkar Sir Kishen Persad Bahadur was Minister throughout the year, and His Highness the Nizam continued personally to supervise the administration of the State.

"The most important measure of administrative reform during the year was the introduction of rules for the superannuation of officials. As in British India, the ordinary age of retirement has been fixed at 55 years, and power has been reserved to certain high authorities to sanction extensions of service up to 60 years, after which no official can be retained in the service of the State without the personal order of the Nizam. In the matter of excise, an agreement with the Administration of the Central Provinces was in contemplation under which it is stipulated that no liquor shops shall be established or maintained within a three-mile zone on either side of the frontier. A similar agreement has existed between the Nizam's Government and the Government of Bombay for some years past. The administration of justice in the State was reported as having been on the whole satisfactory. The District Police force was under the charge of a British officer, and its personnel and efficiency are reported to have been greatly improved. The Thagi and Dakaiti establishment, which was transferred to the control of the Nizam's Government in 1904, worked well during the year under review.

"No public works of great importance were undertaken during the year. The Medak Irrigation Canal was completed, and negotiations were being carried on with the Nizam's Government in the matter of certain irrigation projects of the Madras Government.

"Plague was reported to be declining in the State, and the City of Hyderabad continued to enjoy immunity from the disease.

"Reports of the output of minerals for the year 1906 have not yet been received, but during the previous year, for which figures have now been received, 454,293 tons of coal were produced at the Singareni collieries. In the same year, minerals other than coal, and gems to the value of nearly £50,600, were produced in the State."

Mysore.

The rainfall in the Mysore State during the year under review was 44.44 inches, as against 27.37 in the preceding year. From an agricultural point of view the rains, though somewhat late, were, on the whole, favourable, and greatly relieved the anxiety caused by the deficient rainfall of the two previous years. The public health was not, however, so good as in the preceding year. There was an increase in the number of cases of both cholera and small-pox, and plague was still prevalent. The Representative Assembly held their twenty-third session at Mysore on the 1st October 1906, when 220 out of the 280 delegates were present. The original Land Survey and Settlement operations of the whole State were completed during the year, and the bulk of the work to be done by the Survey Department will, in future, consist of revision survey. Amongst the Legislative Regulations passed during the year under review, the following may be noted:—

Regulation IV. of 1906.—To consolidate and amend the law relating to Mines in Mysore. This Regulation, amongst other things, makes illegal the possession of unwrought gold within the mining area, provides for the weeding out of the mining area of all undesirable characters, and empowers the Sanitary Board to frame bye-laws and to levy taxes and rates in the area under its administration.

Regulation I. of 1907.—To establish a Legislative Council in Mysore. This Regulation is intended to associate with the Mysore Government a certain number of officials and non-officials qualified by practical experience and knowledge of local conditions and requirements, so as to secure the

benefit of criticism from different points of view in the discussion of measures before the Council. The Legislative Council, under the terms of the Regulation, is constituted by the Dewan and two Councillors as *ex-officio* members and not less than 10 or more than 15 additional members to be nominated by Government and to hold office for two years at a time, not less than two-fifths of the additional members being non-officials. The work of the Council is confined to the consideration and passing of measures introduced at its meetings; the enactment of every measure resting with His Highness the Maharaja.

The work of the Police force was satisfactory, and crime was light. The Forest Administration was good and the results were satisfactory. In the matter of mining and prospecting for minerals the year was one of considerable activity. Reference has been made to the gold production of the Mysore gold mines in Chapter X. of the present Statement. The aggregate expenditure incurred in connection with Public Works during the year under review amounted to £314,200, being £22,500 less than in the year 1905-06. The outlay on the Cauvery Power Scheme during the year amounted to £39,000. The total capital invested in the scheme up to the 30th June 1907 was £433,000, and the net revenue realised in 1906-07 was £118,000. During the year under review no new railway construction was undertaken by the State. The length of lines remained the same as in the preceding year, viz., 401 miles metre gauge and 10 miles standard gauge. Special attention continued to be paid to education. The expenditure on education from all sources amounted during the year under review to £96,300. Over 56 per cent. of this sum was provided out of State Funds. The financial condition of the State was satisfactory. The revenue collected during the year amounted to £1,477,400, as against £1,435,800 in the preceding year. The expenditure amounted to £1,348,700, as compared with £1,358,800 in 1905-06. The cash balance at the close of the year was £660,000.

The latest information available as to the administration of the Baroda State is contained in the Report for the year ended 31st July 1906. Baroda.

During the period dealt with, His Highness the Maharaja Gaekwar was absent on a tour in Europe and America, and the affairs of the State were conducted by the Council of Administration.

The rainfall in 1905-06 was below the average of the five preceding years, and was badly distributed. In the Kadi district damage was caused by heavy rains, while in the Amreli district the rains were generally scanty, and failed in the latter part of the season. Famine conditions ensued, and it again became necessary to open relief works. These conditions were confined to the Amreli district. The relief operations were well conducted. Liberal *tacavi* advances and timely suspensions and remissions of land revenue were granted. The arrangements for the supply of fodder were successful in preserving many of the agricultural cattle. There was no loss of life through famine, and the public health throughout the State was generally satisfactory. Expenditure on famine relief, apart from *tacavi* advances, during the year under review, amounted to about £25,000, as against £21,000 in the preceding year. There was a very considerable decrease in plague cases and deaths.

The most important new Acts passed during the year were the Hindu Marriage Act and the Benevolent Societies' Act. The Acts for the Prevention of Infant Marriages and the Religious Endowment Act, referred to in last year's Statement, were in operation and showed good results. The measure for the separation of Judicial and Executive Duties was further developed during the year under review. The decentralisation of the Revenue Department, which was effected in 1904-05, is reported to have been attended by satisfactory results.

During the year under review more waste land was brought under cultivation, and less land was relinquished by cultivators. The land-revenue demands and collections were greater than in the preceding year. The following are the figures:—Demand and Collection in 1905-06 were respectively £569,000 and £259,000, as against £499,000 and £337,000 in the year 1904-05.

NATIVE STATES.

Satisfactory progress was made in land settlement and revision of settlement operations in the various Talukas of the State. The reforms instituted in the system of State Customs Duties, in 1904-05, were virtually completed in the year under review. Under the revised rules a double system of taxation has been generally avoided, and a large number of articles have been exempted from duty altogether. A marked advance in Industries has been made within recent years, but Baroda is reported to be still somewhat backward as compared with the great industrial towns of Western India. There were 59 ginning factories and 5 cotton presses in different parts of the State during the year under report. These figures show an increase of 10 factories and one cotton press over the figures of the preceding year.

The Expenditure on Public Works during the year under review amounted to about £126,000. The State Railways covered 250 miles, open for traffic, while 40 miles were under construction. The total capital expended on railways was £566,000, and net profit in the year 1905 was over 7 per cent.

The financial condition of the State was generally satisfactory. The receipts for the year ending 31st July 1906 amounted to £1,175,000, and the disbursements to £1,047,000—as against £758,700 and £972,400 respectively in the preceding year.

Satisfactory progress in all branches of Education is reported during the year. The total expenditure under this head during the year under review amounted to £40,000. The most important reform was the extension of free and compulsory education to the whole State. The system had been in force in one Taluka of the Amreli District since 1893 with satisfactory results. The rule adopted is that all boys between the ages of 7 and 12, and all girls between 7 and 10, should attend schools under penalty for non-attendance. The special grant for the purpose has been increased to £33,000 per annum.

Some useful reforms in Police administration were initiated during the year. The work of the Force was generally satisfactory, and crime was normal.

Rajputana.

The following information as to the Native States of Rajputana is for the year 1905-06. The report for the year 1906-07 had not been received when the present Statement was prepared.

Scarcity existed in most parts of Rajputana during the year owing to deficient rainfall. In Bikaner, Jhalawar and Jaisalmer, the failure of the monsoon was partial and there was no marked distress; but famine conditions prevailed in Jodhpur, Udaipur, Tonk, Kishangar, Jaipur, Alwar, Bharatpur, Karauli, and Dholpur. Prompt action to meet distress was taken by the Durbars of these States. Relief works were organised; revenue demands were suspended; and loans and advances were made to cultivators. The public health during the year was satisfactory on the whole, but plague was prevalent in Alwar and Tonk, and in a less degree in other States. The number of deaths from the disease recorded in Alwar during the year was 4,715, and in Tonk 600. In the latter State epidemics of cholera and small-pox are also recorded. In spite of the adverse conditions caused by drought, and consequent losses of revenue sustained by many States, some progress was made with administrative measures, especially in matters connected with Public Works and Irrigation. The total outlay on Public Works in the Native States for a period of 18 months, ended 30th September 1906, amounted to £440,000. The expenditure for the 12 months, ended 31st March 1905, as shown in last year's Statement, was £228,900. Investigations in connection with the Rajputana Protective Irrigation Works were continued during the year under review by the Superintending Engineer, and schemes for 72 projects were worked out and forwarded to the Durbars concerned. The result of the investigations carried out during the 3½ years ended April 1906 is briefly as follows:—

- (i) Every State in Rajputana, with the exception of Karauli and Jaisalmer, was visited by Colonel Sir Swinton Jacob, the Consulting Engineer, and by the Superintending Engineer, Protective Irrigation Works.
- (ii) Reports on irrigation in each State have been prepared and printed.
- (iii) In the seven States which have engineers of their own and a recognised Public Works Department, the Consulting Engineer has recorded his opinion on all the projects on which his advice was requested.

- (iv) In the remaining eleven States without engineers or recognised Public Works Departments of their own, and for the Istimrari area of the Ajmer district, 100 projects in all were approved by the Consulting Engineer.

NATIVE STATES.

The total expenditure incurred by the Government of India on the investigation up to the year 1906-07 amounted to about £17,000. It may be noted that when the rains failed in 1905 seven irrigation projects, the estimated cost of which was £32,700, were put in hand by the Shahpura, Bundi, Tonk, and Karauli States, the intention being to complete them before the rains of 1907.

The total Imperial outlay on Public Works for the year ended 31st March 1906, excluding Irrigation and Famine Works in British territory, amounted to £26,000 as against £10,000 in the preceding year. As regards State Railways, the following was the position at the close of the year 1906-07 :—

- (1) The Jaipur-Sawai-Madhupur Railway, under construction by the Jaipur Durbar : 32·18 miles open, and 40·66 miles under construction.
- (2) Dholpur-Bari Railway, under construction by the Dholpur Durbar : 19·25 miles under construction.

The following administrative changes took place during the year under review :—The Chief of Kishangarh, His Highness Maharaja Madan Singh, was invested with ruling powers on the 11th December 1905, and in April 1906 a reorganisation of the State Council, giving greater power and responsibility to individual members, was introduced. In the Tonk State, the arrangement under which the Political Agent had exercised a certain measure of control in all the Departments of the State was modified at the close of the year. The Chiefs of Bharatpur and Jaisalmer being minors, the States continued under management. The former is administered by a Council of Regency, under the control of the Political Agent, and the latter by the Diwan under the general supervision of the Resident, Western Rajputana States.

Information as to the Central India Agency for the year 1906-07 was not available when the present Statement was prepared. The following are the facts and figures for the year 1905-06 :—

Central India Agency.

Their Royal Highnesses the Prince and Princess of Wales paid a visit to Indore in November 1905. On the 16th of that month His Royal Highness held a public Durbar, which was attended by a large number of chiefs and notables.

