

STATEMENT

EXHIBITING THE

MORAL AND MATERIAL PROGRESS AND CONDITION

OF

INDIA

DURING THE YEAR 1900-01.

THIRTY-SEVENTH NUMBER.

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

India Office, }
14 May 1902. }

ARTHUR GODLEY,
Under Secretary of State for India.

Ordered, by The House of Commons, to be Printed,
15 May 1902.

LONDON:
PRINTED FOR HIS MAJESTY'S STATIONERY OFFICE,
BY EYRE AND SPOTTISWOODE,
PRINTERS TO THE KING'S MOST EXCELLENT MAJESTY.

And to be purchased, either directly or through any Bookseller, from
EYRE AND SPOTTISWOODE, EAST HARDING STREET, FLEET STREET, E.C., and
32, ABINGDON STREET, WESTMINSTER, S.W.; or
OLIVER AND BOYD, EDINBURGH; or
E. PONSONBY, 116, GRAFTON STREET, DUBLIN.

1902.

V2,8 'N00

N0231

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. Of these reports, many 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. One annual volume which is largely used in the preparation of the Statement is the "Finance and Revenue Accounts of the Government of India," containing the complete audited accounts of the revenue and expenditure—Imperial, Provincial, and Local—of every public department in each Province of India, including the Railways, Irrigation Works, and other commercial enterprises which are under Government management.

Of the reports mentioned above, some, 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 at about the same date that the Finance and Revenue Accounts are received.

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; and it is often necessary to exceed the prescribed date by some weeks.

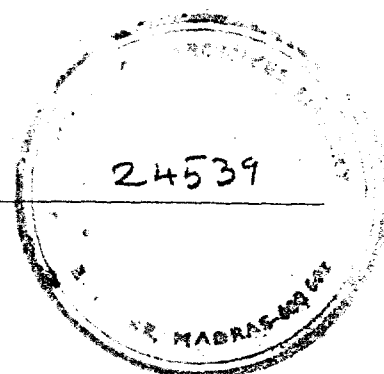
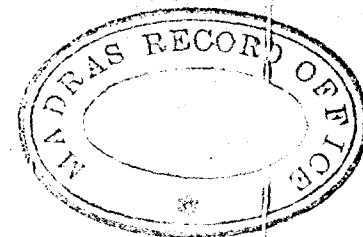


TABLE OF CONTENTS.

	PAGE		PAGE
I. ADMINISTRATION AND LEGISLATION :		IX. FORESTS - - - - -	105
Death of the Queen Empress - - - -	1	X. AGRICULTURE AND MINERAL RE-	
Administration - - - - -	2	SOURCES :	
Legislation - - - - -	3	Agriculture - - - - -	111
II. LOCAL GOVERNMENT, MUNICIPAL-		Horse Breeding and Veterinary	
ITIES, SANITATION, HOSPITALS, &c. :		Colleges - - - - -	116
General - - - - -	6	Agricultural Produce :	
Municipalities - - - - -	6	Agricultural Statistics - - - -	118
District Boards - - - - -	12	Wheat - - - - -	119
Port Trusts - - - - -	15	Oilseeds - - - - -	120
Sanitation - - - - -	19	Rice - - - - -	121
Hospitals, Dispensaries, and		Cotton - - - - -	121
Leper Asylums - - - - -	24	Tea - - - - -	122
Lunatic Asylums - - - - -	25	Coffee - - - - -	123
IIA. FAMINE AND PLAGUE :		Cinchona - - - - -	124
Famine - - - - -	28	Jute - - - - -	125
Plague - - - - -	31	Indigo - - - - -	125
III. JUSTICE AND POLICE :		Sugar - - - - -	126
Crime and Police - - - - -	34	Mines and Mineral Resources :	
Criminal Justice - - - - -	38	Coal - - - - -	127
Jails - - - - -	44	Iron - - - - -	127
Civil Justice - - - - -	47	Mineral Oil - - - - -	128
IV. REGISTRATION :		Gold - - - - -	128
Registration - - - - -	52	Rubies - - - - -	129
Joint Stock Companies - - - -	54	XI. PUBLIC WORKS :	
Patents and Designs - - - -	55	General - - - - -	130
V. FINANCE :		Railways - - - - -	132
Form of Accounts - - - - -	56	Irrigation - - - - -	141
Gross Revenue and Expenditure	56	Buildings and Roads (Civil) -	151
Net Revenue and Expenditure	57	Native States - - - - -	156
Capital Outlay on Public		XII. POST OFFICE AND TELEGRAPHS :	
Works - - - - -	59	Post Office - - - - -	157
Debt - - - - -	59	Telegraphs - - - - -	162
Savings Banks and other Obliga-		Indo-European Telegraph De-	
tions - - - - -	60	partment - - - - -	165
Cash Balances - - - - -	60	XIII. EDUCATION AND LITERATURE :	
Coinage and Paper Currency -	60	Education - - - - -	167
Rate of Exchange - - - - -	61	Literature and the Press - -	172
VI. SURVEYS AND SETTLEMENTS :		XIV. EMIGRATION AND MIGRATION :	
Survey of India, &c. - - - -	62	Emigration - - - - -	175
Meteorological Department -	64	Migration - - - - -	176
Settlements and Cadastral Sur-		XV. TRADE AND MANUFACTURES :	
veys - - - - -	65	Trade - - - - -	178
VII. LAND REVENUE (INCLUDING FISH-		Manufactures - - - - -	181
ERIES, CAPITATION TAX, &c.) AND		Factory Act - - - - -	185
GOVERNMENT AND WARDS' ES-		XVI. FRONTIERS AND NATIVE STATES :	
TATES :		Map of the North West	
Land Revenue - - - - -	70	Frontier Province - - - -	188
Wards' Estates - - - - -	79	Frontiers and Frontier States -	188
VIII. OPIUM REVENUE AND TAXATION :		Native States - - - - -	191
Opium - - - - -	82	XVII. ARMY AND MILITARY WORKS :	
Salt - - - - -	83	Army - - - - -	199
Excise - - - - -	88	Military Works - - - - -	202
Stamps - - - - -	100	APPENDIX—Tables of Net Revenue and	
Customs - - - - -	100	Expenditure - - - - -	i
Provincial Rates - - - - -	101		
Income Tax - - - - -	102		



STATEMENT

EXHIBITING THE

MORAL AND MATERIAL PROGRESS AND CONDITION OF INDIA

During the Year 1900-1901.

[NOTE.—Throughout this Statement, Receipts and Expenditure are shown in pounds, rupees being converted for the purpose at the rate of Rs. 15 = £1.]

CHAPTER I.

ADMINISTRATION AND LEGISLATION.

The death of H.M. the Queen Empress on the 22nd of January 1901 was the occasion of universal sorrow throughout India, which found expression in a great number of messages of condolence from the Governments, Native Princes, cities, and communities of that country. On behalf of all classes the Governor-General conveyed to H.M. the King Emperor the assurance of the general sentiments and respectful homage upon his accession. In reply, His Majesty graciously desired that his acknowledgments of the homage tendered to him on his accession should be made known to the Chiefs and people of India, whose country he had seen, in whose attachment to his throne he had full confidence, and whose prosperity and happiness would always be to him of the highest interest and concern. The proclamation of His Majesty's accession was read throughout India on the 26th of January. On the 5th of February the following letter was published in the Gazette of India:—

Death of
the Queen
Empress.

“TO THE PRINCES AND PEOPLE OF INDIA.

“Through the lamented death of my beloved and dearly mourned Mother, I have inherited the Throne, which has descended to me through a long and ancient lineage.

“I now desire to send my greeting to the Ruling Chiefs of the Native States, and to the Inhabitants of my Indian Dominions, to assure them of my sincere good will and affection, and of my heartfelt wishes for their welfare.

“My illustrious and lamented Predecessor was the first Sovereign of this Country who took upon Herself the direct Administration of the Affairs of India, and assumed the title of Empress in token of Her closer association with the government of that vast Country.

“In all matters connected with India, the Queen Empress displayed an unvarying deep personal interest, and I am well aware of the feeling of loyalty and affection evinced by the millions of its peoples towards Her Throne and Person. This feeling was conspicuously shown during the last year of Her long and glorious reign by the noble and patriotic assistance offered by the Ruling Princes in the South African War, and by the gallant services rendered by the Native Army beyond the limits of their own Country.

“It was by Her wish and with Her sanction that I visited India and made myself personally acquainted with the Ruling Chiefs, the people, and the cities of that ancient and famous Empire.

"I shall never forget the deep impressions which I then received, and I shall endeavour to follow the great example of the first Queen Empress, to work for the general well-being of my Indian subjects of all ranks, and to merit, as she did, their unfailing loyalty and affection.

(Signed) EDWARD R. ET I.

"Windsor Castle, 4th February 1901."

ADMINISTRATION.

List of the holders in 1900-1901 of the more important appointments connected with the Administration of India, those appointed during the year being shown in *italics*.

Office.		Date of Appointment or Assumption of Charge of Office.	REMARKS.
Secretary of State	The Right Hon. Lord George Hamilton.	5 July 1895	
Permanent Under Secretary of State.	Sir Arthur Godley, K.C.B.	29 September 1883	
Parliamentary Under Secretary of State.	The Earl of Onslow, C.C.M.G.	5 July 1895	
	<i>The Earl of Hardwicke</i>	17 January 1901	
	Sir James B. Peile, K.C.S.I.	12 November 1887	Re-appointed 12 November 1897.
	Sir Alfred C. Lyall, K.C.B., G.C.I.E.	17 January 1888	Re-appointed 17 January 1898.
	Sir Charles H. T. Crossthwaite, K.C.S.I.	3 March 1895	In succession to Sir R. H. Davies.
	Sir Stuart C. Bayley, K.C.S.I., C.I.E.	16 September "	In succession to Sir H. C. Rawlinson.
	F. C. Le Marchant	27 February 1896	In succession to Mr. B. W. Currie.
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.
	Sir Dennis Fitzpatrick, K.C.S.I.	24 April "	In succession to Sir John Strachey.
	Sir J. L. Mackay, K.C.I.E.	27 April "	In succession to Mr. 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 "	In succession to Sir A. J. Arbuthnot.
	Sir James Westland, K.C.S.I.	8 August 1899	In succession to Sir A. Alison.
	<i>Lieut.-Gen. A. R. Badcock, C.B., C.S.I.</i>	26 March 1901	In succession to Sir D. M. Stewart.
Governor-General	The Right Hon. Lord Curzon of Kedleston, G.M.S.I., G.M.I.E.	6 January 1899	
	General Sir A. Power Palmer, K.C.B. (extraordinary), Commander-in-Chief.	22 April 1901	Commander-in-Chief from 19 March 1900.
Members of Council	Major-General Sir E. H. H. Cullen, K.C.I.E., C.B.	27 April 1896	
	Sir A. C. Trevor, K.C.S.I.	2 May "	
	Sir C. M. Rivaz, K.C.S.I.	9 April 1898	And temporarily from 18 October 1897 to 19 February 1898.
	Thomas Raleigh	3 April 1899	
	<i>Sir E. F. Law, K.C.M.G.</i>	31 March 1900	In succession to Mr. Dawkins.
Lieutenant-Governor of Bengal	Sir John Woodburn, K.C.S.I.	7 April 1898	
Lieutenant-Governor of the North Western Provinces and Chief Commissioner of Oudh.	Sir Antony P. MacDonnell, G.C.S.I.	6 November 1895	
Lieutenant-Governor of the Punjab.	Sir William Mackworth Young, K.C.S.I.	6 March 1897	
Lieutenant-Governor of Burma	Sir F. W. R. Fryer, K.C.S.I.	1 May 1897	Formerly Chief Commissioner.
Chief Commissioner of Central Provinces.	D. C. J. Ibbelton, C.S.I.	14 July 1898	Officiating Member of Governor-General's Council from 4 December 1899. Absent on furlough from 4 April 1900. Officiating.
	A. H. L. Fraser, C.S.I.	28 November 1899	
Chief Commissioner of Assam	H. J. S. Cotton, C.S.I.	28 November 1896	
Agent to the Governor-General in Rajputana and Chief Commissioner of Ajmer-Merwara.	A. H. T. Martindale	9 March 1898	

OFFICE.		Date of Appointment or Assumption of Charge of Office.	REMARKS.
Resident in Mysore and Chief Commissioner of Coorg.	Lieutenant-Colonel D Robertson, C.S.I.	19 February 1897	And officiating from 7 December 1896.
Resident, Hyderabad	Sir Trevor J. C. Chichele-Plowden, K.C.S.I.	6 March 1892	
	<i>Lieutenant-Colonel D. W. K. Barr, C.S.I.</i>	21 February 1901	Officiating from 24 February 1900.
Agent to the Governor-General in Central India.	Lieutenant-Colonel D. W. K. Barr, C.S.I.	29 March 1895	
	<i>C. S. Bayley</i>	3 March 1900	Officiating.
Resident in Kashmir	Lieutenant-Colonel Sir Adalbert C. Talbot, K.C.I.E.	14 June 1896	
	<i>Lieutenant-Colonel H. A. Deane, C.S.I.</i>	19 November 1900	
Resident and Agent to the Governor-General, Baroda.	Lieutenant-Colonel E. W. Ravenshaw.	1 April 1900	And officiating from 31 August 1899.
Agent to the Governor-General for Baluchistan and Chief Commissioner of British Baluchistan.	H. S. Barnes, C.S.I.	14 June 1896	
	<i>Brevet-Colonel C. E. Yate, C.S.I., C.M.G.</i>	24 December 1900	
Political Resident, Persian Gulf.	Lieutenant-Colonel M. J. Meade, C.I.E.	10 March 1898	
Governor of Madras	Sir Arthur E. Havelock, G.C.M.G., G.C.I.E.	18 March 1896	
	<i>Lord Amphil, G.C.I.E.</i>	28 December 1900	
Members of Council	Arundel T. Arundel, C.S.I.	12 June 1898	
	Henry M. Winterbotham	9 November "	
Governor of Bombay	Lord Northcote, G.C.I.E.	17 February 1900	
Members of Council	J. Nugent, C.S.I.	12 July 1896	
	Sir E. C. K. Olivant, K.C.I.E.	24 April 1897	
	<i>J. Monteth, C.S.I.</i>	6 August 1900	
Political Resident, Aden	Brigadier-General O'M. Creagh, V.C.	22 February 1899	

LEGISLATION.