In the southern and south-eastern portions of Central India, the rainfall during the year under review was good and well distributed, but in the greater part of Malwa it was much below the average, while in North Gwalior and Bundelkhand there was a serious shortage, which was also the case, though in a less marked degree, in the Baghelkhand Agency. Scarcity which deepened into famine began to make itself felt in September 1905. Relief works were instituted in the Gwalior State, the Bundelkhand Agency, and the Alampur Pargana of Indore. The total number of units relieved in these districts during the year under review was 9,213,781. At the close of the year—31st March 1906—there were still 103,595 persons in receipt of relief. The history of the famine belongs more properly to the year 1906-07, but it may be noted that the States faced the situation with courage, and that the arrangements made were on the whole excellent and successful. It is believed that there was practically no loss of human life attributable to starvation, but the loss of cattle was very severe.

Apart from an epidemic of small-pox, the year was on the whole healthy. There was a marked decrease of plague in the earlier part of the year, but hopes which were entertained of the disappearance of the disease were disappointed by a recrudescence in 1906-07.

The report on the working of the Agency Police was generally satisfactory and a further decrease of crime is noted. The report on the working of the Thagi and Dakaiti Department of the year 1905 shows that 98 cases of dakaiti occurred in Central India during that year, as against 108 cases in 1904. There was, however, an increase in the value of the property plundered, while the number of persons killed and wounded was reported to have been 7 and 69, as against 4 and 50 in 1904.

NATIVE STATES.

Four cases of poisoning occurred during the year 1905. Of these, three occurred within the Indore State, while the remaining one took place in the Dhar State.

The total outlay on Imperial Public Works amounted to £44,000 as against £31,600 for the preceding year. Of this amount, £9,800 was spent on "Communications," £7,500 on "Establishments," £9,000 on "Civil Buildings," £1,000 on "Military Works," and £1,800 on "Protective Irrigation Works." As regards "Communications," the position at the end of the year 1905-06 was as follows:—

Metalled roads—	Miles.
Maintained by the Imperial Public Works Department	785
Maintained by Native States	1,866

At the close of the year 1906-07, 133.53 miles of the Gwalior Light Railway were open to traffic, and 66.39 miles were under construction by the State.

The survey for the Narbada Valley Railway, to connect Barwaha on the Rajputana-Malwa line with Bodeli on the Gaekwar's State Railway, was commenced in March 1906. Investigations as to protective irrigation works were carried out by the consulting engineer, who personally visited many of the Native States during the year under review. The Imperial outlay under this head amounted to £1,333.

Some progress was made in educational matters. The States of Central India now possess over 900 educational institutions, which include four colleges teaching up to the University B.A. standard, and 25 High Schools teaching up to the entrance standard. The Gwalior and Indore States have efficient and well-organised Educational Departments. States in the other Agencies are more backward, and much remains to be done there in regard to arrangements for the inspection of schools and for the supply of a qualified teaching staff. The foundation stone of the new buildings of the Daly College at Indore was laid on the 4th November 1905. The interest displayed in the movement was active and widespread, and the money subscribed in Central India amounts to a total of over £74,000.

The administration of the Indore State under the Council of Regency continued to be satisfactory. The finances of State were in good order, and there was a closing balance of £1,534,000; the expenditure on extraordinary Public Works amounted to about £68,000.

Bengal.

The seasons in the Cooch Behar State during 1906-07 were not entirely favourable to agriculture. A heavy flood, which disorganised traffic and did much damage to the early rice, occurred in August 1906, while the late rice suffered owing to drought. The jute crop was good, however, and the general condition of the people was prosperous. Some further progress was made in the cultivation of tobacco, but the industry was still in an experimental stage. The public health was normal. Malaria was less prevalent than in the preceding year, but the number of cases of cholera increased. The administration of criminal justice continued to be satisfactory. There was very little heinous crime, and only one case of murder was reported during the year. The financial condition of the State was satisfactory. The total revenue amounted to £165,000 and the expenditure to £161,000, as against £161,000 and £155,000 respectively in the preceding year. There was a closing balance of about £76,000. The outlay on Public Works amounted to £12,500 as compared with an outlay of £8,000 in 1905-06. The gross earnings of the State Railway amounted to £11,000 as against £10,000 in the preceding year. The progress of education continued to be satisfactory. The Victoria College building was completed during the year.

In the Native States in the Chota Nagpur Division and the tributary Mahals of Orissa the seasons were favourable to agriculture. In many of the States the crops were excellent; the only marked exception being the Narsingpur State, where the rainfall was neither timely nor well distributed and the harvests were poor. A brisk export trade in food grains was carried on, and there was a rise in prices, whereby the cultivators were benefited, while the labouring classes who are usually paid in kind were not adversely

affected. The public health was generally good. The benefits of vaccination were more widely appreciated by the people; and the State dispensaries continued to increase in popularity. The Chiefs continued to take considerable interest in the agricultural, industrial, and educational development of their States, and were beginning to realise the great economic importance of proper management of their forests. The increased interest taken by them in this matter was shown in a general strengthening of forest establishments and in a stricter enforcement of forest rules.

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The following administrative changes took place during the year under review:—Owing to the death of the Chiefs of Rehrakhol and Hindol, and the abdication of the Chief of Keunjhar, the administration of these three Orissa States was undertaken by Government. The other States under Government management at the close of the year were Baramba, Bonai, Kalahandi, Nayagarh, Narsingpur, Nilgiri, Pal Lahera, and Kharsawan.

The financial position of the States under Government management was considerably strengthened. The same remark applies to the States under the administration of their chiefs, with the exception of four small Orissa States, viz.:—Athgarh, Ranpur, Daspalla, and Khondpara. The expenditure on public works in the several States was adequate, and many improvements were effected in roads, buildings, &c.

There was a slight increase in cognisable crime. The behaviour of the Police forces employed in the States was generally satisfactory. Administrative reforms were being introduced in some States, and the Police forces in other States were being reorganised. The reorganisation of the Police in the Kalahandi State was effected, and the results were satisfactory. The progress made in the matter of education was satisfactory. There was an increase in the number of schools and of scholars.

During the year under review arrangements were made for entrusting the administration of the Manipur State to His Highness Raja Chura Chand Singh, who had attained his majority. The change was effected on the 15th May 1907, when the Superintendent formally made over the charge to His Highness and a Durbar. The State was in a sound financial position. The revenue amounted to about £38,000 and the expenditure to £36,000, and there was a closing balance of £17,700. From an agricultural point of view the year was not a prosperous one. The price of rice rose, and it was found necessary to place some restriction on its exportation. The hill tribes caused no trouble during the year. Measures for their disarmament were proceeded with. A reduction of the strength of the Military police from 330 of all ranks to 180 was effected during the year.

Eastern Bengal and Assam.

In Hill Tippera unseasonable rain injured the cotton crop in the uplands and the early rice crop in the plains. The price of food-stuffs rose and occasioned some distress among the hill people. Test relief works were opened, but they attracted very few of the people. The public health was, on the whole, good, and the number of immigrants exceeded the number of emigrants. The State dispensaries and the Victoria Memorial Hospital, Agartala, were reported to have done good work and to be growing in popularity.

Information as to the frontier tribes of Assam will be found on p. 180.

The harvests in the Rampur State were good, and the year from an agricultural point of view was a prosperous one. The prices of food grains were however high, and plague was again prevalent in the State. Remedial measures were adopted, and a special hospital was opened. Sanitation and lighting were improved, and vaccination operations made some progress. The financial position of the State was satisfactory. There was a closing balance of about £16,000. Collections of land revenue were satisfactory, and outstanding arrears were somewhat reduced by timely remissions. His Highness the Nawab made a donation of £4,444 towards the Medical College at Lucknow.

United Provinces of Agra and Oudh.

The Tehri State enjoyed a prosperous year, which was not marked by any event of political importance. The finances of the State were in a satisfactory condition, and a surplus of nearly £106,000 is shown. Some progress was

NATIVE STATES. made in matters of sanitation, education, and public works. The valuable forests in the State, many of which are managed by the Imperial Forest Department, yielded a much larger income than in past years.

Punjab. The arrangements for the purposes of supervision of the Native States in the Punjab remained as in 1905-06, the States being grouped as follows:—

- (i) Patiala, Jind, Nabha, and Bahawalpur, in the charge of the Political Agent for Phulkian States and Bahawalpur;
- (ii) Kapurthala, Mandi, Maler Kotlah, Faridkot, and Suket, in the political charge of the Commissioner of Jullundur;
- (iii) Simur, Kalsia, Pataudi, Loharu, and Dujana, in the political charge of the Commissioner of Delhi;
- (iv) Chamba in the political charge of the Commissioner of Lahore; and
- (v) Bilaspur, Bashahr, Nalagarh, Keonthal, and numerous other small States in the Simla Hills, in the charge of the Superintendent of Hill States, Simla.

In the Phulkian States and Bahawalpur the seasons were favourable, and good harvests were secured. The year was uneventful except for the death of the Nawab of Bahawalpur, which occurred on the 7th February 1907, as recorded in last year's Statement. The Nawab's infant son was recognised as his successor, and arrangements were made for the administration of the State by a Council of Regency of Native officials, under the direct supervision of the Political Agent. The finances of the State were in good order, and there was a balance of £190,700.

In the Patiala State there was no change during the year under review in the Council of Regency appointed to conduct the administration of the State during the minority of the Chief. The finances of the State were in a very satisfactory condition. The returns for the year show a credit balance of £305,000. The expenditure on public works amounted to about £86,000. The year was an unhealthy one in the Patiala State owing to a prevalence of malarial fever and plague. The States of Jind and Nabha enjoyed a fairly prosperous year, but plague was prevalent in the latter State.

The administration of the States in the Jullundur Division proceeded smoothly. The Raja of Kapurthala was absent in Europe for five months of the year under review. During his absence the State was managed by the Administrative Council. In the Mandi State excessive rain did considerable damage to roads and buildings; and a destructive fire occurred in the town of Mandi. The shops burnt down have been rebuilt by the State, and opportunity has been taken to effect various improvements in the streets. The public health was generally good.

The administration of the Sirmur State continued to be efficiently conducted by the Raja, who was invested during the year with enlarged powers as a ruler. The harvests in the Maler Kotla State were good, and apart from the plague the public health was satisfactory. The finances of the State were well managed.

The administration of the Faridkot State was satisfactorily conducted by the State Council. The Raja, who is a minor, entered the Aitchison College as a pupil in November 1906. The finances of the State were in good order. Considerable progress was made with public works. The health of the people was good, except for the plague which broke out again in the State in January 1907.

In the Delhi Division plague was prevalent during the year in all the States except Loharu. Full ruling powers were conferred on the Sardar of Kalsia State in February 1906. His conduct of affairs was satisfactory. Owing to the unstable condition of the finances of the Loharu State, an officer of the Punjab Commission was deputed with Nawab's concurrence to investigate them. Measures were being taken to effect the necessary reforms.

In the Chamba State, which, as before mentioned, is in the political charge of the Commissioners of Lahore, the year was on the whole a

prosperous one. The financial condition of the State was sound. Considerable attention was paid to public works. The health of the people was not good owing to prevalence of fever.

NATIVE STATES.

In the Simla Hill States the year was an uneventful one. The measures taken to restore order in the Dodra Kawan tract of the Bashahr State, referred to in last year's Statement, were attended by success and no further trouble arose.