Between the 1st April 1900 and the 31st March 1901, 15 Acts were passed by the Council of the Governor-General for making Laws and Regulations, five by the Legislative Council of Madras, seven by that of Bombay, six by that of Burma, three each by those of the Punjab and Bengal, and two by that of the North-Western Provinces and Oudh. Ten Regulations were also 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. 3.

The following were the most important of the measures referred to:—

Act VII. of 1900, "to amend and provide for the further continuance of the Currency Conversion (Army Annual) Act, 1899," makes such amendments in the previous measure as will convert it from a temporary to a permanent enactment. As the exchange between British and British Indian currency has now been definitely fixed, it was no longer necessary to continue Act XIX. of 1899 merely as a temporary measure.

Act XIII. of 1900, "to amend the law relating to agricultural Land in the Punjab." The object of this measure is to place restrictions on the transfer of agricultural land in the Punjab with a view to checking its alienation from the agricultural to the non-agricultural classes. No restriction is imposed on permanent alienations when the alienor is not a member of an agricultural tribe, when the alienor is a member of an agricultural tribe and the alienee holds land as an agriculturist in the village where

INDIA.

the land alienated is situated, or when the alienor and alienee are both agriculturists and belong to the same tribe or the same group of tribes. In other cases permanent alienation can only be effected with the sanction of the Deputy Commissioner, who has discretion to refuse or to grant it. The Local Government is required to notify, with the sanction of the Government of India, what bodies of persons in any district are to be deemed agricultural tribes or groups of such tribes.

Temporary alienation to persons not belonging to the same tribe or group is allowed only in the form of mortgages or leases for terms not exceeding twenty years, or mortgages in which the mortgagor recognises the mortgagee as landlord and himself remains in cultivating occupancy at a rent not exceeding double the land-revenue in addition to rates and cesses.

Mortgages by way of conditional sale are forbidden in the future, and those in existence are to be converted into usufructuary or other permissible mortgages for not more than 20 years. The sale of land belonging to a member of an agricultural tribe in execution of a decree, whether made before or after the commencement of the Act, is forbidden; and no instrument which contravenes the provisions of the Act is to be accepted for registration by any registering officer.

The Local Government is given power, with the sanction of the Government of India, to exempt any district or part of a district, or any person or class, from the operation of the Act, either wholly or partially.

Native
Military
Lunatic
Asylums
Act, 1901.

Act I. of 1901, "to amend the law relating to the admission of native military Lunatics into Asylums," enacts that any native soldier declared to be insane shall be discharged from the army and not allowed to bear arms again after leaving the asylum. The practice in the native army is thus assimilated to that in use in the home army.

Indian Tolls
(Army) Act,
1901.

Act II. of 1901, "to amend the law relating to the Exemption from Tolls of persons or property belonging to the Army," combines in a single Act of general application the various provisions relating to such exemptions, and brings these provisions into harmony with the English Army Act.

Indian
Forest
Amendment
Act, 1901.

Act V. of 1901, "to further amend the Indian Forest Act, 1878," is designed to enforce communal responsibility in cases of wilful or grossly negligent incendiarism in forests.

Assam
Labour and
Emigration
Act, 1901.

Act VI. of 1901, "to consolidate and amend the law relating to Emigration to the labour districts of Assam." The objects of this important measure are twofold: firstly, to place a check on the abuses which had grown up under the system of uncontrolled recruitment by professional agencies; secondly, to improve the condition of the immigrant labourer by increasing the wages earnable by him in the second and third years of his contract, and by special clauses designed to protect newly arrived and weakly labourers. The present enactment enables the Local Government to prohibit emigration from any defined local area to any labour district or part thereof except under such provisions of the Act as may be specified in the notification, thus making it possible to bring all professional recruitment under the restrictions of Chapter III.; other provisions of the Act tend further to strengthen the control of the Local Government over recruiting agencies and to protect the interests of the immigrants.

Native
Christians
Administra-
tion of
Estates Act.

Act VII. of 1901, "the Native Christians Administration of Estates Act," places native Christians as far as possible on an equality with Hindus, Muhammadans and Buddhists as regards succession duties leviable on the administration of the estates of deceased persons.

Indian
Mines Act,
1901.

Act VIII. of 1901, "to provide for the regulation and inspection of mines." Hitherto the Government has had no legal power to inspect mines or to regulate their management, and the need for legislation has long been felt. The general object of the present enactment is to enforce proper precautions in the working of mines for the avoidance of accidents and the protection of the miners, and to regulate the employment of women and children on underground work or on work unsuited or dangerous to their age or sex. The appointment of Inspectors of Mines is dealt with in the Act, and statutory

powers and authority are granted to the Imperial Inspector for the whole of British India.

INDIA.

Act II. of 1900, "to amend the Coffee-stealing Prevention Act, 1878," is intended to render more efficacious the protective provisions of the previous Act, by imposing on possessors of coffee estates, who are sellers of coffee, the duty of keeping registers of their transactions.

MADRAS.
Madras
Coffee-
stealing Act
Amendment
Act, 1900.

Act V. of 1900, "to amend Act VII. of 1865 (Irrigation Cess)." The general object of this measure is to provide for the levy of water-cess in cases where Government water reaches a cultivated field with beneficial effect, otherwise than after application by the cultivator. In view of the immense importance of irrigation to the community at large, and the right of Government to claim a share in the greater productiveness of land due to water supplied from public irrigation works, it was considered essential that individual cultivators should not be able to claim exemption from water rate (when the supply is beneficial and sufficient) on the plea that the water was forced on them. Under the old Act such pleas had been successfully urged in the law courts.

Madras Act
to amend
Act VII.
of 1865
(Irrigation
Cess).

Act III. of 1901, "to further amend the Bombay Port Trust Act of 1879." The Port Trust at Bombay pays municipal taxes, assessed in the usual manner, and has hitherto been allowed a rebate of 10 per cent. on the assessment. The object of the present measure is to reduce the rebate to 5 per cent.

BOMBAY.
Bombay
Port Trust
Act Amend-
ment Act,
1901.

Act IV. of 1901, "for the better management of Municipal affairs in Mofussil towns and cities," while recognising the right of supervision and, if necessary, interference on the part of the Central Government, aims at creating an effective system of local self-government in the various towns of the Mofussil.

Bombay
District
Municipal
Act, 1901.

Act IV. of 1900, "to amend section 8 of the Punjab Laws Act, 1872, in respect of the descent of Jagirs." This measure has two objects in view:— firstly, to check the sub-division of *jagirs*, or revenue-free assignments, among numerous heirs; and secondly, to secure such grants from attachment in execution of the decrees of the Civil Courts.

PUNJAB.
Punjab
Descent
of Jagirs
Act, 1900.

Act II. of 1900, "to make better provision for the preservation of certain Estates and other immoveable Property in Oudh," was passed to enable the principal talukdars in Oudh, succession to whose estates is governed by Act I. of 1869, to settle their estates so that alienation or incumbrance to the prejudice of successors will no longer be possible. The Act is a voluntary one, any talukdar wishing to have it applied to his estate being required to obtain the permission of the Local Government before this can be done.

N.W.P. AND
OUDH.
The Oudh
Settled
Estates Act,
1900.

Act II. of 1901, "to amend the Burma Military Police Act, 1887," provides for the arrest of military police-officers without warrant for certain offences, and for their confinement in the quarter-guard. It is considered essential to the proper maintenance of discipline that officers in command should have powers similar to those possessed by military officers in dealing with military offences.

BURMA.
Burma Mili-
tary Police
Act Amend-
ment Act,
1901.

The most important of the Regulations passed by the Governor-General in Council, in pursuance of 33 Vict. c. 3, were the Regulation to provide for the better administration of Upper Tanawal, a tract on the Punjab frontier, and that "to provide for the management of local affairs at Aden."

Regulations.

CHAPTER II.

LOCAL SELF-GOVERNMENT, MUNICIPALITIES, SANITATION,
HOSPITALS, &c.

GENERAL. In every province of India a great deal of local business is done, considerable funds are raised and spent, and valuable service to the public is performed, by local bodies, which are constituted and exercise their functions under various enactments. Municipal committees exist in most towns of the Indian Empire, and have charge of municipal business generally, including the care and superintendence of streets, roads, water supply, education and hospitals. The number of such committees in each province is given in the body of this chapter. Local and district boards have charge of local roads, sanitary works, schools, hospitals, and dispensaries in rural districts. 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 1900-01, apart from loans, sale of securities, and such-like extraordinary receipts, was £2,923,000. The sources of this income and the yield of each source are shown in the table on the last page of this chapter. The revenue enjoyed by the local and district boards during the year was £2,893,000, inclusive of grants and transfers from provincial revenues. Of this total, the local rates levied on land, "for expenditure on roads, schools, hospitals, and general purposes," account for nearly two-thirds; and among other sources of income belonging to the local boards are tolls on ferries and roads, school fees, the rent of corporate property, and the grants made by Government for educational and medical purposes.

The income of the port funds, exclusive of loans, &c., amounted in 1900-01 to £1,159,000.

The revenue of cantonment funds amounted to £169,600; that of town and bazaar funds came to £67,000; and other miscellaneous funds had a revenue amounting to £145,400.

Thus, the revenue managed by all the various local bodies amounted in 1900-01 to about £7,357,000.

The following statement shows the indebtedness of municipalities and local funds at the end of the year:—

	India, General.	Central Provinces.	Burma.	Assam.	Bengal.	N.W.P. and Oudh.	Punjab.	Madras.	Bombay.
	£	£	£	£	£	£	£	£	£
Transactions during 1900-1901:									
Borrowed - -	1,577	—	77,200	—	201,307	12,667	11,537	126,220	187,553
Repaid - -	2,038	4,731	25,381	45	15,781	11,446	11,910	11,565	99,247
Amount owing on 31st March 1901:									
To Government -	31,391	65,981	12,490	859	2,656,729	548,827	260,221	484,292	2,398,989
To the Public -	—	16,533	357,269	—	2,802,172	200	13,333	336,927	4,813,677

MUNICIPALITIES.

**MUNI-
CIPALITIES,
General.**

Throughout India the cities and larger towns manage their own local affairs, through the agency of commissioners or committees appointed from among the citizens. 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 committees are elected by the townsfolk under legal rules, but in every

**MUNI-
CIPALITIES.**

town some, and in a few minor towns all 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, everywhere 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 are, mainly—

House tax,	Water rates,
Tax on rent,	Conservancy rates,
Octroi duties,	Rents of public lands and
Bazaar or market rents,	properties,
Carriage tax,	Public gardens and parks.

The objects on which municipal funds can be spent are, mainly, water supply, hospitals and dispensaries, streets and roads, vaccination, drainage, sanitation, and education. Municipalities do more for the benefit of their citizens under these heads than was done before by Government officers; and the commissioners or committees generally evince diligence and public spirit in the performance of their honorary duties. The interest in the municipal elections, and in municipal affairs generally, is not 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 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 year 1900-01 was the first in which the new Calcutta Municipality Act was in force. The Corporation consisted during the year 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 to be selected from among the commissioners, four by the elected, and four by the nominated commissioners, and four by the Local Government. The year's experience is reported by the chairman, with the unanimous concurrence of the commissioners, to have shown that the new constitution is a workable machine. The requirements of the law are more clearly enumerated by the new Act, the rights and duties of the public are more exactly defined, and useful provisions have been introduced for the health and comfort of the inhabitants. It is generally recognised that the Corporation is badly served by its subordinates, and good progress was made during the year in the direction of reorganisation of the administration.