There was no change during the year under review in the form of administration of any of the 15 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 five States—Sirguja, Udaipur, Jashpur, Korea, and Changbhakhar, taken over from the Bengal Government in October 1905—are reported to have cheerfully fallen into line with the other Feudatories. There was a general and steady improvement in the material prosperity of all the States. The crops were good, and favourable rains ensured adequate employment for agricultural labourers, whilst trade was generally brisk. The year was on the whole a healthy one, though the death-rate was somewhat higher than that of the preceding year. Slight outbreaks of cholera occurred in Khairagarh and in Chhuikadan, and there was also an epidemic of plague in Nandgaon, which was, however, quickly stamped out. The financial condition of the States was satisfactory. Government securities to the value of £36,000 was held by the Chiefs, as compared with £23,000 in the preceding year. Steps were taken to introduce a regular system of land settlement. Crime continued to be very light, and on the whole justice, both civil and criminal, was administered with reasonable promptitude. Excise revenue increased by about 30 per cent. The increase was distributed over all the States, and was accompanied by a satisfactory reduction in the number of liquor shops. Education continued to make steady progress in the States, and several new schools were started. The Rajkumar College made satisfactory progress during the year. The total expenditure of all States on Public Works was about £15,000.

Central Provinces.

There was a great improvement in the agricultural condition of the Native States under the political supervision of the Government of Bombay during the year 1906-07. The improvement was general and was not confined as in the preceding year to Kathiawar and Gujarat, but was shared by the States in the southern part of the Presidency. While, therefore, the Northern States enjoyed another good year, the Southern States, which, as shown in last year's Statement, had been fighting against the adversities of famine and scarcity, were afforded welcome relief. Janjira was the only State where the climatic conditions were unfavourable and the harvests were poor.

Bombay.

In nearly all the States returning prosperity was accompanied by a decrease of crime. Revenue was collected without difficulty, and the chiefs and administrators, being freed from the necessity for heavy expenditure upon famine administration, were for the most part able to devote money to works of utility, and an increased expenditure on public works, education, and medical relief is recorded.

There was a rise in the general death rate, but no great reliance can at present be placed on the returns furnished by the States. Though there was a general decrease in the number of deaths from plague, the disease was severe in Mahi Kantha, and an outbreak of cholera in the Southern Maratha States caused nearly 1,000 deaths.

There was a general rise in the number of schools accompanied by a general fall in the number of scholars. The decrease in attendance is accounted for by the agricultural prosperity, which created a demand for the employment of children in the fields.

His Highness Jam Shri Jasvatsinghji of Navanagar died on the 14th August 1906. He was succeeded on the *gadi* by His Highness Jam Shri Ranjitsinghji Vibhaji, who was installed by the Agent to the Governor on the 11th March 1907. This is the only administrative change of importance which occurred in the States during the year under review.

NATIVE STATES.

The Khairpur State (Sind) suffered a severe loss in the death of the Vigir, Sardar Muhammad Yakab Khan, C.I.E.

There was an increase in the total value of the sea-borne trade of Cutch and Kathiawar. The following are the figures:—

	Value of Exports.		Value of Imports.	
	1905-06.	1906-07.	1905-06.	1906-07.
	£	£	£	£
Kathiawar - - -	861,000	1,567,000	1,559,000	1,436,000
Cutch - - - - -	80,000	101,000	588,000	607,000

Madras.

The State year in the Travancore State closes on the 15th August. The following facts and figures as to the State are for the year ending the 15th August 1906:—

The seasons during the period under review were generally unfavourable to agriculturists and prices ruled high. The total revenue of the State, excluding deposits, &c., amounted to £633,000 and the expenditure to £694,000, the result being a deficit of £61,000. The year closed with a balance of about £449,000. There was a loss of revenue in salt of £53,000, which is accounted for by reduction of taxation.

The total value of the external trade was £3,017,000 as compared with £1,528,000 in the preceding year. The exports contributed 63 per cent. of the total; but the imports also increased by 11 per cent., as compared with the preceding year. The outlay on Public Works under all heads amounted to £143,000, of which sum £30,000 was devoted to the Kodayar irrigation project, the main dam of which was completed on the 15th June 1906 after 9½ years' work. In the matter of education steady progress was maintained during the year. The public health was good, and crime was light.

As in Travancore, the State year in Cochin closes on the 15th August. The following facts and figures as to Cochin are for the year ending 15th August 1906.

Climate conditions in the summer were favourable to agriculture, but there was a failure of the winter rains. Prices rose and remained high throughout the year. The year was on the whole a healthy one, and there was a decrease in the number of small-pox cases. The total receipts and disbursements under service heads amounted to £222,500 and £226,000 respectively, as against £222,000 and £221,000 in the preceding year. The revenue collections realised 98·5 per cent. of the demand, and coercive processes and sales were rarely resorted to. Nearly £133,000 of old arrears were written off. Revenue from salt declined owing to the reduction of duty, but consumption increased. The Forest Department was reorganised, and good progress was made with measures for the development of the State forests. Further progress was made with the forest tramway, mentioned in last year's Statement, and at the close of the year under review 26½ miles were open for traffic. The total expenditure on Public Works amounted to about £20,000.

The report from the Puddakottai State is for the year ending the 30th June 1907. His Highness the Raja visited Europe for reasons of health, and was absent from his State throughout the year. The rainfall during the period under review was ample and well distributed. The harvests were good. The condition of the people who had suffered from two successive years of scarcity was much improved, but large arrears of land revenue were still outstanding. The public health was not good, and 309 deaths from cholera and 327 deaths from small-pox are recorded. The receipts for the year were £111,600 and the expenditure £81,600, leaving a surplus of £30,000 and a closing balance of £84,800 as against an opening balance of £54,800. The working of the Police was not wholly satisfactory, and a scheme of reorganisation was under consideration. Educational matters continued to receive attention, and a scheme for promoting elementary instruction was sanctioned during the year.

The Banganapalle State remained under the administration of the Assistant Political Agent during the year under review. The Nawab, who succeeded his father in 1905 and who has not yet received full powers, took a prominent part in the judicial and administrative work. The early crops were above the average, but the later crops suffered owing to a shortage of rainfall. Prices of food grains rose, and the rise was accompanied by an increase in the rate of wages. The revenue collections were good, and coercive measures were seldom resorted to. Small-pox was prevalent during the year, and there was an increase in the general death rate. Crime was light. The Police force was reorganised during the year, and satisfactory progress was made with the work of reorganising other branches of the administration.

NATIVE
STATES.

The Sandur State continued to be administered by the Divan under the control of the Political Agent, owing to the minority of the Chief. The rainfall during the year was insufficient and the crops were poor. There was no actual scarcity in the State itself, and prices rose owing to scarcity in the adjoining British districts. The principal feature of interest was an increase of the mining revenue. The chief mineral product of the State is manganese, which is now being worked by a Calcutta firm.

CHAPTER XVII.

MILITARY AND MARINE SERVICES.

ARMY.

ARMY.

The sanctioned establishment for 1906-07 was as follows :—

British Troops	-	-	-	-	-	-	-	74,516
Miscellaneous Officers	-	-	-	-	-	-	-	1,137
Native Troops (including European Officers)	-	-	-	-	-	-	-	160,686
Total								236,339

Corresponding Total for 1905-1906 - - - 232,269

The actual strength and distribution of the Army in India on the 1st April 1907 were as follows :—

	Number of Officers and Men.		Number of Officers and Men.
NORTHERN COMMAND.		EASTERN COMMAND—cont.	
<i>British.</i>		<i>Native.</i>	
Cavalry (3 regiments)	1,920	Cavalry (8 regiments)	5,070
Artillery (24 batteries and companies, with ammunition columns)	3,882	Artillery (with ammunition columns and Native drivers of British batteries)	300
Engineers	8	Sappers and Miners (6 companies)	1,122
Infantry (14 battalions)	14,514	Infantry (26 battalions)	23,684
	20,324		30,176
<i>Native.</i>			51,104
Cavalry (16 regiments)	9,974	SECUNDERABAD DIVISION.	
Artillery (9 batteries, with ammunition columns and Native drivers of British batteries)	4,548	<i>British.</i>	
Sappers and Miners (5 companies)	826	Cavalry (2 regiments)	1,304
Infantry (44 battalions)	40,583	Artillery (11 batteries and companies with ammunition columns)	2,004
	55,931	Engineers	33
	76,255	Infantry (6 battalions)	5,172
WESTERN COMMAND.			8,513
<i>British.</i>		<i>Native.</i>	
Cavalry (1 regiment)	630	Cavalry (3 regiments)	1,907
Artillery (34 batteries and companies, with ammunition columns)	5,634	Artillery (with ammunition columns and Native drivers of British batteries)	171
Engineers	96	Sappers and Miners (7 companies)	1,178
Infantry (14 battalions)	14,344	Infantry (13 battalions)	9,526
	20,704		12,782
<i>Native.</i>			21,295
Cavalry (12½ regiments)	7,837	BURMA DIVISION.	
Artillery (with ammunition columns and Native drivers of British batteries)	1,268	<i>British.</i>	
Sappers and Miners (10 companies)	1,622	Artillery (2 companies)	341
Infantry (44 battalions)	35,672	Infantry (4 battalions)	4,235
	46,394		4,576
	67,098	<i>Native.</i>	
EASTERN COMMAND.		Artillery (2 batteries)	657
<i>British.</i>		Sappers and Miners (2 companies)	220
Cavalry (3 regiments)	2,029	Infantry (7 battalions)	5,895
Artillery (21 batteries and companies, with ammunition columns)	3,561		6,772
Engineers	48		11,348
Infantry (15 battalions)	15,290		
	20,928		

AR

	Number of Officers and Men.		Number of Officers and Men.
CORPS NOT UNDER THE ORDERS OF THE COMMANDER-IN-CHIEF IN INDIA.		GRAND TOTAL—cont.	
<i>Native.</i>		<i>Native.</i>	
Bodyguards (Governor-General's and Governors')	271	Cavalry (39½ regiments) - - -	25,059
Resident's escort, Nepal - - -	89	Artillery (11 batteries, and Native details of ammunition columns, and Native drivers of British batteries)-	6,939
	360	Suppers and Miners (30 companies)-	4,968
		Infantry (134 battalions) - - -	115,449
GRAND TOTAL.			152,415
<i>British.</i>			227,460
Cavalry (9 regiments) - - -	5,888	Officers on the Staff - - -	974
Artillery (92 batteries and companies, and British details of ammunition columns) - - - - -	15,422		228,434
Engineers - - - - -	185		
Infantry (52 battalions) - - -	53,555		
	75,045		

In January 1907 the number of battalions of Native Infantry which are regularly employed in the Colonies and are not reckoned as part of the Indian Establishment, was reduced from five to four by the return of a battalion from Mauritius. Two battalions from the Indian Establishment, however, were still absent on service in China throughout the year.

The total of the Native Army Reserve in India on 1st April 1907 was 32,944.

The net expenditure on the Army (exclusive of Special Defence Works) in 1906-07 was as follows:—

	£
Effective charges - - - - -	15,462,027
Non-effective charges - - - - -	2,978,249
Total - - - - -	<u>18,440,276</u>

The corresponding figures for 1905-06 were:—

	£
Effective charges - - - - -	15,137,287
Non-effective charges - - - - -	2,940,147
Total - - - - -	<u>18,077,434</u>

The number of Volunteers in the whole of India on 1st April 1907 was as under:—

	Enrolled Strength.	Efficient.
Northern Command - - - - -	2,322	2,195
Western Command - - - - -	7,072	6,344
Eastern Command - - - - -	13,623	12,734
Secunderabad Division - - - - -	7,792	7,601
Burma Division - - - - -	2,797	2,682
	<u>33,606</u>	<u>31,556</u>

ARMY.