There were 12 general meetings, at which the average attendance was 35, and six special meetings. The General Committee held 54 meetings, and there were 102 other committee meetings. The revenue of the year was £384,500, or over 3 per cent. in excess of the figure for 1899-1900. The expenditure was £370,000, and the balance at the end of the year, apart from war funds, was £53,300. Of the receipts, £274,700 accrued from the consolidated rates, against £262,600 in the previous year. The rates were, as in the previous year, a general rate of 9½ per cent., and water, lighting, and sewage rates aggregating 10 per cent. The incidence of the consolidated rates per head of the population was Rs. 6½, and including other taxes the incidence of taxation was about Rs. 7½ per head. The total assessed valuation of the city rose to £1,493,000. Of the expenditure against income, £94,400 were for interest and other charges in connection with the water supply, £32,900 for lighting, £27,100 for sewage, and £215,600 for general purposes,

MUNI-
CIPALITIES.

including conservancy. A loan of £15,000 was raised in the year for plague purposes; but the debt was reduced by a net amount of £7,500, and stood at £2,028,500 at the close of the year.

The city suffered during the year from an exceptionally heavy rainfall and consequent extensive floods, followed by an outbreak of cholera and bowel complaints. There was also a recrudescence of plague, from which disease 7,016 persons are reported to have died. The expenditure on plague has hitherto been met from loans raised for that purpose, or from Government grants. It is in contemplation, however, to provide for some expenditure under this head in the future budgets of the municipality. The improvement of insanitary dwellings is an important question in Calcutta; the present law contains provisions respecting this matter, which have not as yet been very fully used. A scheme is under consideration for opening out the town by the construction of wide thoroughfares.

Interior of
Bengal.

The municipalities in the interior of Bengal numbered 155, or two more than in the previous year, one existing municipality having been divided into two parts for administrative purposes, and a new one having been created. The number of ratepayers was 478,500, or 17 per cent. of the population of the municipalities. There were general elections in 20 towns during the year, and a considerable amount of interest is reported to have been taken, 48 out of a total of 85 wards having had contests. The Commissioners numbered 2,190 at the beginning of the year, and of these 1,163 had been elected, while 1,952 were natives of India and 362 were Government servants. The number of meetings held was 2,546 compared with 2,515 in 1899-1900; the number of municipalities which failed to hold the prescribed minimum of 12 meetings was smaller than in the preceding year. The average attendance at the meetings is reported to have been satisfactory. The incomes of the municipalities, excluding debt heads, amounted in all to £261,400, of which £205,900 came from taxation. The taxes are levied either on persons, according to their circumstances and property, or on holdings at a rate generally $7\frac{1}{2}$ per cent. of the assessed annual value, besides lighting and water rates; there are no octroi duties. The average incidence of taxation in all the towns, excluding Calcutta, was $17\frac{1}{2}$ annas (an anna being equal to a penny) per head of the population. The total expenditure of the Funds, excluding debt heads, was £258,500, of which £17,300 was for water-supply, £13,600 for drainage, £80,600 for conservancy, £29,700 for hospitals and dispensaries, £8,500 for education, and £38,900 for public works. Of the towns in debt to Government all paid interest and sinking fund instalments in full, and are considered to be quite able to do so in future.

North-
Western
Provinces
and Oudh.

In the North-Western Provinces and Oudh the year was notable as being the first in which the new Act of 1900 was in force. Rules were being framed under the Act for the guidance of municipal administration and for financial procedure. A reduction in the number of members was effected in many municipalities where the committees were disproportionately large. The number of municipalities remained at 104, but the number of members fell from 1,653 to 1,392, of whom 1,028 were elected and 1,124 were natives. Elections were held in 61 towns, and the lively interest shown in previous years was maintained. The income of the municipalities, excluding loans, was £330,700, of which £256,100 accrued from taxation. Of the taxation revenue, octroi duties accounted for a net amount of £181,200, compared with £175,700 in 1899-1900, the increase being chiefly due to greater prosperity of the country, but also partly to the increase of one in the number of towns levying this duty, which amounted to 82. The average incidence of taxation per head of population was Re. $1\frac{1}{6}$, though this rate was greatly exceeded in the hill municipalities. The expenditure also showed an increase and included £120,700 spent on water supply, drainage and conservancy, and £9,700 on education. A small loan was taken from the Government by Agra, and a loan of £10,000 by Benares, during the year.

Punjab.

There were in the Punjab 148 municipalities, besides 40 notified areas, which have a modified form of municipal government. Elected members serve on 109 of the municipal committees, the proportion being generally two elected to one nominated member. The total number of members of the committees of municipalities was 1,658, of whom 797 were elected; 326 were

MUNI-
CIPALITIES.

officials and 131 were Europeans or Eurasians. The number of vacancies to be filled during the year was 288, of which about one quarter were filled after contested elections. Forty-five of the committees failed to hold the prescribed minimum of 12 meetings, but the working of the committees in the larger towns throughout the province is reported to have been satisfactory; the Hoshiarpur committee is said to have "afforded an example of what local self-government can be." The total income of the municipalities and notified areas, excluding loans and extraordinary receipts, rose from £307,500 to £312,500, of which £204,500 were raised by octroi duties in force in 152 towns. The receipts from taxation had practically returned to the amount at which they stood before the famine of 1897-98. The expenditure rose from £310,700 to £311,300, including £48,800 on fire, lighting and police, £41,000 on education, £42,800 on conservancy, and £22,000 on roads and buildings. The Government advanced £10,700 on account of the loans to the Simla and Delhi municipalities for waterworks and drainage, and repayments were made to Government by various towns amounting to £10,600. The total debt outstanding at the end of the year was £273,500.

BURMA.
Rangoon.

In the town of Rangoon there is a municipal committee, for the most part elected by the various national communities, with a salaried president. The number of members was 25, of whom 19 were elected and 6 nominated, 11 were natives, and 4 were Government servants. The ordinary revenue continued to increase, and amounted to £140,200, against £133,700 in 1899-1900. Of this total, direct taxation accounts for £81,800, showing an increase owing to additional assessments; the taxes are a nine per cent. general tax, and water, lighting and scavenging taxes, and they amount to Rs. $5\frac{1}{4}$ per head of the population. Extraordinary receipts, including a Government contribution for the town lands reclamation fund, were considerably higher than in the previous year. The ordinary expenditure was £118,900, showing an increase as compared with the previous year, chiefly under the head of civil works and for the census operations; the extraordinary expenditure is chiefly composed of loan charges and expenditure under suspense heads of the account, such as reclamation and road making. The debt of the municipality at the end of the year was £329,000, against which has to be set a sinking fund of £19,300; the net addition to the debt during the year was £56,800, a loan of £77,200 having been raised in the public market. The birth-rate for 1900 is given as 13·66 per thousand of the estimated population, the death-rate 33·23; still-births are excluded, and it is probable that registration of births is very imperfect.

Interior of
Burma.

The number of other municipalities in Burma was 41, or one more than in the previous year. The committees contained 532 members, of whom 91 were elected, 375 were natives, and 194 were Government servants. Elected members were serving on nine of the committees; but with the exception of Moulmein little interest was shown in the elections. The average attendance at each meeting was, on the whole, good. The income of the municipalities, excluding debt heads, was £146,200, of which £57,800 came from taxation and ferry tolls, and £66,000 from markets and slaughter-houses. There are no octroi duties in Burma. The ordinary expenditure rose from £133,000 to £134,000, the closing balances rising to an aggregate of £40,000. Some of the municipalities, which have in hand or in contemplation large schemes of sanitation, require large balances, but others need incitement to spend their excessive balances on useful projects. The amount spent on sanitation, conservancy and hospitals was £35,500, showing an advance on 1899-1900; but only £8,300 were spent on public instruction. The expenditure on public works, chiefly roads, were £27,600. No loan was sanctioned during the year, and the total indebtedness of the municipalities at the end of the year was no more than £13,700. Important works are in contemplation, for which debt will have to be incurred, e.g., waterworks at Mandalay and Moulmein, and a drainage system for the latter town, which are all much needed. But the municipal funds are for the most part small, only six, including Rangoon, exceeding £6,500 per annum. The incidence of taxation and tolls per head of municipal population was 22 annas in Lower Burma and 19 annas in the Upper Province, the highest rate being Rs. $2\frac{1}{2}$ at Moulmein and Prome.

MUNI-
CIPALITIES.
Central
Provinces.

In the Central Provinces 52 towns had municipal committees in 1900-01, but many of them are mere villages, and only 20 have a population exceeding 10,000. The number of members was 625, of whom 442 were elected. The municipal incomes, including Government grants, but excluding other advances, increased from £91,100 to £96,000, of which £59,700 accrued from octroi duties, levied in 27 municipalities. The expenditure was £89,900, excluding advances and repayment of loans; this sum included £15,500 for refunds of octroi duties on exported articles, £17,800 for conservancy, £9,700 for education, and £6,100 for hospitals and dispensaries. The balance at the credit of the municipalities at the end of the year was £18,000, compared with £15,700 at the beginning, only one town, Wardha, being without a balance to its credit. Generally speaking, the year was more prosperous than had been anticipated, and this was specially the case in Nagpur, the most important of the municipalities in the last quarter of the year. The latter town, however, has many wants, and it is in contemplation to increase the taxation rates.

Assam.

The number of municipalities in Assam, including two stations and three unions, remained at 14, but only three of them have a population of more than 10,000. The total number of members of the municipal committees was 144, of whom 53 were elected in six of the towns, 115 were natives, and 50 were officials. The income amounted to £16,400, compared with £18,100 in the previous year; but as the latter figure included £2,000 lent by the Government to Gauhati and Shillong, there was an increase in income proper. The receipts from taxation were £7,400. The total expenditure was £16,600, of which £8,100 were spent on water supply, drainage and conservancy. Though no scheme of any great importance was carried out, the year was, on the whole, one of steady progress.

MADRAS.

Madras City.

On the municipality of Madras there are 33 Commissioners, 24 being elected by the ratepayers, whose numbers amounted in the year 1900-01 to 12·4 per mille of the inhabitants. Seven elections were held, at which 33 per cent. of the registered electors came to the poll. Eight Commissioners were Europeans and nine were officials. At 27 meetings of the Commissioners the average attendance was 20. The income of the year included £68,900 from taxation and £91,500 from municipal property and powers apart from taxation, these two items showing a slight increase as compared with 1899-1900. Other items, such as Government contributions, loans, &c., raised the total receipts to £172,800. Taxation fell on the population at the rate of Rs. 2½ per head; the principal tax is one of 10 per cent. on buildings; there are no octroi duties. The expenditure came to £173,000, of which £23,500 were spent on maintenance of the existing water supply and drainage works, and £21,700 on conservancy. The new "Moore Market" was opened in the course of the year. Included in the above statement of receipts and expenditure are, on the one hand, loan funds amounting to £69,700, and on the other, an expenditure against capital of £62,600, of which £55,500 was on the new drainage scheme, which is estimated to cost £215,500. The outstanding debt of the municipality amounted on the 31st March 1901 to £348,000, against which must be set the sinking fund, amounting to £97,000.

Interior of
Madras.

The number of municipalities in the interior of Madras was 60. The councils were partly elective in 55 of these towns, and in 37 towns the councillors elected their own chairman. On an average, 27 meetings were held by each council, and the average attendance of councillors at meetings was 8·7, as compared with 8·6 in the previous year. There were 883 municipal councillors in all, including 412 elected members, 206 who were officials, and 721 natives. The total income of the municipalities, excluding debt heads, was £189,400, including £120,500 from taxation and tolls. An increase of 5 per cent. in the receipts from taxation was caused chiefly by the raising of the rate of the tax on buildings and lands in several towns. The average incidence of taxes and tolls was 15 annas per head of the municipal population; there are no octroi duties in these towns. The expenditure was £194,900, compared with £176,800 in the preceding year; of this amount £32,800 were spent on water supply, £47,700 on conservancy, and £23,100

MUNI-
CIPALITIES.

on education. The outstanding debts at the end of the year amounted to £113,900, against which there was a sinking fund of £4,200.

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 revenue realised was £560,200, or £28,400 less than in 1899-1900, when the revenue was the largest ever raised in the city; but the large outstandings at the close of the year account for the falling off; and allowing for these and for other non-recurring factors the results are held to indicate an increase of about £10,000 in the stable sources of income. The raising of the general tax from 9 to 12 per cent. in the previous year resulted in a considerable gain in both years; but the town duties, which yielded an exceptional amount in 1899-1900 owing chiefly to the importation of Rangoon rice for the famine, declined in the year under report, as a large refund of them fell to be made, on re-export of the grain from the city. The expenditure was £572,300, or £79,500 more than in 1899-1900, including a contribution of £31,600 to the City Improvement Trust, £108,800 spent on public works under the Engineer's control, £144,600 on public health, and £166,900 on debt services. The balance at the end of the year was £144,500, compared with £6,700 required by law, and with £140,000 at the end of the preceding year. Against this are to be set an estimated deficit of £27,700 in the ensuing year, a sum of £86,600 advanced for plague purposes, which may not be recoverable, and the necessity for a further large payment in 1902 for the City Improvement Trust. The municipality decided during the year to purchase the tramways of the Bombay Tramway Company.

A short term loan of £80,000 was raised for plague purposes; the outstanding debt at the end of the year was £2,960,000, the sinking fund amounting to £203,000. The expenditure from loan funds during the year was £45,400 for plague purposes, £48,000 on sewerage works, and £8,300 on minor works. The plague expenditure of the year was £49,300 in all, compared with £63,600 in the preceding year, and the expenditure since the plague began was £354,300 at the end of March 1901. Of this, £112,500 have been received from the Government, and the remainder has been met partly by short term loans, partly out of other loan funds, and partly as an advance out of income.