On the 1st April 1906 the number of enrolled Volunteers was 32,156, of whom 31,556 were efficient. The number of Volunteers enrolled in the Reserve at the end of 1906-07 was 1,747.

The following changes in organisation, &c., came into effect during 1906-07 :—

With a view to rendering service in the native ranks more attractive, the kit-money on enlistment was raised and an annual boot allowance was introduced; it was decided that free grass was to be given to silladar cavalry when on the march or at manœuvres; and free passages (within certain limits) were sanctioned for men called home on urgent private affairs.

The number of British officers of a native regiment permitted to be absent on combined leave out of India at the same time was raised from four to five. A new rate of pension (£432 a year for 26 years' service) was instituted for officers of the Indian Army.

The military branch of the Indian Medical Service was entirely delocalised; and for the allocation of officers to areas of service on appointment to the civil branch, a system was instituted analogous to that in force in the Indian Civil Service. There was also a reorganisation of the headquarters office of the Director-General of Military Works.

Steady progress was made in carrying out the schemes of the Commander-in-Chief for the reorganisation and redistribution of the Army in India.

MILITARY WORKS.

MILITARY
WORKS.

The expenditure on military works in 1906-07 amounted to £1,076,516. There was also an expenditure of £133,358 on Special Defence Works.

MARINE.

MARINE.

The net expenditure on marine services amounted to £482,324 in 1906-07, as against £392,733 in 1905-06. If 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 1907 the Royal Indian Marine consisted of eleven sea-going vessels, six inland and harbour vessels, a submarine mining flotilla, and a number of small steamers, launches, &c. There was an establishment of 102 executive officers, 72 engineer officers, and 66 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 1,890.

APPENDIX A.

TABLE showing the NET REVENUE and EXPENDITURE in the several PROVINCES of INDIA and in ENGLAND.

	Bengal.		United Provinces.		Punjab.		Burma.		Central Provinces, including Berar.		Eastern Bengal and Assam.	
	1905-06.	1906-07.	1905-06.	1906-07.	1905-06.	1906-07.	1905-06.	1906-07.	1905-06.	1906-07.	1905-06.	1906-07.
REVENUE.												
Land revenue	2,106,857	1,915,452	3,004,638	4,089,274	1,471,201	1,651,744	2,314,409	2,561,769	1,131,154	1,134,361	997,773	1,381,977
Forest	74,491	70,961	160,941	168,594	118,705	107,007	687,855	652,345	162,994	169,417	73,688	87,890
Tributes	-517	-853	-1,072	-1,072	16,355	14,434	29,561	29,751	-152,500	-148,056	1,671	923
Opium	2,869,259	3,038,867	38,268	40,374	4,900	5,554	40,554	38,478	20,319	31,336	35,787	42,977
Salt	1,076,486	1,062,170	-	-	-	-	114,975	114,524	-	-	60,110	180,092
Stamps	1,213,811	970,783	589,937	607,703	237,098	265,818	244,891	260,346	168,957	162,449	312,429	601,744
Excise	1,121,044	1,071,378	663,363	611,346	237,314	265,475	552,093	509,768	477,937	533,681	307,733	424,422
Provincial rates	602,078	473,335	634,597	458,070	285,910	179,748	121,237	125,693	116,347	82,422	168,360	259,849
Customs	1,346,565	1,251,265	7,761	8,145	-1,170	-907	850,782	812,406	11,301	10,824	1,848	4,426
Assessed taxes	337,778	320,846	139,786	142,969	85,326	91,890	104,108	105,187	37,420	39,791	39,074	68,784
Registration	96,474	81,539	33,911	33,204	17,245	18,158	13,493	14,194	13,397	13,996	25,916	55,275
Post office	-18,001	-	-12,035	-	-300	-	-21,501	-	-5,207	-	-5,208	-
Telegraph	-	-	-	-	-	-	-	-	-	-	-	-
Railways	-1	-	-0,631	-5,734	-	-	-1,300	10	-	-	839	-778
Irrigation	-180,073	-109,340	114,460	365,372	701,507	928,423	-74,216	-69,397	-24,221	-22,498	275	-3,196
Other heads	-	-	-	-	-	-	-	-	-	-	-	-
Total	10,734,562	10,091,797	6,266,744	6,515,515	3,193,991	3,527,844	5,206,862	5,165,174	1,939,098	2,017,125	2,009,603	2,954,385
EXPENDITURE.												
Interest	-65,270	-61,237	43,749	43,819	-6,570	-7,392	-1,505	-1,150	-1,848	-1,739	-752	-231
Collection of revenue	665,876	588,787	695,932	688,489	412,118	418,327	787,563	789,761	346,521	343,103	213,742	363,495
General administration	171,323	155,358	135,273	138,000	100,405	96,205	105,101	103,781	62,216	65,504	54,231	87,050
Law and justice	634,280	552,822	424,710	449,112	278,088	290,064	258,273	282,413	121,587	143,883	141,816	296,721
Police	419,656	430,478	506,070	649,080	241,335	268,198	658,487	690,286	154,846	174,247	135,424	233,431
Ports and Pilotage	-15,443	-24,350	-	-	-	-	27,177	33,752	-	-	5,611	10,057
Education	280,255	301,788	208,286	243,073	152,454	158,914	108,492	122,257	94,619	102,651	85,237	134,394
Ecclesiastical	14,799	14,106	16,656	17,576	14,300	16,043	8,484	8,792	4,971	5,169	1,246	1,336
Medical	148,774	152,650	97,939	105,550	98,331	105,891	93,072	133,192	46,344	48,223	45,797	70,060
Political	6,882	8,088	8,020	11,893	44,056	42,765	27,828	30,045	2,871	2,717	5,376	5,308
Scientific and minor	51,095	51,729	29,438	38,369	24,984	35,084	20,440	21,187	18,553	17,047	4,983	13,483
Miscellaneous civil charges	265,845	263,767	231,163	250,198	129,724	127,487	77,141	76,409	48,599	42,367	17,848	46,240
Civil works	336,743	349,498	582,428	584,565	427,523	411,148	347,595	790,381	320,087	367,080	354,104	463,270
Army	-	-	-	-	-	-	-	-	-	-	-	-
Marine	-	-	-	-	-	-	-	-	-	-	-	-
Military works	4,924	4,111	5,887	8,832	9,432	25,109	64,475	87,080	650	381	3,708	4,260
Other heads	10,125	-61,038	1,530	367,102	-159,910	-13,218	-169,581	141,300	292,578	196,365	240,234	-77,543
Total	3,399,407	3,181,549	3,071,071	3,580,208	1,774,976	1,969,625	2,913,021	3,310,326	1,512,479	1,506,992	1,308,605	1,711,771

PROGRESS AND CONDITION OF INDIA, 1906-07.

TABLE showing the NET REVENUE and EXPENDITURE in the several PROVINCES of INDIA and in ENGLAND—continued.

	Madras.		Bombay.		North-West Frontier Province.		India, General.		England.	
	1905-06.	1906-07.	1905-06.	1906-07.	1905-06.	1906-07.	1905-06.	1906-07.	1905-06.	1906-07.
REVENUE.										
Land revenue	£ 3,479,152	£ 3,609,585	£ 2,194,994	£ 2,618,233	£ 123,664	£ 143,360	£ 86,210	£ 98,883	—	£ 3,810
Forest	196,732	218,547	231,621	227,440	8,569	12,178	56,270	58,939	1,260	—
Tributes	298,649	299,214	101,912	91,510	—	—	103,727	116,986	—	—
Opium	—	—	565,565	548,068	583	617	—	—	—	—
Salt	1,016,534	919,217	1,060,746	1,102,273	—	—	781,098	766,895	—	—
Stamps	617,454	653,273	422,082	410,921	26,983	27,728	23,184	24,941	—	—
Excise	1,273,394	1,366,780	903,457	947,198	14,050	14,985	81,088	80,766	—	—
Provincial rates	637,161	463,292	208,894	213,218	21,631	14,775	5,971	4,110	—	—
Customs	300,507	350,267	1,739,820	1,795,183	—	—	1,065	914	—	—
Assessed taxes	174,652	164,572	256,801	312,043	7,750	8,308	131,952	135,939	—	—
Registration	111,085	115,995	44,605	43,438	1,763	1,866	1,246	1,227	—	—
Post office	—	—	—	—	—	—	262,997	210,899	—	—
Telegraph	—	—	—	—	—	—	143,798	134,535	—	—
Railways	8,140	5,666	—	—	—	—	8,756,803	10,283,710	—	—
Irrigation	154,804	209,894	—	—	—	—	—	—	—	—
Other heads	—	—	103,707	130,014	—	—	103,786	339,897	—	—
Total	£ 8,268,254	£ 8,396,501	£ 7,756,601	£ 8,400,487	£ 213,206	£ 248,304	£ 10,046,828	£ 11,909,957	£ -7,180,533	£ 8,482,410
EXPENDITURE.										
Interest	£ -29,974	£ -29,973	£ -70,131	£ -60,845	£ -590	£ -603	£ -2,117,335	£ -374,522	£ 2,745,493	£ 1,487,071
Collection of revenue	1,219,038	1,245,463	906,268	916,002	59,456	56,189	116,885	118,778	48,693	112,085
General administration	119,556	114,098	143,850	140,128	19,285	19,378	392,000	410,742	290,842	280,008
Law and justice	329,379	343,763	343,775	350,391	32,345	34,513	107,764	114,055	152	556
Police	311,370	359,278	399,389	435,810	70,450	75,010	50,740	60,590	1,160	1,700
Ports and Pilotage	976	1,076	—	—	—	—	—	—	—	67
Education	215,003	234,744	250,331	273,339	6,862	8,462	18,858	19,805	5,646	6,157
Eccelesiastical	22,601	31,790	23,678	25,428	2,259	2,515	12,125	12,282	282	378
Medical	229,326	216,182	150,718	152,103	8,469	8,214	32,219	37,462	9,700	11,614
Political	6,767	6,699	55,965	59,850	173,985	171,505	607,255	722,377	5,534	3,786
Scientific and minor	32,341	35,686	50,999	39,249	4,919	2,733	275,428	319,987	44,769	64,393
Miscellaneous civil charges	245,899	257,888	301,602	254,624	10,003	9,619	—	—	2,249,089	2,335,855
Civil works	650,531	647,511	515,974	565,611	138,794	100,602	145,527	199,750	55,683	45,282
Army	—	—	—	—	—	—	13,513,307	13,393,530	4,639,379	3,046,746
Marine	—	—	—	—	—	—	—	—	—	—
Military works	5,965	4,603	6,063	5,892	—	—	137,879	125,784	299,315	368,550
Other heads	116,778	229,830	63,977	305,696	1,861	-1,487	896,342	976,373	119,253	103,193
Total	£ 3,476,556	£ 3,688,640	£ 3,139,930	£ 3,430,635	£ 527,500	£ 486,590	£ 14,773,817	£ 16,436,950	£ 10,466,700	£ 9,851,533

APPENDIX B.