The year was marked by a fearful mortality, representing more than 10 per cent. of the population. There were epidemics of plague, cholera, measles, small-pox and relapsing fever, and the mortality among children and old persons was exceptionally high. The water-supply, drawn from the Tansa, Vehar and Tulsī lakes, is sufficient, though of unequal quality; but the lakes fell to a low level during the year owing to the early cessation of the rains.

The City Improvement Trust did not notify any new schemes during the year. Good progress was made on the Nagpada scheme, £35,400 being spent on the acquisition of properties, and four of the six tenements being almost completed. Two street schemes received Government sanction during 1900-01; other projects were under revision. Plans of foreshore reclamation are being worked out in detail. No loan was raised, as there was an unexpended balance of the loan raised in 1899. The year's revenue of the Trust amounted to £52,200, and the expenditure, exclusive of capital charges, to £21,500. The capital expenditure was £66,800, chiefly on the Nagpada scheme or on the improvement of the properties vested in the Board. The revenue consisted of the statutory municipal contribution £31,600 mentioned above, and other receipts from investments, rents, and other proceeds of property.

The municipalities in the interior of Bombay numbered 165, and the total number of municipal Commissioners was 2,319, of whom 885 were elected, and the rest nominated. There were 1,697 non-officials and 2,140 natives of India on the committees. On the whole, the attendance at meetings was not satisfactory, except in Sind. The income of the municipalities was £347,700, excluding loans and advances, and of this total £265,600 was raised by taxation, the incidence per head of population being 27 annas per head of the municipal population. The receipts showed a considerable falling off as compared with the previous year, owing partly to the diminution of the building and plague grants made by the Government and partly to the effects

Interior of
the Bombay.

**MUNI-
CIPALITIES.** of famine and plague. Octroi duties accounted for a large, though diminished, share of the taxation revenues. The expenditure, also excluding loan heads, fell from £365,600 to £345,000, owing partly to smaller refunds of octroi duties, partly to reduced expenditure on wells, and partly to the subsidence of plague. The total indebtedness of the municipalities amounted, at the end of the year, to £346,700, or about one year's income. The debt was reduced during the year by a net amount of £21,000. The closing balance at credit of the municipal funds was £75,400.

Berar. The number of municipalities in Berar was 12, as in the previous year, and in six of these towns the majority of the municipal committees are elected by the ratepayers. All but two of the committees held monthly, or more frequent, meetings as required by the law. There were altogether 173 members of these committees at the end of the year, of whom 81 were elected, 145 were natives, and 54 were officials. Twenty-five vacancies occurred, for which 792, or only 13 per cent., of the electors, recorded their votes. The total income of the municipalities was £18,100, including £8,000 from rates and taxes; there are no octroi duties. The total expenditure was £17,300 including £500 for advances and repayment of loans.

DISTRICT BOARDS.

**DISTRICT
BOARDS.
General.**

The constitution of district boards with precise powers and responsibilities under the law took place more recently than the creation of municipalities; but 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. In all the more advanced provinces district boards are now constituted under different enactments. In Madras, the boards have the power of proposing local taxation, and in Bengal they are empowered to decide at what rate, within the legal maximum, the road cess shall be levied in each district; but for the most part the district boards do not possess powers of taxation; they administer funds, or the yield of specific imposts, made over to them for expenditure on roads, schools, hospitals and sanitation, within their jurisdiction. 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.

Bengal.

In Bengal there were 42 district boards, an increase of four being caused by the extension of the Act to Chota Nagpur; there were 105 local boards, as in the previous year. On the district boards were 844 members, of whom 332 were elected by the local boards, 273 were officials, and 619 were natives of India; on the local boards were 1,262 members, of whom 388 were elected, 160 were officials, and 1,150 were natives of India. There were also 56 union committees entrusted with minor duties. It is reported that at present the union committees are no real help to the administration. With four exceptions each district board held 12 or more meetings. Of the local boards 54, or more than one half, failed to meet once a month. The income of the district boards, apart from debt headings, rose from £450,700 to £467,400, owing to the increase in the number of the boards. These figures include £282,300 from the road cess and £41,800 contributed by provincial funds. The expenditure, also excluding debt heads, was £455,600, of which £86,100 were spent on education and £302,400 on civil works. The closing balances were slightly higher on the whole, setting aside the newly created local boards, than they were at the end of the preceding year.

**North-
Western
Provinces
and Oudh.**

There were, as in the previous year, 44 district boards and four district committees in the North-Western Provinces and Oudh; the district boards consisting of members elected or nominated from the members of the local boards of sub-districts. The 44 boards had 894 members, of whom 600 were elected, 241 were *ex officio* members, and 79 were Europeans. The members of the committees numbered 84, and none are elected. The magistrate of each district is chairman of the district board. The boards held on an average 12 meetings, and the committees 8 meetings, with an average attendance of 8 and 13 respectively. The income of the boards and committees

**DISTRICT
BOARDS.**

during 1900-01 was £366,000, excluding deposits and advances; of this amount, £220,500 came from provincial rates. The increase, as compared with the previous year, 17 per cent., was caused by the making over to the boards of the management of ferries on local roads. The expenditure showed a corresponding increase for the same cause, and amounted to £353,600, including £98,300 spent on education, £161,800 on drainage, waterworks, buildings and roads, and £39,700 on medical services and sanitation. The results of the year's work are regarded as showing a satisfactory, though slow, improvement in local self-government.

The number of district boards in the Punjab was 31; of the 48 local boards, those in the Delhi and Lahore districts were abolished during the year. The members of district boards numbered 1,271, of whom 429 were elected by the local boards, 274 officials, and 1,178 natives. The local boards had 899 members, 472 being elected, 54 officials, and 893 natives. In 12 districts, most of which are situate on or near the frontier, the district boards are composed entirely of nominated members, and in other districts the members are in part nominated or *ex officio*, and in part are elected delegates from the local boards. Elections for the local boards were characterised by the usual apathy, only 27 out of 114 vacancies being contested. Twelve district boards and 29 local boards failed to hold the required minimum number of meetings. The working of the district boards was on the whole satisfactory, and that of the local boards almost uniformly the reverse. The year's income of the district boards, apart from loans and advances, came to £202,600, of which the chief items were £152,200 from local rates and £20,800 from civil works. The receipts from local rates were higher than in the previous year by £9,200, owing to recovery of the country from the famine. The total expenditure of the year was £211,700, of which the chief items were education, £44,500; medical and sanitary charges, £40,100, including £15,200 on plague; and roads and other public works, £55,700. The closing balances of the district funds taken together amounted to £31,000, compared with £39,800 at the end of 1899-1900.

In the Central Provinces district councils and local boards have been established everywhere except in the backward tract of Mandla, and their numbers were 17 and 54 respectively. They contained 1,212 members, of whom 911 were elected; 1,187 of them were natives of India; 145 were officials. The number of meetings held by councils and boards was satisfactory, but the attendance was irregular on account of famine and census work. It is reported that the local boards were less active than the district boards, owing probably to the lack of decentralisation, the local boards not having had enough work delegated to them. The development of the utility of these boards is being kept in view. The income was £42,900, excluding debt heads, as compared with £47,000 in 1899-1900, while the expenditure, also excluding repayment of loans, &c., was £47,700, compared with £52,000. The fall in the income was due largely to the uncertainty of the receipts from provincial rates, owing to the remissions and suspensions due to the famine. The expenditure included £17,900 on education and £12,200 on public works. The reduction of expenditure rendered necessary by circumstances involved some neglect of roads, &c., but fortunately the number of schools which had to be closed was small.

**Central
Provinces.**

In Assam there were 19 local boards, containing 361 members, of whom 65 were officials and 133 were Europeans or Eurasians. The European non-official members are elected by the tea industry, and native non-official members are nominated by the Deputy Commissioners, except in three districts, where a modified system of election prevails. The number of members so elected was 143. The attendance at meetings was not good, and nearly 20 per cent. of the non-official members did not attend a single meeting of their board. The income of the boards, apart from debt heads, was £71,800, or rather less than the receipts of the previous year; the local rates yielded £43,000, or £1,800 below their yield in 1899-1900. The boards spent £78,200; two-thirds of the total expenditure was devoted to public works, 18 per cent. to education, and 4 per cent. to sanitary and medical objects other than those included under public works.

Assam.

DISTRICT
BOARDS.
Madras.

In Madras there were 21 district boards and 79 taluk boards, and the number of village unions was 379. The sanctioned number of members of the district boards varies between 24 and 40, one half being elected by the taluk boards, except in the Nilgiris, where the latter do not exist; the total number of members at the end of the year was 638, 62 vacancies being unfilled; this number included 308 elected members, 261 officials, and 537 natives of India. The average attendance at meetings of the boards was 57 per cent. of the members. The taluk or subdivisional boards are not elective, the members being appointed by the Government, but some of them elect their vice-presidents; the average attendance at meetings was 57 per cent., and all but a few of the boards met each month as required by the Act. The village unions deal chiefly with local sanitation and the management of elementary schools, markets, and other local institutions entrusted to them by the taluk boards. The number of members of all the unions was 3,563, and the average number of meetings was 13.

The income of the boards and unions, excluding debt heads and contributions from one district board to another, amounted to £585,300. The chief item is the land cess, levied at rates varying from one to two annas per rupee of the land revenue assessment, which yielded £351,000, compared with £334,300 in the preceding year. The expenditure of the boards, also excluding the heads mentioned above, amounted to £548,000, or 3 per cent. more than in 1899-1900. The chief items of expenditure were £278,000 on public works, £68,200 on education, and £94,200 on medical and sanitary purposes. About one half of the expenditure is controlled by the taluk boards.

Bombay.

In Bombay and Sind there were 23 district and 207 taluk (or sub-divisional) boards, nearly all of which are partly elective. There were altogether 3,571 members of all boards, of whom 1,598 were elected, while 791 were officials and 3,384 were natives of India. In 16 districts the local boards were reconstituted on the termination of the triennial term of office. The percentage of voters who attended the polls was 72 per cent. in the Southern division and 27 per cent. in the Northern division. In the Central division little interest was shown. The income of the local boards, excluding debt heads, was £272,300, of which £150,400 were derived from provincial rates and £70,200 from Government contributions. The income shows an increase in comparison with that of 1899-1900, but it was still less than that received in 1898-99, which was £304,000, the fall being due to remissions or suspensions of the one anna cess owing to the famine. The expenditure of the boards, also excluding debt heads, was £267,600, including £100,900 on education, £114,000 on civil works, and £22,200 on medical objects. The actual balances at credit of the boards, which before the disorganisation by famine and plague stood at about £170,000, were reduced at the end of the year under report to £75,700.

Berar.

In Berar there were six district and 21 taluk or sub-divisional boards. The district boards had altogether 152 members, of whom 122 were elected by taluk boards, 28 were officials, and 145 were natives. The members of the taluk boards numbered 373, each board generally consisting of 18 members, of whom 12 are elected by the ratepayers; all the members of these boards were natives, 31 being officials. There were 71 vacancies in the taluk boards during the year, 139 candidates stood for election; the percentage of the qualified voters who exercised their right varied from 1 to 13 per cent. No interest is displayed in the elections. All the boards, with four exceptions, held the required number of meetings, but the attendance of members was not good. The income of the district boards, apart from loans and advances, was £45,700, of which £24,600 accrued from rates, and £5,700 from assessed taxes. The expenditure, also deducting debt head, was £54,150, of which £13,200 was spent on education and £11,400 on civil works, chiefly roads and wells. It is reported that the boards have given valuable assistance during the famine. They contributed £18,000 to provincial revenues on account of gratuitous famine relief in the year under report.

Burma.

In Burma local boards have not been constituted. In Lower Burma 19 district cess funds had an income of £133,000, as compared with

DISTRICT
BOARDS.

£127,000 in 1899-1900. The expenditure was £136,300, of which £89,800 occurred under the head of Civil Works and £14,200 under Education. There were 16 district funds in Upper Burma, with a total income of £26,700, and an expenditure of £21,900, including £15,800 on Civil Works. The balances to the credit of the funds in Upper and Lower Burma at the end of the year amounted to £79,700.

PORT TRUSTS.

PORT
TRUSTS.

The custody of the harbours and the administration of harbour and shore affairs in the more important ports of the Peninsula 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 are the only members of local public bodies who receive a small fee for each attendance at meetings for business. No members of municipal councils, or of district or local boards, receive any fees for the performance of their local duties.

Bombay.