STATEMENT showing the Number of Municipalities in British India, their Receipts and their Expenditure, for the Year 1906-07.

	Bengal.		United Provinces.	Punjab.	North-West Frontier Province.	Burma.	Central Provinces and Berar.	Eastern Bengal and Assam.	Madras.		Bombay.		Minor Provinces.	Total.
	Presidency Corporation.	District Municipalities.							Presidency Corporation.	District Municipalities.	Presidency Corporation.	District Municipalities.		
Number of Municipalities	1	128	80	188	10	48	58	49	1	60	1	162	9	749
Population within municipal limits	847,796	2,354,856	3,110,254	2,080,512	164,571	908,786	882,698	624,796	509,946	1,915,208	977,822	2,367,418	131,586	16,876,689
Receipts:	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Octroi	—	1,952	227,762	216,555	24,088	—	52,785	—	—	—	117,470	160,247	23,017	623,876
Other Taxation	408,855	214,049	90,077	28,228	1,078	205,019	87,556	57,809	89,706	151,283	436,109	148,527	2,725	1,869,515
Revenue from municipal property and powers apart from Taxation.	56,601	25,788	77,559	57,159	9,191	155,033	23,258	7,068	28,798	48,540	48,487	70,030	6,454	607,900
Grants and contributions	2,564	31,165	32,468	29,056	399	37,585	10,878	9,914	23,600	18,894	—	36,948	588	284,053
Extraordinary and Debt	92,792	67,723	92,992	30,990	120	169,376	83,031	16,425	46,652	41,897	1,514,345	65,591	1,640	2,173,417
Miscellaneous	24,211	10,134	14,328	29,546	315	15,530	12,215	4,072	8,880	16,520	22,220	7,071	4,308	170,250
Total (1906-07)	584,022	350,812	535,181	391,435	35,187	582,542	169,723	94,787	191,642	277,185	2,138,631	489,249	38,732	5,879,077
Total (1905-06)	572,648	331,142	478,223	360,274	36,285	534,605	143,595	90,049	224,718	275,216	2,646,102	548,100	41,181	6,282,132
Expenditure:														
Cost of Collection and Administration	55,778	26,503	54,863	56,208	4,110	36,722	15,770	6,560	11,401	19,313	46,064	53,928	4,222	391,044
Public Health and Convenience	339,776	213,529	310,178	188,372	19,079	326,088	83,893	63,254	79,705	153,172	312,615	215,435	17,713	2,358,409
Public Safety	48,094	20,821	19,610	48,940	5,535	21,789	3,871	8,916	8,017	9,895	57,356	20,584	3,541	264,368
Public Instruction	2,057	9,481	20,519	29,529	4,005	29,876	15,317	3,300	3,639	26,759	11,054	64,046	2,418	222,547
Interest and Miscellaneous	128,109	24,282	50,258	31,179	2,212	49,548	7,254	8,799	25,318	19,279	177,550	29,641	6,104	568,534
Extraordinary and Debt	70,889	48,205	83,947	26,718	181	97,109	26,812	11,294	38,766	48,864	1,496,432	79,331	2,602	1,981,148
Total (1906-07)	640,602	342,771	498,374	390,946	35,722	561,188	152,927	92,121	168,845	277,282	2,131,071	463,561	39,596	5,776,949
Total (1905-06)	602,423	318,891	474,397	366,340	36,087	538,810	139,378	90,489	213,088	260,446	2,616,682	536,506	42,458	6,267,080

PROGRESS AND CONDITION OF INDIA, 1906-07.

EAST INDIA (PROGRESS AND CONDITION).

STATEMENT

EXHIBITING THE

MORAL AND MATERIAL PROGRESS AND CONDITION

OF

INDIA

DURING THE YEAR 1906-07.

FORTY-THIRD NUMBER.

(PRESENTED PURSUANT TO ACT 21 & 22 VICT. c. 106, s. 93.)

India Office,
18 May 1908. }

ARTHUR GODLEY,
Under Secretary of State for India.

Ordered, by The House of Commons, to be Printed,
18 May 1908.

LONDON:

PRINTED FOR HIS MAJESTY'S STATIONERY OFFICE,
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EAST INDIA (PROGRESS AND CONDITION).

STATEMENT

EXHIBITING THE

MORAL AND MATERIAL PROGRESS AND CONDITION

OF

INDIA

DURING THE YEAR 1907-08.

FORTY-FOURTH NUMBER.

(PRESENTED PURSUANT TO ACT 21 & 22 VICT. c. 105, s. 58.)

India Office,
20 May 1909. }

ARTHUR GODLEY,
Under Secretary of State for India.

Ordered, by The House of Commons, to be Printed,
20 May 1909.

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EAST INDIA (PROGRESS AND CONDITION).

STATEMENT

EXHIBITING THE

MORAL AND MATERIAL PROGRESS AND CONDITION

OF

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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.

*Ordered, by The House of Commons, to be Printed,
20 May 1909.*

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NOTE.

THE Statement exhibiting the Moral and Material Progress and Condition of India is presented to Parliament in each year in accordance with the requirements of the 53rd section of the Act for the better Government of India (21 and 22 Vict., cap. 106), which provides as follows:—"The Secretary of State in Council shall, within the first fourteen days during which Parliament may be sitting next after the first day of May in every year, lay before both Houses of Parliament an account for the Financial Year preceding that last completed of the Annual Produce of the Revenues of India . . . and such account shall be accompanied by a Statement prepared from detailed reports from each Presidency and District in India, in such form as shall best exhibit the Moral and Material Progress and Condition of India in each such Presidency."

The Statement is prepared in the India Office from a large number of annual reports received from India. Many of these reports are compiled from information furnished by District and Political Officers, and are submitted to the Governments of the respective Provinces and to the Government of India for consideration and review before transmission to England; and some of them, which deal with the operations of important departments and require the careful consideration of the authorities in India, are not received at the India Office till about a year after the date of the period to which they refer.

It is, therefore, seldom possible to present the Statement to Parliament earlier than the date mentioned in the Statute, *i.e.*, about thirteen and a half months after the close of the official year.

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.

AD:
TRJ

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 1906	
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	
Members of the Council of India -	Sir J. L. Mackay, G.C.M.G., K.C.I.E.	27 April 1897	Re-appointed for five years, 27 April 1907.
	Sir John Edge, K.C. - - -	30 March 1898	Retired 29 March 1908.
	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	
	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, Bart., G.C.I.E.</i>	16 October 1907	
<i>Sir J. D. La Touche, K.C.S.I. -</i>	1 November 1907		
<i>Saïyid Husain Bilgrami, C.S.I. -</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	
Members of Council - - - -	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. Erie Richards - - - - -	18 April 1904	
	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	
W. L. Harvey, C.I.E. - - - - -	5 March 1908	Temporary.	
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.
	<i>Sir Thomas Gordon Walker, K.C.I.E., C.S.I.</i>	22 May 1907 23 January 1908	Officiating. Temporary.
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. Boyley, C.S.I. - - - - -	1 March 1906	
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	

STATEMENT EXHIBITING THE MORAL AND MATERIAL

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. - - -	9 November 1903	
	G. S. Forbes, C.S.I. - - -	12 June 1906	
Governor of Bombay - - -	Lord Lamington, G.C.M.G., G.C.I.E.	12 December 1903	Resigned 27 July 1907. Temporary.
	J. W. P. Muir-Mackenzie, C.S.I.	27 July 1907	
	Sir George Sydenham Clarke, G.C.M.G., G.C.I.E.	18 October 1907	
Members of Council - - -	E. McG. H. Fulton, C.S.I. - - -	21 April 1902	Retired 21 April 1907.
	J. W. P. Muir Mackenzie, C.S.I. -	6 August 1905	
	Sir S. W. Edgerley, K.O.V.O., C.I.E.	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.

India.

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

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. Madras.

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. Bombay.

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. Bengal.

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. Eastern Bengal and Assam.

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

- LEGISLA-
TION. 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.	HOME CHARGES.
GROSS REVENUE AND EXPENDITURE.	CAPITAL OUTLAY ON PUBLIC WORKS.
NET REVENUE AND EXPENDITURE.	DEBT.
CASH BALANCES.	CURRENCY AND EXCHANGE.
PROVINCIAL FINANCE.	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 : 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.	Gross Revenue and Expenditure.
	£	£	
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 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.

Net
Revenue
and Ex-
penditure.

	1906-7.		1907-8.		Increase (+) or Decrease (-).	
	£	£	£	£	£	£
Land Revenue, &c. :						
Land Revenue - - - -	19,066,833		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 - - - - -	4,093,173		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	
		20,458,813		20,778,131		+ 319,288
Commercial Undertakings :						
Post Office - - - - -	148,213		51,279		- 96,934	
Telegraph - - - - -	173,199		77,050		- 96,149	
Railways - - - - -	2,307,673		1,563,002		- 744,671	
Irrigation - - - - -	796,156		616,475		- 179,681	
		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 - - - £		48,955,206		47,006,372		-1,948,834

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 - - - - -	18,140,276		17,625,054		- 515,222	
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		11,909,649		+ 364,120	
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		20,502,185		+ 1,128,314
Famine Relief and Insurance - -		1,009,748		1,296,063		+ 286,320
Provincial Adjustments :						
1. Charge against Revenue of the year arising from increase of Provincial Balances.		312,242		-		-1,333,428
2. Diminution of the Charge against Revenue of the year, owing to Expenditure being met from Provincial Balances.		-		-1,021,180		
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

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.

FINANCE.

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	2,985,337	—	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	—	4,853,188	—
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	177,389	198,273
India Office (excluding pensions)	189,312	204,154
Army and marine effective charges	769,149	850,343
Stores of all kinds charged against revenue	2,484,028	1,431,134
Furlough allowances	744,014	872,087
Non-effective charges (pensions and gratuities)	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:—

FINANCE.
Capital outlay on public works.

	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:—

Debt.

	£
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
	<hr/>
Total of public works debt - - - - -	207,575,011
Balance being ordinary debt - - - - -	38,459,060
	<hr/>
Total debt on 31st March 1908, as above -	<u>£246,034,071</u>

CURRENCY AND EXCHANGE.

Currency
and ex-
change.

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 2s. the rupee (ten rupees to the £) to about 1s. 3d. 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.*, 1s. 4d. 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 1s. 4d.

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 re-
serve, *see below*.)

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 :—

FINANCE.

	Nominal Amount.	Cost Price.
<i>Sterling Securities—</i>	£	£
2½ per cent. Consolidated Stock - - - - -	7,395,379	6,716,156
2½ 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
2½ 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 1s. 4·084d. per rupee.
 1907-8 £15,307,061 " " 1s. 4·029d. " "

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 1s. 3¾d. 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.

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 - - - -	1,063,333	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.

LAND LEGISLATION.

REVENUE SURVEYS, SETTLEMENTS, &C.

REVENUE ASSESSMENTS, &C.

COLLECTION OF THE REVENUE.

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 1900-3 (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.

LAND REVENUE.

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	60,575	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, Manpur)	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.

Land Legislation.
Bengal.

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.

United Provinces.

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.

Punjab.

LAND REVENUE.	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.
North-West Frontier Province.	
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 <i>zamindari</i> 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 <i>savkar</i> 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.

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.

LAND
REVENUE.
United
Provinces.

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 tenus of settlement, which are 15 years in Lower 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

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.

LAND
REVENUE.

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
	<u>£20,838,634</u>	<u>£19,796,373</u>
Deduct portion of land revenue due to irrigation - - - -	1,006,981	1,040,533
Gross land revenue - - - -	<u>£19,831,653</u>	<u>£18,755,840</u>

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.

LAND REVENUE. 139,044 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.

	1906-7.	1907-8.	
	£	£	
Land Revenue	- 1,629,473	1,665,511	<p>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</p>
Capitation tax	- 313,368	347,102	
Household tax	- 309,199	267,538	
Fisheries	- 179,129	173,185	
Other sources	- 173,442	172,596	
TOTAL	- 2,634,611	2,625,932	

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 nearly 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 land 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 assesseees 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 3,293 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

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 OPTIUM

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

(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 3½ rupees (in Bengal) per maund of 82½ lbs. In 1882 a general duty of Rs. 2 per maund was introduced (except in Burma) and raised in 1888 to Rs. 2½. In 1903 the rate of Rs. 2 was reverted to, and in March 1905 the tax was further reduced to Re. 1½ 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 remained since 1888 at one rupee per maund on 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 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.

General.

Year.	Issues of Salt in 100,000's of Maunds.	Duty per Maund.	Gross yield of Duty.
Average 1898-9 to 1903-3	360	Rs. 2½	000 £ 6,002
1903-4	376	2	5,250
1904-5	394	2	5,355
1905-6	407	1½	4,376
1906-7	431	1½	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.	Per maund.	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

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

SALT.

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.

Madras.

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.

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.

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

Sind.

	Total Issues.	For Local Consumption.
	Maunds.	Maunds.
Baragra salt	2,742,640	549,646
Sea salt	9,290,339	2,364,481
Imported salt	87,811	291,975
Total	12,420,790	3,206,101

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.
General.

Excise.

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

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

Excise.

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	£ 325,143	£ 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	218,212	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 Preparations.	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 -	85,340	—	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*.

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

Excise
Bengal.

Gross Receipts from	1906-7.	1907-8.
	£	£
Country spirits	579,425	626,739
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	1,608
Total	£1,071,985	£1,139,539

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

United
Provinces.

Gross Receipts from	1906-7.	1907-8.
	£	£
Country spirits and fermented liquors	395,213	345,755
Foreign liquors and rum	29,833	29,259
Opium	56,994	56,537
Other drugs	131,911	123,736
Miscellaneous	643	359
Total	£614,604	£595,636

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

the head of licence fees. The consumption of the expensive drug *charas* fell with the hard times, and the cheaper *bharg* 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, 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

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

Gross Receipts from	1906-7.	1907-8.
	£	£
Imported liquors, &c.	66,556	78,420
Country spirit	27,973	30,879
Toddy and rice-beer, &c.	144,085	135,255
Opium	307,587	314,967
Fines, &c.	3,064	2,675
Total	£549,265	£562,196

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.

Excise.

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.

Central Provinces and Berar.

Gross Receipts from	1906-7.	1907-8.
	£	£
Country spirits and toddy	428,333	365,632
Opium	123,288	118,956
Hemp drugs	39,901	28,512
Miscellaneous, including foreign liquors	4,533	4,792
Total	£585,873	£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 its 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.

Eastern Bengal and Assam.

Gross Receipts from	1906-7.	1907-8.
	£	£
Country spirits	125,185	136,796
Imported liquors and rum	8,008	8,035
Opium	175,744	189,121
Hemp drugs	111,081	114,355
Miscellaneous, including toddy, &c.	4,810	4,919
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 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	₹ 465,411	₹ 490,310	₹ 182,949	₹ 19,238	₹ 164,880	₹ 112,025	₹ 429,356	₹ 223,964	₹ 2,512,783
Sale of commercial and other stamps	₹ 8,599	₹ 207,621	₹ 175,693	₹ 153,990	₹ 93,073	₹ 11,673	₹ 99,342	₹ 70,918	₹ 260,564	₹ 192,716	₹ 1,374,192
Fines and miscellaneous - -	₹ 4,877	₹ 22,294	₹ 1,488	₹ 3,448	₹ 7,264	₹ 174	₹ 4,751	₹ 893	₹ 9,526	₹ 12,993	₹ 67,206
Total, 1907-8 - - -	₹ 29,795	₹ 1,032,216	₹ 642,592	₹ 647,748	₹ 283,286	₹ 31,125	₹ 268,973	₹ 183,836	₹ 699,446	₹ 429,673	₹ 4,259,183
" 1906-7 - - -	₹ 23,331	₹ 960,447	₹ 604,681	₹ 614,754	₹ 269,392	₹ 28,111	₹ 265,111	₹ 164,032	₹ 680,192	₹ 417,467	₹ 4,028,908

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, raw 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.

General.

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 - - - - -						
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 (£66½) 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 - - - - -	350,628
Eastern Bengal and Assam - - -	76,488
United Provinces - - - - -	141,761
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 immovable 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 immovable property not comprised in the above-mentioned classes, deeds affecting moveable property, wills, and other documents. As regards transfers of immovable 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 immovable property had to be registered, except that transfers of tangible immovable 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 immovable 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 immovable 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 £104,000 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 immovable 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. Bengal.

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. Eastern Bengal and Assam.

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. United Provinces.

In the Punjab, where the new Act is not in force, the number of registrations of immovable 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. Punjab.

REGISTRATION. North West Frontier Province.	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.
Burma.	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.
OPIUM. General.	OPIUM.
	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

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	£ 4,893,505	£ 4,401,988
Duty on Malwa opium - - - -	647,093	661,033	871,383	749,125	569,400	553,788	620,480
Cost of Excise opium, and miscellaneous -	145,392	174,805	186,291	192,833	195,806	211,235	222,518
Total - - - -	3,453,181	4,498,438	5,736,045	6,021,499	5,468,780	5,660,528	5,244,986
Opium expenditure (chiefly in Bengal) -	1,592,744	1,648,483	2,225,744	1,967,035	1,892,441	1,913,292	1,669,441
Net Opium Revenue - - - - £	1,860,437	2,849,955	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	1.162
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

exclusing 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. Bombay.

	Chests.
1903-4 - -	25,340
1904-5 - -	18,986
1905-6 - -	14,088
1906-7 - -	13,321
1907-8 - -	16,858

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.

AGRICUL-
TURE.

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 waterlogged 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 *khārif* crop area was slightly above normal, a decline in rice and juar 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 *khārif* 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

AGRICUL-
TURE.

8,148,500 acres, or 33 per cent. of the total sowings, the proportion on unirrigated areas alone being 48 per cent. The *khariif* 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 10¾ 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 2¼ 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 Chuniyan 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 jwar 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.

AGRICULTURE.

was above normal, and exports were larger. Increased areas were devoted to cotton and ground-nuts. The new irrigation systems of Mandalay and Shwebo 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 27½ 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 2½ million acres in Sind irrigated by Government canals, while the area irrigated (chiefly by wells) in the Presidency proper rose to 825,000 acres.

AGRICULTURAL PRODUCE.

AGRICULTURAL PRODUCE.

(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 Ragl).	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	25,548	19,997
United Provinces -	7,727	7,105	5,209	5,620	13,255	36,917	863	1,875	1,463	141	46,547	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	82	943	68	529	10,879	961	44	178	—	12,902	12,575
Central Provinces and Berar.	4,288	3,714	4,551	1,071	4,978	18,602	2,453	22	4,684	88	26,390	24,713
Madras - - -	8,043	14	9,531	130	6,679	24,506	1,991	151	1,834	78	31,178	27,550
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.

AGRICULTURAL PRODUCE.
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

Wheat.

Province.	Average of five years to 1905-6.		1906-7.		1907-8.	
	Area.	Yield.	Area.	Yield.	Area.	Yield.
	Acres.	Tons.	Acres.	Tons.	Acres.	Tons.
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	2,386	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

in the north-western and central parts of India. The bulk of it is sown in autumn and reaped in spring. The area under wheat has greatly expanded with the extension of irrigation. Nearly 57 per cent. of the total area under wheat in India is in the Punjab and the United Provinces, and 52 per cent. of the wheat area in each of these provinces is irrigated. The marginal table shows the area and

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).

Year.	Punjab and N.W. Frontier Province.	United Provinces.	Central Provinces and Berar.	Bombay.
1903	2.45	2.48	3.32	3.45
1904	2.26	2.36	2.87	3.11
1905	2.67	3.11	3.00	3.43
1906	2.73	3.35	3.61	4.29
1907	2.95	3.76	3.67	4.38

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

AGRICULTURAL
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	18,503
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).

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.

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

Sugar. The area under sugar in India was reported to be 2,622,400 acres in 1907-8, and the yield was estimated at 2,054,700 cwt. Although the acreage was greater the estimated yield was smaller than in 1906-7 owing to the unfavourable season. Of the total, 1,481,700 acres were in the United Provinces, where the area under cane has considerably increased. Bengal contained 435,500 and the Punjab 384,700 acres. Too much reliance, however, must not be placed on these figures, as in many of the large sugar-growing areas no accurate records are available, and sugar cane is often grown in small and irregular clumps whose extent is not easily estimated. To the

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	49,931	27,650	10,706
Total	413,566	555,202	558,988

sugar-cane cultivated in British India must be added the extensive crops grown in Native States. In estimating the total output account must also be taken of the production of palm sugar, which for Bengal and Eastern Bengal has been estimated at 163,000 tons. By no means all of the sugar produced is converted into "refined" sugar; for a considerable quantity both of cane in the raw state and of the unrefined sugar or *gur* is consumed as food. For this sugar high prices can be secured in spite of the increasing competition

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.

AGRICULTURAL PRODUCE.

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.
Rape and mustard	Acres. 5,699	Tons. 1,000	Acres. 6,393	Tons. 1,053	Acres. 5,145	Tons. 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	3,739	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 - £	17,073,000	8,681,000	11,210,000

The rape and mustard-seed crop is grown chiefly in the United Provinces, the Punjab, Eastern Bengal and Assam, and Bengal; linseed in the United Provinces, the Central Provinces, Bengal, and Hyderabad; sesamum in the United Provinces, the Central Provinces, Bombay, Madras, and Hyderabad; while the groundnut area lies chiefly in Madras and Bombay. For oil seeds generally

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	1,283	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	4,819	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

The estimated area and yield of cotton in India are returned as shown in the margin for the last three years. The figures are in thousands (omitting 000). The area cultivated was about 6 per cent. less in 1907-8 than in 1906-7, on account of the deficient and ill-distributed rainfall, while the yield exhibited a still larger decline. Doubt, however, is thrown on the estimate of total yield by comparing it with the total of net exports

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.

Year	Cwts.	£ valued at
1903-4	7,931	16,251
1904-5	5,657	11,623
1905-6	7,399	14,228
1906-7	7,401	14,652
1907-8	8,562	17,135

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AGRICULTURAL
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	9,206,403
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

Year.	Raw Jute.		Jute Manufactures.	Total Exports.
	Quantity.	Value.	Value.	Value.
1903-4	Cwts. 13,721	£ 7,812	£ 6,313	£ 14,125
1904-5	12,875	7,977	6,628	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

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.