The year 1900-01 was one of the worst on record in respect of the volume of all the staple exports from Bombay, and on the other hand the imports of rice exceeded even the phenomenal amounts of the previous year. The net result to the Bombay Port Trust was a slight fall, as compared with 1899-1900, in their revenue, which amounted to £349,100. This figure was, however, higher than that of any other previous year. The result is considered to be a satisfactory one, and to augur well for the development of trade when normal seasons occur. The receipts for wharfage fees and dock dues at docks and quays were £163,000, and from other sources, such as port dues, warehouse fees and rents, &c., £186,100. Wheat exports, which amounted in 1898-99 to over 300,000 tons, were only 3,500 tons in 1900-01. Exports of grain to Europe practically ceased, and large imports of rice and other grains were made, amounting in the aggregate to 910,000 tons, more than two-thirds of which was rice. The exports of cotton showed a great decrease, owing to the short crop. They were 1,162,000 tons in 1898-99 and 709,000 tons in the year under report. On the other hand, there was a huge increase in the imports of petroleum in bulk, which totalled 12,000,000 gallons, against figures varying between four and five millions in recent years. There was also, as is usual in time of famine, a great increase in the number of hides exported. The exports of cotton goods showed a considerable fall, as did also the imports of machinery, owing in both cases to the depressed state of the mill industry. The total number of vessels entering the port was 2,001, of 2,519,000 tons, against 1,975 of 2,390,000 tons in 1899-1900. The total expenditure was £359,100, of which £147,900 were for interest. The debt of the Trust amounted at the end of the year to £3,555,400, including £83,300 raised at 4 per cent. during the year, of which two-thirds was for the replacement of the last of the five per cent. loans, and the remainder for new works. The net result was that an amount of £16,700 was obtained for new works of a productive character, without any increase of the total interest charges. It has been decided to set aside annually as Sinking Fund an amount sufficient to extinguish the debt in sixty years, and the amount so set aside during the year was £16,700. The revenue reserve fund stands at £93,400.

Calcutta.

The receipts of the Calcutta Port Trust were £491,100, or £47,700 better than in 1899-1900, exclusive of outstanding bills, and the expenditure was £471,200, including the Kidderpore Dock Account and payments to sinking funds and for renewals and improvements. The jetties yielded a surplus of £49,400, and the petroleum wharf £20,600, and the tea wharf showed improved receipts. The Kidderpore docks receipts were £156,400, or £40,000 better,

PORT
TRUSTS.

than in the preceding year; the expenditure was £229,300, or £35,000 greater. This latter figure includes £89,100 for interest. The working of the Port Trust was investigated by a committee during the year, which reported in March 1901. The report disclosed some imperfections, but disproved the general charges of mismanagement that had been made. The Committee decided in favour of the present system by which loss on the docks is met from profits on other portions of the property. The imports of petroleum declined, owing to the greater competition of Burma oil. The chief improvements in progress were the provision of improved machinery for loading coal, and sanction was given during the year to the construction of a second graving dock, two permanent coal berths, and additional sidings. The number and

Year.	No.	Tonnage.
1889-90	1,038	2,251,000
1897-98	1,235	3,552,000
1898-99	1,297	3,612,000
1899-1900	1,290	3,726,000
1900-01	1,112	4,585,000

tonnage of vessels entering the port in recent years is shown in the margin. In both respects the year's figures, owing chiefly to the military transports for South Africa and China, were the largest recorded. The outstanding debt of the port, including the dock loan of £1,918,000, the consolidated loan from Government of £41,700, and the book debt transferred to the Commissioners in 1871, amounted at the end of the year to £3,164,200, against which are to be set £184,700 at credit of sinking funds, reserve funds £222,000, and value of properties £4,190,000 besides the valuable Strand Bank lands held from the Government.

Rangoon.

The receipts of the port of Rangoon were £95,100, and although £6,700 of this amount, being a Government contribution on account of plague expenditure, cannot be considered as revenue, there is still an increase of 8½ per cent. above the high figure of 1899-1900, due to the continued growth in the import trade. This growth is considerable, whether the year's imports are compared with those of the previous year or with those of 10 years ago. The net tonnage of seagoing vessels entering the port was 1,575,000 tons, against 1,457,000 tons in 1899-1900 and consisted almost entirely of steamers, the number of which rose from 1,034 to 1,114; 118 steamers of tonnage exceeding 4,000 tons entered the port, compared with 100 in the preceding year and only one in 1890-91. A new line of steamers running between Hamburg and Rangoon has recently been established, and accounts to some extent for the increase in entries. The expenditure of the port in 1900-01 was £92,000, or £15,000 more than in 1899-1900, the increase being due to outlay on the purchase of vessels and to larger plague expenses. The Chairman has prepared a note on the administration of the port, with suggestions for improvement, and various engineering schemes are in contemplation. No debt was incurred, and the balance rose from £34,300 to £37,400. The new whole-time Chairman and the Port Engineer were not to take up their duties until after the close of the year under report.

Madras.

The expenditure of the Madras Harbour Trust was £44,800 and its receipts were £56,400, compared with an expenditure of £41,500 and receipts amounting to £41,300 in 1899-1900. The increase in expenditure was very small in comparison with the growth in the receipts. The latter was due to a change of system in the levying of landing, shipping, and portage dues. There was a large growth in the trade of the port, owing chiefly to a heavy increase in the importation of food grains. The number of seagoing vessels, excluding native craft, entering the port was 536, with a tonnage of 1,116,000 tons, compared with 563 of 1,087,500 tons in 1899-1900. All of these vessels were steamships, and seven of them were Government ships or transports. No further advances were made to the Trust during the year; the Trust repaid £6,700 on account of previous advances and spent £14,000 on account of interest. The depth at the entrance to the harbour has been gradually reduced by silting to 38 feet as against 48 feet fifteen years ago. The minimum depth considered requisite is 40 feet, and it is hoped that this may be secured by dredging. A scheme of harbour improvements was under the consideration of the Government.

PORT
TRUSTS.
Karachi.

The income and expenditure of the Karachi Port Trust were respectively £56,000 and £56,200 as compared with £79,400 and £64,800 in the previous year. The decline in the receipts was due to the total failure of the wheat crop. The capital debt of the Trust stood at £356,500 at the end of the year, including £6,700 received during the year on account of a new loan of £13,300. An expenditure of £29,700 was incurred on engineering works, and an amount of dredging considerably greater than in the previous year was effected with the aid of the Hopper dredger. The number of vessels which entered the port, other than native craft, was 445, against 492 in 1899-1900; and, including native craft, the total tonnage was 706,700 tons, compared with about 819,900 tons in the preceding year. Piece goods as usual formed the largest item among the imports, and food grains formed the largest class of exports. The amount of the grain exports was lower than in any year since 1896-97, though higher than the figure of that year.

There are other minor ports at which smaller sums are raised yearly and expended on improvements. The value of the total foreign trade of the five principal ports during the past five years in merchandise only, excluding Government stores, is set forth below:—

Name of Port.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.
	£	£	£	£	£
Bombay	40,011,000	34,709,000	40,387,000	37,646,000	35,672,000
Calcutta	49,841,000	47,997,000	48,553,000	52,826,000	57,346,000
Rangoon	7,506,000	8,232,000	9,360,000	8,118,000	9,312,000
Madras	6,841,000	6,774,000	5,747,000	6,436,000	7,340,000
Karachi	5,582,000	6,152,000	8,600,000	7,034,000	5,253,000

STATEMENT showing the Number of Municipalities in British India, their Receipts and their Expenditure, for the Year 1900-01.

	Bengal.		North-Western Provinces and Oudh.	Punjab.	Burma.	Central Provinces.	Assam.	Madras.		Bombay.	Minor Provinces.	TOTAL.
	Presidency Corporation.	District Municipalities.						Presidency Corporation.	District Municipalities.	Presidency Corporation.	District Municipalities.	
Number of Municipalities	1	155	101	118	42	52	14	1	60	1	165	760
Population within municipal limits*	843,487	2,730,809	3,235,668	2,129,128	902,242	703,511	66,970	509,337	1,913,387	776,006	2,349,729	16,530,017
Receipts:												
Octroi	-	-	180,222	204,491	-	59,738	-	-	-	94,876	152,608	£ 715,861
Other Taxation	320,924	205,911	75,919	15,851	139,665	17,135	7,415	68,883	120,477	390,184	113,716	£ 1,477,370
Revenue sources other than Taxation	46,637	55,459	72,904	92,111	176,277	19,057	8,936	29,940	68,963	71,191	80,417	£ 729,503
Extraordinary and Debt	96,227	30,245	14,305	13,664	118,151	8,833	41	160,179	27,219	1,374,128	51,478	£ 1,901,714
TOTAL (1900-01)	463,788	291,615	313,350	326,150	431,096	104,793	16,382	258,972	216,689	1,939,379	398,219	£ 4,825,048
CORRESPONDING TOTAL (1899-1900)	568,038	280,030	322,253	327,655	318,117	100,129	15,954	257,635	226,463	2,299,478	404,561	£ 5,223,047
Expenditure:												
Cost of Collection and Administration	33,273	26,901	42,823	46,437	25,874	26,998	1,227	7,863	16,328	13,754	81,727	£ 361,455
Public Health and Convenience	202,827	181,226	173,149	141,662	209,633	44,878	13,719	124,509	139,911	396,762	156,523	£ 1,707,723
Public Safety	35,912	17,576	44,444	48,753	23,301	1,386	633	5,169	8,132	57,199	16,254	£ 261,236
Public Instruction	521	8,462	13,691	41,011	17,503	9,673	520	2,121	23,122	7,402	45,802	£ 171,472
Interest and Miscellaneous	112,548	21,379	34,622	33,400	23,398	6,917	553	22,542	13,655	226,493	42,660	£ 543,914
Extraordinary and Debt	125,476	32,829	15,554	12,869	65,544	12,701	94	93,105	19,885	1,301,831	68,459	£ 1,753,434
TOTAL (1900-01)	509,662	291,373	321,283	324,132	365,253	102,563	16,636	255,219	229,563	1,946,501	411,425	£ 4,799,234
CORRESPONDING TOTAL (1899-1900)	613,441	272,211	315,447	324,679	353,650	104,768	16,836	213,702	202,948	2,305,635	445,776	£ 5,230,293

* The population figures are for the most part estimates on the basis of the 1891 Census.

SANITATION.

SANITATION.

(Detailed information on the subjects treated in this and the two succeeding sections 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.)

The health of the European troops in India in 1900 was unfavourably affected by epidemics of cholera, bowel complaints, small pox, and malaria, which prevailed especially in Madras and Bombay. The percentage of admissions to hospital and the constantly sick rate were, it is true, lower than in the preceding year, but the mortality was higher, though still well below the average of recent years. The following table gives details:—

European troops.

Year.	Average Strength.	Ratio per Mille of Strength.			
		Admissions into Hospital.	Constantly Sick.	Deaths.	Invaliding.
1889-1898 (10 years' average)	69,108	1,468	89	16.49	28
1898	67,741	1,437	90	20.05	38
1899	67,697	1,149	73	12.75	32
1900	60,553	1,143	72	14.62	33

The chief causes of admission were, as usual, venereal diseases and ague, which accounted for 26 and 27 per cent. respectively of the total sickness. The ratio of admission on account of the latter disease, 308 per mille of the strength, compared with 235, an unusually low rate, in 1899; venereal diseases showed an admission rate of 298 per mille, against 313 in 1899, 363 in 1898, and 486 in 1897. Enteric fever, hepatic abscess, and cholera were the chief causes of mortality, showing a death-rate of 4.77, 1.57, and 1.45 per mille respectively. Enteric fever alone caused 33 per cent. of the total deaths, but it was very much less prevalent than in 1898, when the death-rate from that cause alone was 10.17 per mille. The admission rate for this disease was 16 per mille, the lowest since the year 1888, owing to there being no drafts of young soldiers from England. It is said, however, that the comparative immunity of older men in respect of this disease is less than has been observed in previous years. Among troops between the ages of 20 and 25 the death-rate from this disease was 6.85 per mille, while among men between the ages of 25 and 30, 30 and 35, or 35 and 40 the mortality equalled 3.65, 2.01, and 3.33 per mille respectively. Of soldiers who had served between one and two years in India the rate was 9.2 per mille, between five and ten years 3.15 per mille. On the whole, the death-rate from enteric fever was lower than in the preceding year. There was only one death from plague, but there were 88 deaths from cholera, during 1900. The latter disease was very prevalent as a consequence of the famine; but the ratios in the case of European troops were less than among the Native troops and the prisoners.

The loss by invaliding during 1900 amounted to 2,026 men, equal to 33.5 per mille of strength, against 2,142 or 31.6 per mille in 1899. Venereal diseases were the cause of invaliding in nearly 19 per cent. of the number of cases, and the next most important cause was malaria. As regards the influence of age and length of residence in India upon invaliding, 21.9 per mille of the men between 30 and 35 years of age were invalided, whilst the figure for those between 20 and 25 was 39.5, and for those over 40 was 48.9 per mille; 26 per mille of men with from four to five years' service were invalided, 47.5 per mille of those with one year, and 27.5 per mille of those with more than ten years' service.

The health of the Native troops in 1900 was also worse than in the preceding year, for the same reasons as those given in the case of the European troops. The details are given below.

SANITATION.

Native troops.

Year.	Average Strength.	Ratio per Mille of Strength.		
		Admissions into Hospital.	Constantly Sick.	Deaths.
1889-1898 (10 years' average)	128,106	917	33	12·7
1898	126,036	816	33	11·07
1899	128,529	705	28	10·7
1900	123,463	785	30	14·04

The native soldier suffered less than the European from enteric fever, hepatic affections, and venereal diseases, equally from small-pox, and more from most of the other diseases. There were smaller admission rates from influenza and respiratory disease, but the ratios for cholera, fevers, tubercle of the lungs, and small-pox were higher. Ague continued to rank first among the causes of admission, and accounted for 41 per cent. of the total. Pneumonia, as usual, was the chief cause of death, but represented a ratio of 3·3 per mille, against 3·9 in 1899. The mortality from fevers other than enteric fever was 2·1 per mille. The death-rate from cholera was very high, 3·2 per mille, and this disease and pneumonia caused 46 per cent. of the total mortality. The death-rate from enteric fever among the Native troops was only 0·15 per mille, as compared with 4·77 among the European troops. The deaths from plague during 1900 numbered 29. The rate of admission to hospital for venereal diseases was 42 per mille.