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-OPERATIVE
CREDIT
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

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

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.	27½		
Burma	36 to 60	15	8

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

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

CO-OPERATIVE CREDIT SOCIETIES.

were altogether 35 rural and 6 urban societies only. It seems that the movement has almost everywhere passed out of the experimental stage, that a large number of the societies are firmly established on a self-supporting basis, and that they are winning more and more the appreciation and confidence of the people. Loans are well and punctually repaid. In Bengal 96 per cent. of the loans in 1907-8 were employed for purposes directly or indirectly productive. In Eastern Bengal and Assam the loans were much larger than in 1906-7. In this province outside capital has been attracted to a considerable extent, but the aid of the educated classes has not been enlisted. The crying need of the banks in the United Provinces is more capital, though certain banks are now in a position to borrow money from joint stock banks on the security of their own reserves. In the Punjab the most unsatisfactory feature has been the winding-up, after a brief existence, of many societies that had been founded through misguided zeal. Progress was chiefly made in the Chenab Canal Colony. Success has been achieved in the Punjab in attracting the confidence and savings of the genuine agriculturist. Owing to scarcity in the Central Provinces, the formation of new societies was not actively encouraged. The most urgent needs here are the provision of capital and the cultivation of the co-operative conscience. In Burma societies have not only been established without pecuniary aid from Government, but their credit has attracted larger sums as deposits than could be accepted. The main feature of the year in this province was the substitution of societies on the Raffeissen and Luzatti principles for those of the Schultze type. In Madras the confidence of non-members in the societies was shown by their readiness to make deposits on business terms. Some of the older societies have reduced the rates of interest they offer. In Bombay the banks are steadily progressing, but very few rural banks can obtain loans in the open market.

No. of Societies.	June 1907.	June 1908.
Central	14	7
Urban	89	149
Rural	741	1,202
	<u>844</u>	<u>1,358</u>
No. of Members	90,925	149,023
<i>Capital.</i>		
	£	£
Loans from private persons	43,738	82,890
" " other societies	16,028	38,891
Share capital	37,054	62,082
Deposits by members	38,402	61,802
Loans from Government	18,983	43,454
Reserve	3,907	5,243
Total	<u>158,112</u>	<u>298,802</u>
<i>Expenditure.</i>		
	£	£
Loans repaid to private persons	10,079	26,798
Loans issued to members	158,931	245,878
Purchase of raw material and stores	21,045	26,044
Profits	7,508	12,072
Total	<u>197,563</u>	<u>310,792</u>

Proper supervision of societies' accounts is now secured by the appointment of official auditors. The experience of the year shows the need for proper instruction during the infancy of a society; the necessity for great care in selecting members; the need of obtaining sufficient capital to supply the wants of members; the necessity of considering current local rates of interest in fixing the rates at which members should borrow from the society; the need of closer supervision of small societies and improved methods of financing them; and the need of amending the Act in several respects.

The Third Conference of Registrars of Co-operative Credit Societies, held in October 1908, discussed a great variety of subjects, including the proposal to establish a large central Agricultural Bank.

CHAPTER VI.

FORESTS.

FORESTS.

(For further details see *Statistical Abstract of British India*, Tables 59 and 60.)

Systematic conservancy of the Indian forests is based on the Forest Law of 1878, which gave the Government powers of dealing with private rights in the forests of which the chief proprietary right is vested in the State. Forest administration is based upon the principle that State forests should be administered for the public benefit; they are worked, therefore, with a view to combining all reasonable facilities for their use by the public with the protection necessary for their preservation as sources of fuel and timber and as retainers of moisture in the soil. The forests are classified as "reserved," "protected," or "unclassed." In the reserved areas the control of the Forest Department is more complete than in the protected or unclassed forests. In the latter, the area of which cannot be precisely stated, are included large tracts of uncultivated land, especially in Burma, much of which will probably become agricultural land. Among the most important measures of conservancy are the prevention, so far as possible, of the fires which are liable to devastate the forests, the maintenance of a supply of seed-bearing trees, and the regular reproduction of timber of the more valuable kinds. At present the reserves cover an area of about 92,000 square miles; and there is scope for further reservation in Madras and Burma. Outside the reserves there are about 150,000 square miles of State forests, including 20,000 square miles of protected forests, and a small area of leased forests. Some part of this area will eventually be brought within the "reserve" area, and all of it is, with more or less completeness, managed and worked for the benefit of the people, of their cattle, and of the public revenue. The forests dealt with in this chapter are, almost exclusively, State forests. The limited areas of private forest, except where they have been leased to the Government, are being gradually exhausted; and few private communal or village forests have been successfully brought under conservancy. In every province a very few of the most valuable timber trees are declared to be reserved trees, and can only be felled under special licence. Outside the reserves, the country folk are generally allowed to obtain from the State forests timber, bamboos, firewood, and grass for their own use without charge; inside the reserves, persons specially licensed are allowed to extract timber or other produce, on payment of fees, though all rights recognised by the forest settlements are preserved to the public. Forest revenue is raised by royalties on, or by the sale of, timber or other produce and by the issue at specified fees of permits to graze cattle, or to extract for sale timber, firewood, charcoal, bamboos, canes, and minor forest produce. The gross revenue derived from forests in 1907-8 was £1,732,610, including £525,650 and £1,095,530 received for timber and other produce removed from the forests by Government agency and by consumers (or purchasers) respectively. The charges amounted to £980,340, leaving a net revenue of £752,270. Some of the better-managed Native States, such as Kashmir, Mysore, Travancore and Baroda, have followed the example of the British Government, and have organised a systematic forest administration, from which they derive a considerable forest revenue. •

The following paragraphs treat of forest administration in each province.

In Bengal a re-organisation of the Forest Service was effected during the year. At the end of 1907-8 the areas of reserved and protected forests were respectively 4,240 and 3,392 square miles, representing over 6 per cent. of the area of the province. The survey of the Sunderbans reserved forests was completed. Working plans have been provided for 5,093 square miles. With regard to fire protection, the year was very unfavourable, owing to the dry season. Attempts were made to exclude fire from 1,888 square miles, but 59,400 acres were burnt, the fires being mostly ascribed to malice. The rubber (*ficus elastica*) plantation in the Tista division has been so far very successful; and good progress has also been made with the teak plantation in Southern Puri. The yield of timber was 5,179,000 cubic feet, a small increase on that of 1906-7, and the out-turn of fuel, 30,843,000 cubic feet, was also larger. The

- 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-afforesting 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.

Central
Provinces
and Berar.

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.

Eastern
Bengal and
Assam.

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

Madras.

- 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
PRO-
DUCTION.

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 Coal.

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	408	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

in developing domestic industries. The production has risen in 20 years from 1½ to 11¼ 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.

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 Giridh 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 653,000 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

MINERAL PRODUCTION AND MINING. 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.

Gold. 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	151,800
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.

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.

MINERAL
PRODUCTION
AND MINING.
Other
Minerals.

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.

Mining
Concessions.

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.

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.

Inspection
of Mines.

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.

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.

Mining Edu-
cation, &c.

CHAPTER VIII.

MANUFACTURES.

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 DEVELOPMENT.

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
1889-9	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) Cotton mills. 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.

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

Year.	Counts Nos. 1 to 25.	Above No. 25.	Total.
	Million Lbs.	Million Lbs.	Million Lbs.
Average :			
1896-7 to 1900-1	423.9	20.1	444.0
1901-2 to 1905-6	537.4	39.9	577.3
Year 1906-7	541.4	49.2	630.6
" 1907-8	556.6	57.2	613.8

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

Year.	Grey.	Other Kinds.	Total.
	Million Lbs.	Million Lbs.	Million Lbs.
Average :			
1896-7 to 1900-1	80.6	11.8	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

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.

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 7½ 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 £186,000, 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
Cotton mills -	217	211,166
Jute presses -	126	23,639
Jute mills -	44	166,895
Rice mills -	92	12,766
Saw mills -	62	7,731
Iron and brass works and foundries -	74	26,128
Indigo factories -	196	102,148
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	891,866
Railway workshops -	87	87,419
Arsenal, arms and ammunition factories (State) -	14	16,037

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

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.

LARGE INDUSTRIES.

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 artizans, 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.

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:—

FACTORY LEGISLATION.

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 1½ 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

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 stoppage.		Fatal.	Serious.	Minor.	Total.
Bengal	301	•	•	•	292,490	•	—	•	—	80	258	861	949
United Provinces	187	42,899	8,621	1,834	80,264	122	22	3	4	10	56	87	153
Punjab	283	33,286	3,420	1,290	37,996	132	72	14	1	14	23	212	281
North West Frontier Province	3	•	•	•	89	3	—	—	—	—	—	—	—
Burma	261	24,469	812	294	25,985	224	12	6	—	10	99	75	184
Central Provinces and Berar	244	20,228	10,974	1,783	32,985	137	159	•	13	3	67	74	134
Madras	122	38,923	3,629	2,860	48,151	•	•	•	•	7	49	282	328
Bombay	819	161,647	42,890	10,106	214,642	238	148	3	17	21	184	1,420	1,624
Eastern Bengal and Assam	108	16,285	940	882	18,547	52	—	56	—	1	1	24	26
Ajmere-Merwara†	4	8,678	205	96	8,979	2	2	—	—	—	4	26	40
Total, 1907	1,973	•	•	•	724,027	•	•	•	27	116	832	2,771	3,750
Total, 1906	1,722	346,693	102,796	41,222	690,712	1,253	284	100	28	86	728	2,720	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):--

Foreign
seaborne
trade.

Year.	Imports.	Exports.
Year 1882-3 - - - - -	000£ 33,335	000£ 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	21,880,296
" 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 Manufac- tures. - - -	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	5,634,334	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.

Principal imports and exports.

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	2,162	Rice -	12,427	12,353	13,559
Metals -	6,028	6,693	8,794	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 -	7,078	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	1,845	Opium -	6,315	6,205	5,782
Provisions -	1,690	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	1,423	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

Imports of merchandise.

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.

Exports of Indian merchandise.

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.

TRADE
Re-export

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).

Trade by
countries.

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:—

Trade of
chief ports

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.
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	Imports.	Exports.	Total.
	000£	000£	000£
1905-6	5,155	3,992	9,147
1906-7	5,151	4,275	9,426
1907-8	5,718	4,643	10,361

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.
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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 stean tonnage.
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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	398	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
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entrepôts is becoming more marked. The freights for Bombay cotton and Karachi wheat to Liverpool were abnormally low at the close of the year.

TRADE.

	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.

Working of the Merchandise Act.

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 £1,450. 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:—

Joint Stock Companies

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.

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

General.

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 - - -	26,052,089	—
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.

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

RAILWAYS.

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 :—

Financial results to the State.

	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 :—

Statistical results of working.

STATEMENT EXHIBITING THE MORAL AND MATERIAL

RAILWAYS.

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.								
State lines worked by companies -	Miles. 8,911·96	£ 128,328,267*	£ 138,580,800†	Tons. 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	5,010,867	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	184,060,200	186,180,000	44,033,000	22,984,067	11,643,267	11,440,800	6·20
3' 3½" Gauge.								
State lines worked by companies -	8,052·46	43,599,200	54,524,800	8,460,000	5,716,000	3,374,667	2,341,333	—
State lines worked by the State -	816·60	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.	1,309·68	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	302,000	57,067	32,667	24,400	—
TOTAL FOR 1908 - -	12,888·16	65,532,867	105,560,200	15,702,000	8,109,734	4,700,000	3,409,134	4·64
TOTAL FOR 1907† - -	12,635·82	71,005,733	112,336,000	17,144,000	8,121,667	4,423,467	3,608,200	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	81,933	193,300	16,000	6,067	6,067	600	—
Assisted companies' lines -	402·39	1,270,200	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.	392·16	665,533	1,632,700	143,000	68,200	32,333	25,867	—
Lines owned by Native States and worked by State railway agency.	83·60	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.	30,578·80	273,128,800	330,223,900	64,809,000	29,587,067	17,851,800	11,785,467	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	15,810,533	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:—

Mileage opened and under construction.

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 Bezwada 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 Anla 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 completed and in progress.

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 Dabein-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-Brahmakhed 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. 119¼ 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:—

	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
	Midunpur - - - -	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	—	—
	Sarnu 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	11·68	685,135
	Upper Bari Doab - - - -	354	1,580	1,374,402	142,860	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	14,894	578	4·01	17,435
	Ghaggar (Imperial) - - - -	44	24	22,883	-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. IRRIGATION

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. Burma.

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. Central Provinces and Berar.

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 Godaveri, Kistna, and Cauvery to the small tanks and channels maintained by the Revenue Department. Madras.

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. IRRIGATION.

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

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 Provinces and Berar.	Burma.	Eastern Bengal and Assam.	Bengal.	United Provinces of Agra and Oudh.	Punjab.	North-West Frontier Province.	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* - - -	£ 304,901	£ 704,901	£ 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. Bengal.

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.

**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 Jorbat 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. BUILDINGS
AND ROADS
(CIVIL).

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. Madras.

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 Shevaroyas 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. Bombay.

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. Coorg.

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. 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	8,355	154,338
Increase or decrease in 1907-8 as compared with 1906-7	+597	+2,125	-48	+732

* Including the Bombay-Aden line.

YEAR.	Letters (including Postcards).	Newspapers.	Book and Pattern Packets.	Parcels	TOTAL.
	No.	No.	No.	No.	No.
1905-6	643,126,942	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	5,484,169	826,639,323
Increase in 1907-8 over 1906-7	39,812,011	4,248,913	2,419,528	602,285	47,082,737

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

letter carried for $\frac{1}{2}$ anna was raised from $\frac{1}{4}$ 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 employes 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

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	8,586,000	5,625,000	8,557,000	17,716,000	9,159,000
Total	11,703,000	27,922,000	16,219,000	7,228,000	18,268,000	10,040,000	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 :—

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 1903-4	£ 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	390,474	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 £6,461 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	107,178	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.

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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 £18,000 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. Survey of India.

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 3,300 square miles, were completed. Trigono-
metrical
survey.

SCIENTIFIC DEPARTMENTS.	The total area of detail topographical and forest surveys during the year was 25,740 square miles, of which 17,361 were on the 2-inch scale. Of the total area 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.
Topographical and forest surveys.	
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 $\frac{1}{\text{million}}$ 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.

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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.	
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				
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
Carnatic	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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MENTS.

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.

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.

SCIENTIFIC
DEPART-
MENTS.
Punjab.

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.

Central
Provinces
and Berar.

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.

SCIENTIFIC DEPARTMENTS. 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 DEPARTMENT.

Horse, mule, and donkey breeding.

CIVIL VETERINARY DEPARTMENT.

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.

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DEPART-
MENTS.

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.

Subordinate
Staff.

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.

Veterinary
instruction.

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.

Forest
Research
Institute.

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.

The Board
of Scientific
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:—

Archæo-
logical
Department.

SCIENTIFIC
DEPART-
MENTS.

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 Seinyet 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.

CIVIL
JUSTICE.
Bengal.

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.

Eastern
Bengal and
Assam.

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.

North-
Western
Provinces.

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.

Oudh.

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.

Central
Provinces
and Berar.

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

Punjab.

* 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^c 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.

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.

CRIME AND
POLICE.

There was little crime in the Punjab at the beginning of the year under review, 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.

Punjab.

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, 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.

Eastern
Bengal and
Assam.

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

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. CRIME AND POLICE.

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. Coorg.

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. Madras.

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. Bombay.

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. Bengal.

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	93,851	101,664
Admissions during the year -	459,288	480,098	464,660	436,569	440,948
Aggregate Discharged during the year from all causes -	559,359	578,342	559,411	530,450	542,612
	457,012	479,280	460,202	436,668	448,964
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	252,300	246,817	238,589	249,794
Casualties, &c. -	160,439	160,022	155,220	150,289	160,503
	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	5,360
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	189,938	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 cocoanut 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 re-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 421 and of their attendance by about 1,000 to 94,600. Elementary schools, on the other hand,

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

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.

Central
Provinces
and Berar.

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;

Burma.

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 818 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, 31 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.

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.	Kannaree.	Assamese.	Uriya.	Bi-lingual (Oriental) in a Classical and Vernacular Language.
Madras	313	—	153	20	—	—	—	—	—	—	—	421	331	—	64	—	9	Polyglot, 1.
Bombay	77	27	49	5	9	85	29	—	—	179	243	—	—	—	18	—	—	39.
Bengal	211	—	33	—	3	10	106	744	—	—	—	—	—	—	—	—	85	333
Punjab	80	—	6	18	26	491	68	—	238	—	—	—	—	—	—	—	—	—
Burma	6	4	—	—	—	—	—	—	—	—	—	1	—	77	—	—	—	64.
Eastern Bengal and Assam.	18	10	1	—	—	—	—	111	—	—	—	—	—	—	—	—	39	—
Central Provinces	—	—	4	—	—	—	9	—	—	31	—	—	—	—	—	—	—	2.
Myore	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total number of publications in Oriental languages, 84.																		
*Total number of Bi-lingual, 324.																		
*Total number of Bi-lingual, 144.																		
*Total number of Bi-lingual, 10.																		

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 Gurumvki (in Bombay); Lepcha, Manipuri, Mundari, Musalmanni-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 Vijianagar, 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 Mataram*, 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 *Abhadrasinh* 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

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 *Phalasaruti*, 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 Rananüi* (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."

LITERATURE

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.

United Provinces.

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 Müttu 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 Tatva Parkash*, published last year.

Punjab.

The *al Huqūq 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.

Burma.

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 Municipalities.	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	249	501	723	295	1,178	112	1,361
North-West Frontier Province	10	161	49	112	—	49	112	24	137
Central Provinces and Berar	57	752	22	277	453	179	573	79	673
Eastern Bengal and Assam	50	652	66	257	329	135	517	71	681
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

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.

MUNI-
CIPALITIES.

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.
Bombay City.

The municipality of Bombay is administered by a corporation consisting of 72 councillors, of whom 16 are nominated by the Government, 36 are elected by the

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.

MUNI-
CIPALITIES.

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:—

General.

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	422 321	130 86	570 1,085
Bombay	25 211	3,633	25	1,987	1,621	†	†	†	†
Bengal	29 73*	591 946	160 65	184 623	247 258	197 122	394 324	194 97	397 849
United Provinces	48	911	55	222	634	244	667	102	809
Punjab	29 20	1,104 407	239 20	520 126	345 261	258 20	846 387	74 3	1,030 404
N.-W. Frontier Province	5	215	49	166	—	49	166	26	189
Central Provinces and Berar.	21 75	471 1,185	2 13	118 304	351 368	78 119	393 1,066	19 3	452 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 384 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 members on each board must be not less than 12. The change by which district 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.

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.

District
Boards.
Punjab.

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.

North-West
Frontier
Province.

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 £156,200 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.

Central
Provinces
and Berar.

In Eastern Bengal there were 11 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.

Eastern
Bengal and
Assam.

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 Mayaveram-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.

Madras.

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 £225,600 for roads, buildings, and water supply. Roads absorbed 60 per cent. of the outlay on civil works.

Bombay.

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.

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-

stantial 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.

PORT
TRUSTS.

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.

Madras.

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.

Karachi.

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	41.7	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	33.1	27.4	23.7	24.5	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	32.8	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

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.

Year.	Cholera.	Small-pox.	Fever.	Dysentery and Diarrhoza.	Plague.	Respiratory Diseases.	All causes.
1906	441,788 1·98	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 3·06	109,583 0·48	4,452,812 19·69	298,117 1·32	390,355 1·33	201,307 1·00	7,852,330 34·73
1907	408,192 1·81	103,988 0·46	4,164,881 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	62·09
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.

Vaccination.

PLAGUE.

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

Plague Deaths.

1896	-	57,543
1897	-	116,285
1898	-	139,009
1899	-	32,807
1900	-	282,027
1901	-	576,365
1902	-	883,076
1903	-	1,143,993
1904	-	1,069,110
1905	-	356,721
1906	-	1,315,892
1907	-	149,938*

* Preliminary figures.

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.

PLAGUE.

- (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.

General.

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.

Bengal.

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 £5,700,000 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.

United Provinces.

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.

Punjab.

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 Lanmadaw 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 Maudalay 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, Gudiyattani, 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

Hospitals
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Asylums.

FAMINE.

United
Provinces.

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. FAMINE

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, Bengal. 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 *takari* 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 Central Provinces and Berar. 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, Punjab. 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 X. 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. EMIGRATION.

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 Calcutta. representing British colonies and one the Dutch colony of Surinam. The total

EMIGRATION.

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.

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.

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.*)

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

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	100	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

returns showing the index numbers of the 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.

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.

PRICES.
Bombay.

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.

Bengal.

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.

United
Provinces.

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 ¼d. 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.

Punjab.

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.

North-West
Frontier
Provinces.

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-pullers, 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.

GENERAL
REMARKS.

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.

North-West
Frontier Pro-
vince.

The premature cessation of the monsoon of 1907 led to a serious failure of *khurif* 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.)

Central Pro-
vinces and
Bihar.

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.

Burma.

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.

Eastern
Bengal and
Assam.

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.

Madras

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.

Bombay and
Sind.

CHAPTER XVII.

ARMY AND MARINE.

(For further details see *Statistical Abstract for British India, Tables 70 and 180 to 190.*)

ARMY.

ARMY. 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 34,846, 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	2,096

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.

ARMY.

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.

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 £1,076,516 and £138,358.

MARINE.

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.

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 Sulemankhel 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.

outrages the outlaws residing in Afghan territory across the border took a leading part.

FRONTIER
STATES.

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.

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 road were undertaken. 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.

Kashmir.

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 Pharping 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.

Nepal.

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.

Sikkim and
Bhutan.

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 Mishmi 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 Kachius, 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 Hispan 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.

FRONTIER STATES.

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 dakatti 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 Yawngghwe, 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 Yawngghwe 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 Mawkmai on the 20th April, when many houses were burnt.

Southern Shan States.

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.

Karenni.

Hkun Nau, 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.

Hyderabad.

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

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.

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.

NATIVE STATES.

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.

Baroda.

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.

Central India.

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 *takari* 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 *takari* 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.

NATIVE STATES.

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 Sciudhia paper mills were re-opened in Gwalior; important improvements were introduced in the mills at Bind 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 Itikhar 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 seasonable 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

£21,000, 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 £51,200, 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.

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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 £29,000, 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 1,936, 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 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 11,653.

Bengal.

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 Moharohanj 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.

Eastern Bengal and Assam.

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 48,550 as against 36,913 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. Madras.

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 £113,000 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

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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 Pudukkota 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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EAST INDIA (PROGRESS AND CONDITION).

STATEMENT

EXHIBITING THE

MORAL AND MATERIAL PROGRESS AND CONDITION

OF

INDIA

DURING THE YEAR 1907-08.

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.

Ordered, by The House of Commons, to be Printed,
20 May 1909.

LONDON:

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