Jails.

The health of the jail population in 1900 was bad. The rate of admission to hospital was 977 per mille, or about the same as in 1898; the chief causes were dysentery and diarrhoea, which between them accounted for 28 per cent. of the admissions, and ague, which was the cause of 37 per cent. The death-rate was 32·8 per mille, compared with 23·9 in the previous year; it ranged from 19·2 in the inland jails of Burma to 70·9 in those on the western coast of India. The chief causes of death were dysentery, pneumonia, and tubercle of the lungs. The increase in the general jail mortality was due to the conditions created by the famine, which not only lowered the physical condition of the people, but also increased the jail population in the provinces where it prevailed. There were 23 deaths from plague; of small-pox there were 116 cases and 14 deaths; and cholera was more than usually prevalent, causing a mortality of 2·3 per mille. The death-rates in Bengal (39·6 per mille), Burma (21·2), Berar (79·9), Madras (24·7), Bombay (46·8), and the Central Provinces (68·4) all show an increase as compared with 1899, though the Burma rate was the lowest of all provinces.

General population.

The accuracy of the birth and deaths statistics collected with regard to the general population is said to be improving, although the improvement is by

DEATH RATES.

	1899.			1900.		
	In Towns.	Rural.	Total.	In Towns.	Rural.	Total.
Bengal	33·10	31·11	31·21	43·46	35·28	36·63
Assam	37·29	30·87	31·01	35·62	30·48	30·64
North-Western Provinces and Oudh	39·04	32·76	33·19	42·13	30·31	31·13
Punjab	32·58	29·23	29·52	51·55	46·92	47·69
Central Provinces	34·11	27·63	28·09	59·28	56·51	56·75
Berar	42·6	39·5	39·9	87·2	82·1	82·7
Madras	29·1	19·4	20·9	32·6	22·6	23·4
Coorg	35·65	27·24	28·0	52·48	34·83	36·42
Bombay	64·09	31·77	35·72	102·33	65·57	70·07
Lower Burma	34·46	26·23	27·30	32·70	26·71	27·51

no means uniform and much remains to be done. The returns of 1900, now under consideration, were tabulated before the census of 1901, and the ratios are therefore based on the figures of 1891. The provincial death-rates are compared in the marginal table. In every province, except Assam and the North-Western Provinces and Oudh, the death-rate was higher than in the preceding year, though it showed little change in Lower Burma; and only in

the two provinces, Assam and the North-Western Provinces, were the rates lower than the quinquennial averages.

Registered deaths from cholera were much more numerous than in recent years. In 1897 there were 555,035 deaths recorded as due to this cause, and the death-rate was 2·55 per mille; in 1898 the number fell to 152,703, and in 1899 it was only 171,410, the ratio (on the 1891 census population) being 78 per mille. In the year under report the number of deaths was 797,200, and the ratio was 3·7 per mille. Particulars of the plague mortality are given below in a separate chapter. The fever mortality was 22·3, compared with 18·7 in 1899, and with 20 per mille in the five-year period immediately preceding; the number of deaths from this cause rose from 4,126,000 to 4,920,000. The provincial death rates from fevers ranged from 8·1 per mille in Upper Burma and Mysore to 33·4 per mille in the Punjab. The mortality from dysentery and diarrhoea was also higher than in 1899, and was about double the average of the preceding five years; the rate was about 2·4 per mille for the whole of India, compared with 1·14 per mille in 1899.

The birth-rates of the year show a decrease as compared with the previous year, excepting in Madras, Coorg and Lower Burma. The figures are given

	Birth-rates.		
	1899.	1900.	Average of preceding five years.
Bengal	42·96	38·68	35·63
Assam	35·45	34·96	31·58
N.W. P. & Oudh	48·09	40·34	35·69
Punjab	48·4	41·1	42·9
Central Provinces	47·35	31·9	32·14
Berar	59·5	31·3	36·0
Madras	31·3	31·8	28·6
Coorg	25·59	26·25	23·16
Bombay	36·42	26·87	34·41
Lower Burma	37·04	38·37	30·97

in the marginal table. But the rates of the year are in most cases above the low average of the five years 1894-98. The year 1899, as was remarked last year, was distinguished by high birth-rates in most provinces, owing to the cessation of the distress from the earlier famine.

The total number of vaccinations performed among the civil population during 1900-01 was 7,874,000, being a decrease of 251,000 on the previous year's work. Of primary vaccinations, nearly 95 per cent. were successful, and 64 per cent. in the case of re-vaccinations, 31·8 per

mille of the population (census of 1891) having been successfully vaccinated. The number of infants successfully vaccinated was 3,083,000, and of children between one and six years of age 3,129,000.

Some of the important sanitary works which have been completed or were in progress, or under consideration, during 1900, were as follows:—

In Calcutta in the matter of the filtered water supply there is, as last year, nothing to record during the year 1900-01 but the ordinary progress of the existing system. The average daily consumption of filtered water was 20,562,000 gallons; the mains in which this water is conveyed were 316 miles in length. The consumption of unfiltered water was 13,100,000 gallons per diem, or 35 per cent. more than in the previous year. The extension of the unfiltered water supply works was suspended during the year. Work on the suburban drainage scheme adjoining the outfall section was also stopped during the year, as the Commissioners wished to refer the project for expert advice to England. Extensive improvements in the sewage and storm-water outfalls of the town and suburbs were being executed by contractors, and good progress was made during the year. The public sewers in use measured over 200 miles; the drainage of the town proper, as distinguished from the suburbs, is practically complete, and the pipes laid during the year were few. The birth-rate of the year is returned as 12·7 per mille, the death-rate 43·5; but probably many births escape registration.

The municipalities of the interior of Bengal spent 45 per cent. of their income on sanitation in the financial year 1899-1900, the latest year for which report is available, or about the same proportion as in the previous year. The total incomes were, however, so much higher that the actual amount spent on sanitation shows an increase of £12,000. There was no very large expenditure on original work in the direction of water supply or drainage. Various important projects were referred to the Sanitary Board, of which the chief were water supply improvement schemes for the Manicktollah and South Suburban municipalities; drainage schemes for Monghyr, Khulna, Dinajpur, and Rangpur. Repairs and improvements of the Darjeeling Waterworks were estimated for, the amount

SANITATION. being about £13,000, and an estimate of the cost of the Patna water supply was completed. There were 30,134 deaths from plague in Bengal outside Calcutta during 1900, and for the first part of the year plague camps and railway inspection were maintained. Afterwards, in accordance with the findings of the Plague Commission, they were abolished. The towns in which drainage schemes have been carried out numbered six, exclusive of Calcutta, and nine towns have improved water supply.

North-
Western
Provinces
and Oudh.

In the North-Western Provinces and Oudh the municipalities expended £72,100 during the year on the general purposes of conservancy. Nine towns, Agra, Allahabad, Benares, Cawnpore, Lucknow, Meerut, Mussoorie, Dehra Dun and Naini Tal, are now furnished with waterworks and pumping machinery; these towns contain about one-third of the municipal population of the province. Analysis of the filtered water showed good results. At Agra the defects in the water-supply works were remedied during the year; in Benares the large sewerage works were in progress, and £6,600 were spent; in Cawnpore the sewerage scheme was still under consideration; and at Mussoorie measures are being taken to improve the water supply. The Sanitary Board met seven times in the course of the year. Sanitary notebooks have been introduced in 42 districts.

Punjab.

In the Punjab the municipal towns spent nearly 19 per cent. of their income on sanitary objects in the year 1900. The chief water-supply schemes in progress were the extension of the Delhi Waterworks, which is to cost £12,000, and three projects in Simla, estimated to cost in the aggregate £31,000, besides increased reservoirs at Lahore; and a water-supply scheme for Dharamsala was under consideration. Of drainage works, the largest was that at Simla, which is to cost £39,000, just being begun. There are also in progress the three sewage schemes at Lahore, at an estimated cost of £17,800, almost completed, one at Rawalpindi, which will cost about £10,000, and other projects, including the now nearly completed drainage of the Chandri Chauk section of Delhi. Private individuals also spent sums aggregating £7,600 on the construction of various public works, many of them of a sanitary character, during the year, including a school in Rawalpindi. The Sanitary Board met twice; a sanitary engineer was appointed for the province during the year. The system of village sanitary notebooks is in force in every district, and is found to be of considerable value. Rewards are offered to village headmen who have shown conspicuous interest in the sanitation of their villages, and a few villages were recommended for such grants during the year; the points with a view to which these rewards are given are, generally speaking, water supply and surface cleanliness.

Burma.

The municipalities of Burma, including Rangoon, spent nearly 70 per cent. of the income received during the year on sanitation. The recently appointed sanitary engineer submitted five water-supply schemes, of which the following three were of importance:—Myingyan to cost £20,000, Moulmein £62,400, Akyab £26,600. A complete scheme for supplying Mandalay with water at a cost of £80,000 was also in preparation. The Moulmein project was to be financed by a public loan, and to be begun in the ensuing year. A drainage scheme for Kyaiklat, to cost over £20,000, was prepared, but it is probably beyond the means of the municipality. Drainage works and water-supply works were being carried out at Meiktila. No large drainage scheme is at present in progress. A sum of £10,400 was spent on rural sanitation out of the district cess funds. Village sanitation notebooks are in general use, and by their aid permanent sanitary records are to be kept.

Rangoon.

In Rangoon the amount spent out of revenue on sanitary purposes was £61,600, besides £12,600 spent on the reclamation of the eastern portion of the city, making the total so spent up to date about £135,000. The Lanmadaw portion is still very insanitary, and reclamation work will, it is hoped, shortly be begun there. The reclamation scheme is to be financed by the cession by the Government of the townland rents for a period of 50 years to the municipality. A scheme for the removal of rubbish in East Rangoon, put into operation during the preceding year, gave good results. The drainage of the city is on the Shone system, and worked satisfactorily. The two sources of the water-supply have hitherto been the Royal and the Victoria Lakes. But the supply from the former has been so bad that in the year

SANITATION. under report it was finally discontinued, and sanction was given to what is known as the Thamaing scheme, by which a large storage reservoir will be created north of the Victoria Lake. This is to be proceeded with at once. Various tube wells have been sunk, and are said to yield water of good quality. But the supply obtained from them is insufficient for the needs of the town.

Central
Provinces.

Some progress, mostly in the direction of the improvement of the water-supply, was made during the year 1900 in the Central Provinces. The most important works carried out for the improvement of the water-supply were in Nagpur and Khandwa. The Bhandara waterworks were completed, and progress was made with those at Harda. As to improvement of drainage little was done. The year was one of famine, and the waterworks above specified were for the most part carried out by famine labour. In the circumstances which prevailed it is not surprising to find that the share of municipal incomes spent on sanitary objects was 28 per cent., or about 10 per cent. less than in 1899. No new villages were brought under the Village Sanitation Act during the year. Village inspection notebooks have been started in all districts, but little could be done towards keeping them up. The famine was the cause of the short results not only in this direction, but also in respect of the sanitary maps which have been prepared with a view to the collection of vital and sanitary statistics; the introduction of this system had to be postponed.

Assam.

Excluding four towns which have no separate incomes of their own, the municipal authorities in Assam spent 45 per cent. of their income on sanitation in the year 1900. No extensive sanitary work was undertaken during the year, and no scheme of any importance is at present under consideration; but in almost all municipalities small sums were spent on improvements to the drainage and water-supply systems. The sanitary improvements effected in rural tracts were chiefly in the direction of providing a purer water supply by the construction of masonry wells and the excavation of tanks at some of the larger villages. Three meetings of the Sanitary Board were held during the year.

MADRAS.
Madras City.

In Madras city the expenditure provided for water supply, drainage, conservancy and medical services was £105,500, including £21,700 for conservancy and £55,500 for the new drainage system. Drainage works have for some time been in progress at Madras. The Mylapore system on the south of the city was recently completed at a large cost, and now a scheme for the drainage of the city, estimated to cost £215,500, has been taken in hand, and a good deal of work was done on it during the year. A considerable amount will still remain to be done, in respect of the drainage of Black Town, the northern portion of Madras. The quantity of water supplied from the Red Hills Lake was more than two per cent. greater than in the previous year; but the level of the lake was lower at the close of the year than at the beginning. When the drainage has been put in order there will be much to do for the improvement of the water supply, both in quantity and quality. At present all efforts are being concentrated on the drainage. The birth-rate of the town was 45·6 per mille, and the death-rate was 46·2, calculated on the figures of the 1891 census.

Interior of
Madras.

In the Madras Presidency the district municipalities allotted over 60 per cent., and the district boards 5 per cent., of their income for sanitary purposes, but the actual expenditure fell in each case below the amount allotted. A large portion of this expenditure was on conservancy, but the expenditure out of municipal incomes for water supply altogether amounted to £40,200, in addition to that of Madras city. As regards the district municipalities, the sanitary engineer sums up as follows the progress which has been made towards providing them with water supply or drainage. Of the 60 towns, 10 have waterworks, and three have drainage works completed; two have waterworks, and one has drainage works, in progress. Twenty-six towns have water-supply schemes, either under consideration or preparation or suspended; the number of towns in a similar position as regards drainage is 21. The remaining towns have not yet been surveyed with the view of providing waterworks or drainage as the case may be. The waterworks under construction were those for Coconada and Vizagapatam, while a

SANITATION. scheme is about to be carried out at Tuticorin, at a cost of £7,000. Improvements to the Trichinopoly waterworks and to those at Cuddapah were also executed during the year. Surveys and levels were completed for one drainage and three water-supply projects, and one drainage and seven water-supply schemes were prepared. The Sanitary Board had a large number of questions before them, including that of the drainage of Ootacamund where the main sewer is supposed to be defective. The expenditure on municipal sanitation was 17 per cent. below that of 1899-1900. The progress made in the maintenance of village inspection books is satisfactory, though in some districts the village or union officials had either neglected or were unable to fill in the records.

BOMBAY.
Bombay
City.

In Bombay city the supply and erection of machinery for the Parel sewage district was completed, at a cost of £54,600. Tenders were accepted for, and work begun on, three other minor drainage improvement schemes; but the scheme for subsoil and surface drainage sanctioned in April 1900 has not yet been put into execution. Owing to the early cessation of the rainfall, the water in the lakes from which the city takes its supply fell to a low level, but the supply was sufficient. The municipality spent out of revenue £108,800 on public works, including roads, and £144,600 on public health, while £48,000 were spent out of loan funds on sewerage and £6,000 on minor sanitary works. The total expenditure on plague during the year was £49,300. The plague deaths during the calendar year 1900 were 13,285, and the total mortality reached the very high figure of ten per cent. The European death-rate was 26·9 per mille. A short account of the work of the Bombay City Improvement Trust, which has been created for the ventilation of densely inhabited parts, the removal of insanitary dwellings, and the prevention of overcrowding, is given under the heading "Municipalities."

Interior of
Bombay.

In the other municipalities of the Presidency 21 per cent. of the income was spent on sanitary purposes; and 7 per cent. by the local boards. The whole expenditure on sanitary purposes was £178,000, or much the same as in the previous year. The large expenditure on plague precautions checked the prosecution of sanitary works; drainage schemes at Hyderabad and Ahmedabad, waterworks at Kaira, Mehmudabad and Hyderabad, and water supply and drainage projects at Poona, were under consideration; but until the pressure of plague and famine has passed away funds are not likely to be available for their execution. The waterworks at Yeola, which had been half completed, have been practically at a standstill for two years. The Bombay Village Sanitation Act was introduced in one other village during 1900, making a total of 301 villages now under its provisions. The Act provides for the establishment of a sanitary committee or a sanitary board, consisting of members chosen by the collector of the district or by the Local Government, to supervise sanitary matters. Village sanitary inspection books were in use in 3,356 villages.

Berar.

The municipalities of Berar spent about 45 per cent. of their estimated income on sanitation in 1900. No new works of importance were in progress during the year as, owing to the famine, the outbreak of epidemic cholera, and the plague prevention measures, the available funds were not forthcoming. Plans are being constructed for a drainage scheme at Ellichpur city. The District Sanitary Boards met once at each of the six head-quarter stations. The sanitary survey of selected towns and large villages made fair progress, and the number of towns now surveyed is 37, and of villages 1,262, leaving two towns and 3,981 villages still to be surveyed. The suggestions made for improvements, as a result of the survey, caused the expenditure of £500 during the year by district boards, but in many cases they could not be put into effect owing to lack of funds.

HOSPITALS, DISPENSARIES AND LEPER ASYLUMS.

There are in India, besides the large hospitals in presidency and other important towns, a number of dispensaries which are maintained for the most part at the expense of municipal or local bodies. These are the chief agencies for the medical attendance of the rural population, but there is a large number

of missionary dispensaries in many provinces, for which no statistics are available; and an attempt is being made in a district of Bengal to deal with the question by issuing simple medicine chests to headmen of villages remote from dispensaries. The latter, however, is as yet only in the position of an experiment.

The hospitals in the larger towns are in many cases on an important scale, as, for instance, the Campbell hospital at Calcutta, with its 752 beds and a daily average of 463 in-patients in 1900, the Sir J. Jijibhoy hospital in Bombay City with 352 beds, the Government General hospital at Madras with 500 beds, the Mayo hospital at Lahore with 149 beds, the Rangoon General hospital with 461 beds, and others. The expenses are met to a large extent by the State, especially in the presidency towns, and State subventions are frequently given to dispensaries supported by local funds or private subscriptions. In Calcutta, the Government paid £50,700 out of a total expenditure of £68,000; in Bombay City, nearly £20,000 out of £32,600; in Madras City, £20,700 out of £27,800. Elsewhere, however, the chief contributions are from local funds; of the £67,900 received by the Madras dispensaries in the interior, £57,700 came from local funds; in Burma, out of £47,300, two-thirds came from local funds, and so on. Private subscriptions do not form a large proportion of the receipts; in Calcutta they amounted to £817 in the year 1900; in the rest of Bengal, including chiefly amounts received from native donors, to £20,700; and in the North-Western Provinces and Oudh to £7,200; elsewhere the amounts were smaller.

The year under notice shows a continued increase in the number of patients in attendance at the hospitals and dispensaries, and the increase points to the growing popularity of these institutions. There is, however, an enormous mass of disease and sickness in India, which is as yet untouched by any hospitals or dispensaries.

At the leper hospital in Madras 788 patients were under treatment during the year 1900. At the seven leper asylums in the Punjab 745 lepers were treated. At the Sylhet leper asylum in Assam, which was opened in 1898, the number of lepers treated during 1900 was 22. But besides the cases admitted to, or treated at, special leper hospitals or asylums, a large number of leprosy cases are dealt with each year at the dispensaries.

LUNATIC ASYLUMS.

In Bengal there are five lunatic asylums for natives of India situated at Dullunda, Dacca, Patna, Cuttack and Berhampore. The number of patients in these institutions on the 31st December 1900 was 906; of whom 738 were males and 168 females. The daily average strength of the several asylums during the year was as follows:—Dullunda, 232·56; Dacca, 232·08; Patna, 218·61; Cuttack, 44·32; Berhampore, 170·56. The total number of criminal lunatics in the five asylums on 31st December was 482, of whom 431 were males and 51 females. The total lunatic population for the year was 1,123, as compared with 1,131 in 1899. Admissions and re-admissions totalled 234, as against 220, but the number discharged declined from 155 to 121. Of the total admissions the cause of insanity could only be traced in 80 cases; in 58 of these it was physical, ganja smoking being a potent factor in the majority of cases. The improvement in the health of the inmates, which had taken place in the two previous years, was not maintained, and the number of admissions to hospital rose from 576 to 962. The death rate increased slightly from 9·63 to 10·68 per cent.

The total expenditure on asylums for the year amounted to £6,713.

In the European lunatic asylum at Bhowanipore the number of patients remaining at the close of the year was 37. Admissions declined from 19 (in 1899) to 16. Four persons were discharged cured, and 7 transferred to the care of friends, while deaths numbered 4, as in the preceding year. The expenditure on this asylum was £2,005.

The population of the four lunatic asylums in these provinces (viz., North-Bareilly, Benares, Agra, and Lucknow) was practically stationary, numbering 1,112 at the close of the year, as compared with 1,115 at the end of 1899.

North-
Western
Provinces
and Oudh.

SANITATION. The daily average strength of the several institutions was as follows:—Bareilly, 320·04; Benares, 297·61; Agra, 255·67; Lucknow, 250·72. The number of admissions during the year was 243, including 15 cases of re-admission; 133 (as against 124) persons were discharged cured, while 28 were made over to friends; no escapes are recorded. Deaths totalled 82, or 7·29 per cent. of the lunatic population. The mortality in the Bareilly Asylum showed a considerable increase. There were on the 31st December 1900, 7 European or Eurasian lunatics in the Bareilly Asylum, 8 in that at Benares, and one at Agra. The buildings erected at Agra are under preparation for the reception of all European and Eurasian lunatics. The number of criminal lunatics remaining at the close of the year was 252, as against 242 in 1899. Admissions during the year numbered 66, and deaths 20.

The causes of insanity were recorded in 50·37 per cent. of the total lunatic population. In about 76·5 per cent. of these cases it was attributed to physical causes.

The expenditure on construction and repairs was £858, and on the maintenance of lunatics £5,438.

Punjab.

The new "Punjab Lunatic Asylum" was opened on the 1st March 1900, 455 patients being transferred thereto from the Lahore and Delhi Asylums, both of which were permanently closed. New admissions between the above date and the close of the year numbered 127; patients discharged totalled 57, while 44 deaths were recorded. The number of lunatics remaining on the 31st December 1900 thus amounted to 482.

The total lunatic population for the year was 608 (487 males and 121 females), and the daily average strength was 471·89, as compared with 438·83 in 1899; 384 patients were admitted to hospital during the year; 38 criminal lunatics were admitted in the course of the year, of whom 6 died, and 14 were transferred, leaving a total of 101 at the close of the year.

The total expenditure for 1900 amounted to £3,953.

Bombay.

There are six lunatic asylums in the Bombay Presidency (including Sind). Their total population during the year under report was 1,089, of whom 592 were Hindus, 238 Muhammadans, 186 Christians,* 63 Parsis, and 10 of other religions. The total was 25 less than that recorded for 1899. During the year 285 lunatics were admitted, 78 were discharged, 113 were transferred to friends, and 139 died. The daily average population was 779 (as against 795), including 107 criminal lunatics. There were 543 patients in hospital, as compared with 458 in the previous year, while the number of deaths increased by 53. The rise in these figures was largely due to an outbreak of cholera in four asylums, and to an increased number of cases of diarrhoea. According to such information as could be obtained, insanity was attributable in 140 cases to moral, and in 443 cases to physical, causes. The latter class included 142 cases ascribed to narcotics and intoxicating drinks.

The total expenditure amounted to £10,768 as against £10,124 in 1899.

Madras.

As in the previous year, there were in the Presidency three asylums—at Madras, Calicut, and Vizagapatam. The patients under treatment numbered 554 at the beginning and 559 at the close of the year. There were 161 admissions, 117 discharges, and 39 deaths. The daily average percentage of sick was 74·22 of the total as compared with 81·34 per cent. in 1899. The number of criminal lunatics admitted rose from 29 to 34, while of the total admissions during the year 104 were between the ages of 20 and 40, and 44 between 40 and 60.

The net expenditure declined from £5,721 to £5,239.

Central Provinces.

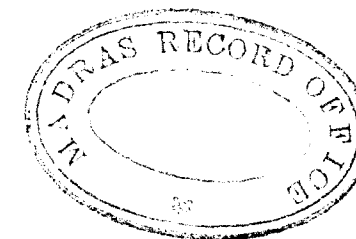
The two lunatic asylums in the Central Provinces are situated at Nagpur and Jubbulpore. The total population of these asylums rose during the year from 340 to 393. There were 53 admissions, 23 deaths, and 58 discharges. The health of lunatics was hardly so satisfactory as in 1899, and there was a rise both in the number of admissions to hospital and in the death rate. The total number of criminal lunatics remaining at the close of the year was 83. Of the admissions for the year, 50 per cent. were ascribed to physical causes.

* Of these, 97 were Europeans and Eurasians; this comparatively large number is due to the fact that all European lunatics (chiefly soldiers), whom it is intended to transfer to Europe, are received at Bombay prior to embarkation.

The total expenditure for the year was £2,475 as compared with £2,265 in 1899. **SANITATION.**

There is one lunatic asylum in the province of Assam, situated at Tezpur. During the year 31 patients (23 men and 8 women) were admitted. 16 persons were discharged (14 cured and 2 improved), 17 died and 3 escaped, leaving at the close of the year 114 inmates (89 men and 25 women) as against 119 at the end of 1899. Of these, 31 men and 3 women were criminal lunatics.

The total expenditure for the year (excluding about £8 covered by receipts from paying patients) was £933 as against £808 in 1899. This rise was due to increased outlay for repairs and maintenance.



CHAPTER IIa.

FAMINE AND PLAGUE.

The progress and prosperity of India have been materially affected in recent years by famine and plague. Some short account of these disasters must find place in the present Statement, and the narrative is brought down to the end of 1901.

FAMINE.

FAMINE.

No attempt will be made to give a detailed account of the famine in 1901, as a further selection of correspondence containing abundant details is about to be published, and will bring the information down to the month of December 1901. In last year's issue of this Statement the account of the famine was brought down to the end of 1900. The famine of 1899-1900 was caused by an extraordinary failure of the monsoon rains of 1899 over the greater part of Western and Central India, by which calamity the autumn harvest of 1899 and the spring harvest of 1900 were destroyed in a great part of the Bombay Presidency, the Central Provinces, Berar and the Punjab, and in many Native States in Rajputana, Central India, Kathiawar and the Deccan. The monsoon rains of 1900 were late, but fairly good over the greater part of the affected area, though they were defective in the Gujarat districts of Bombay and in the Native territory contiguous to them. In consequence of this amelioration of the agricultural position, famine relief rapidly contracted in the last months of 1900. In the beginning of January 1901 the number of persons on relief in British India had fallen to 192,000, and the corresponding number in Native territory stood at 33,000. The following table shows the course of relief during 1901 and in the first quarter of 1902:—

NUMBERS ON RELIEF (*in Thousands*).

	End of March 1901.	End of May 1901.	Maximum, 13th July 1901.	End of July 1901.	End of October 1901.	End of December 1901.	End of March 1902.
Bombay - - -	184	366	486	455	162	61	242
Bombay Native States - -	17	33	50	42	19	23	44
Baroda - - -	14	26	31	32	27	30	32
Hyderabad - - -	—	23	13	9	—	—	—
Madras - - -	4	5	3	3	3	—	—
Central India States - -	3	5	1	5	—	—	30
Central Provinces - - -	—	2	4	4	—	—	—
Punjab - - -	—	—	—	—	—	1	2
Mysore - - -	—	—	—	3	—	1	—
Rajputana - - -	—	—	—	—	—	1	35
Ajmere Merwara - - -	—	—	—	—	—	—	10
Total British India -	188	373	493	462	165	62	254
Total Native States -	34	87	95	91	46	55	141
GRAND TOTAL -	222	460	588	553	211	117	395

Up to the end of May 1901 the relief statistics indicate the distress arising from the partial failure of the rains of 1900 in the Bombay Presidency and the adjacent Native States. The relief reached its maximum in the middle of July. Prices did not attain the high figures which were recorded in the preceding year. In Gujarat and Khandesh they were, in July, 100 per cent. below the rates of 1900, and were nowhere less than 25 per cent below them. The death rate of the Bombay Presidency was below normal, being less than 2 per mille for the month of June in six districts, and rising to 4 per mille in Dharwar only. These rates for the month would be equivalent to annual rates of 24 and 48 per mille respectively. The decline in the figures in the latter part of July was the natural result of the arrival of the monsoon season, though the setting in of the rains was much

FAMINE.

delayed in Gujarat. Unfortunately, the monsoon in Western India and Rajputana showed signs of weakness in August and terminated before the usual time. The autumn harvest in Gujarat and in the Bombay Deccan was again poor, and the spring crops of the year 1902 are reported to be equally bad. The same is the case in the Native States of Kathiawar and Baroda, and in a number of states in Rajputana and Central India. The numbers on relief have again risen, and it is anticipated that distress in these districts will continue until the setting in of the rains in the middle of the present year. Great damage to the crops has also been caused in Gujarat by field rats, which, owing to the dryness of the season, have multiplied to an extraordinary extent, defying all efforts which have been made to exterminate them. The cultivators have been stimulated by liberal rewards to destroy them, but with comparatively little success. Similar plagues of rats have occurred in India in years of similarly deficient rainfall, and have disappeared with the return of normal seasons.

The direct cost of famine in British India during 1900-01 is stated as follows. The indirect cost must necessarily escape accurate calculation:—

	£
Famine relief - - - -	4,225,000
Remissions and suspensions of land revenue and provincial rates - - -	981,000
Compensation for dearness of provisions and other charges - - - -	440,000
Total - - - -	£5,646,000

In addition to the above there were provided in the same year:—

	£
Loans to Native States - - - -	2,740,000
Special agricultural advances - - -	947,000
Total - - - -	£3,687,000

In the year 1901-02 the direct expenditure on famine relief has been £556,000. There has also been other expenditure on agricultural advances and in loans to Native States. The following passage in the Statement made in March 1902 by the Finance Minister on the budget of that year summarises the total outlay on account of the famine under all heads in 1901-02 and the anticipated demands on this account in 1902-03:—

“The monsoon, last season, was in general fairly favourable, but in some large tracts, particularly in Rajputana and Gujarat, the rains were sadly insufficient for agricultural needs; and although, fortunately, fodder has been fairly plentiful, the serious failure in food-crops has been a severe trial to the already impoverished population. As a result of this renewed calamity, there have naturally been further imperative calls for assistance from the Government of India. A considerable portion of the distressed area lies within territories under the rule of Indian princes, and we have felt it to be a duty to give assistance alike to the sufferers under Native rule and to those directly under British administration. To Native States, during the past year, we have made advances amounting to £597,400, besides accepting demands from local governments amounting to £556,200, of which Bombay Presidency received £533,800. The total outlay amounted to £1,153,600. Further, as regards next year's budget, we have estimated for charges on account of direct famine relief amounting to £423,200, which, with £93,900 assigned to the construction of protective irrigation works, £474,200 reserved for avoidance of debt, and the estimated loss of £8,700 on the Bengal-Nagpur Railway, makes up the total charge of £1,000,000 on Famine Relief and Insurance.”

In the budget for 1902-03 the Government of India, in view of an anticipated surplus of revenue over expenditure, have made provision for a final remission of famine arrears of land revenue aggregating £1,321,500.

FAMINE.

These suspensions of land revenue, if it had been determined to collect them, or, rather, such part of them as would not have proved finally irrecoverable in any case, would have been collected gradually in the course of the next three or four years. The remissions have been distributed as follows over the several provinces:—

	£
Central Provinces - - - - -	133,300
United Provinces of Agra and Oudh (North Western Provinces and Oudh) - - -	42,500
Punjab - - - - -	262,000
Bombay - - - - -	866,700
Ajmere - - - - -	17,000
	£1,321,500

With regard to these remissions the Finance Minister observed: "Our object has been to make sure that the bounty which fortunate financial circumstances have enabled us to distribute should directly reach the pockets of those classes most in need of assistance, or be devoted to objects from which they must directly benefit. The earnest attention both of the Government of India and of the local governments and administrations whom we consulted has been given to the question of attaining the end we have in view. Fortune has given us a unique opportunity, and we have spared no pains to make the best of it.

"Though convinced of the leniency of the land assessment, under fairly normal conditions, we are regretfully aware that the ryot has not yet been educated up to the point of realising the full necessity of husbanding his resources in prosperous seasons so as to be able to meet the stress of hard times. We hope by the introduction of a system of mutual credit . . . to find a gradual remedy for this evil, but meanwhile we have to deal with the situation as it exists, and we believe that no more direct benefit could be conferred on impoverished ryots than will be directly realised from such a very substantial measure of relief from present and future burdens as the final remission of all arrears of land assessment in the more sorely tried districts."

The Famine Commission, appointed, as reported in last year's issue of this Statement, under the presidency of Sir A. P. Macdonell, submitted a report during 1901. Reviewing the extent of the famine of 1899-1900, and the way in which it was dealt with, the Commissioners state that the area seriously affected in British India was 175,000 square miles, with a population of 25 millions. Over large areas the conditions were those of scarcity rather than famine; but the difficulties were aggravated by the failure over wide areas of the water supply, and by a fodder famine, especially in Bombay. The most distinctive feature from the administrative point of view was the number of persons who came on relief, amounting at the beginning of August 1900, the time of greatest pressure, to 22·3 per cent. of the population of the affected tracts in the Central Provinces, 12·8 per cent. in Berar, 16·4 per cent. in Bombay, 16·2 per cent. in Ajmere, and 9·9 per cent. in the Punjab. The Commissioners examine the mortality statistics in some detail, and conclude that portion of their report by the calculation that the number of reported deaths from all causes in 1900 in the famine-affected tracts exceeds by about 1¼ millions the average for the last 10 years. "But although," they say, "we can make no statement with authority as to the proportion of the million and a quarter excess deaths which should be allotted to the population of British districts and Native States respectively, the impression which the evidence as a whole leaves upon our minds is that one million excess deaths occurred among British subjects. Of the total excess mortality we consider that at least one-fifth was due to cholera." The recommendations made include a large number of points in the working of the famine relief system, which the Government of India have, with one or two reservations, accepted as principles of famine policy in the future. On the subject of remissions of land revenue the Commissioners insist on the importance of an early announcement of the Government of its intentions; they are of opinion, however, that the demands of Government for revenue were, save in

FAMINE.

Berar, no larger than was consistent with a policy of great liberality. They consider that the revenue is nowhere sufficiently high to be in itself a cause of indebtedness, but that its levy in cash in seasons of deficient crops, among a people who have still to learn the value of thrift, undoubtedly strains their resources and leads to borrowing, which in a succession of bad seasons may end in heavy indebtedness.

Further, the Report contains a series of important suggestions for the improvement of the condition of the agricultural classes. It recommends greater elasticity in revenue collection generally, and particularly in the districts of the Bombay Deccan; the establishment of agricultural banks; the encouragement of land improvement; the expenditure of a larger share of State funds on irrigation works, and, generally, wider attention to measures for increasing the knowledge, the intelligence, and the thrift of cultivators. Particular attention is invited to the indebtedness which fetters the cultivating classes in the Bombay Deccan, and has brought a large proportion of them under the control of the money-lending interest; and measures of reform are advocated.

PLAGUE.

PLAGUE.

The Indian plague epidemic began at Bombay in September 1896; and last year's Statement brought the plague narrative down to the end of March 1901. Reported deaths from plague in the Bombay Presidency had then reached a total of 336,000, while in other parts of India 144,000 deaths from plague had been reported; and it was surmised that, making allowance for unreported deaths, the total deaths from plague in British India and Native States from the beginning until April 1901 might have reached 600,000 in all.

In the year 1901 the plague epidemic in Bombay city is reported to have caused considerably more deaths than in 1900; plague was more prevalent in the spring, and it continued to show a high number of deaths almost throughout the year. It is, however, satisfactory to observe that the Bombay city figures for the recurrence of plague in the spring of 1902 are not so high as those for the corresponding season of 1901. But against this improvement are to be set great epidemics in the latter half of the year in the Satara, Dharwar, Belgaum and Kolhapur districts, and another outbreak in Poona. At the end of the year 1901 and in the beginning of 1902 there were few large tracts of the Presidency in which plague did not exist. The reported plague deaths during 1901 in Bombay city were 18,925, as compared with 13,247 in 1900 and 15,692 in 1899. For the whole of the Bombay Presidency there was a great increase in the number of reported deaths from plague, thus:—

Total reported plague deaths in British districts and Native States of Bombay from September 1896 to December - - - 1897 -	57,943
Total during 1898 -	104,881
Total during 1899 -	117,176
Total during 1900 -	38,345
Total during 1901 -	155,658

The first three months of 1902 show 62,667 reported plague deaths, compared with 17,806 in the corresponding period of 1901. But, considerable as has been the extension of plague in the Bombay presidency, the returns for other parts of India show a corresponding increase. In Calcutta the actual number of plague deaths in 1901 was less than in 1900, although the figures for March, when the epidemic was at its height, were rather worse than in March 1900. But in the Bengal districts of Patna and Saran, and to a less degree in Monghyr, Shahabad and Darbhanga, plague was prevalent up to the beginning of May 1901. The early months of 1902 have fortunately not shown any epidemic in Bengal to compare with that of 1901. In the Central Provinces the disease, which never attained large proportions, seemed almost eradicated until March 1902, when there was a slight recrudescence. In the Hyderabad State there was a satisfactory decline, and in Mysore the figure for 1901, though high (11,697), was rather lower than in 1900. In the first quarter of 1902, however, the disease has shown increased activity in Hyderabad and Mysore. In the North-Western Provinces and

PLAGUE.

Oudh there were two epidemics, of which the second, still in progress in March 1902, had attained large proportions. The same is, to a less degree, true of the Madras Presidency. It is in the Punjab, however, that the greatest development of the disease has occurred. The reported plague deaths in this province for 1901 were 15,245, against 515 in 1900, and in the first months of 1902 the figures have risen to an unprecedented extent. In March, not to speak of more recent months, the reported number was 42,788.

Comparative figures of the plague mortality in the Bombay presidency have already been given; for the rest of India the corresponding figures are :—

Province or Region.	Reported Deaths from Plague.				
	1898.	1899.	1900.	1901.	Three Months of 1902.
Bengal - - - -	166	3,288	37,265	77,917	11,655
Madras - - - -	490	1,817	667	2,355	6,016
Punjab - - - -	1,871	253	522	15,245	69,010
North-Western Provinces and Oudh	116	6	116	8,124	15,869
Central Provinces - - -	103	522	595	9	59
Rajputana States - - -	118	23	10	191	13
Hyderabad State - - -	3,945	4,359	805	95	1,180
Other Provinces and States, chiefly Kashmir.	9	15	25	2,035	3,930
Total - - - -	13,206	16,912	52,272	117,668	114,395

Up to the end of March 1902 the total reported deaths from plague have been 536,600 in the Bombay Presidency, and 315,400 for other parts of India, or 852,000 for the whole of British India and Native States. Perhaps, if allowance be made for untraced and unreported plague deaths, the total plague deaths for India up to March 1902 may reach nearly to one million.

In accordance with the advice of the Plague Commission, the measures for checking movements of the people from and to the plague-stricken towns and districts have been relaxed; so also have the rules regarding the segregation of infected people and the removal of the sick from their homes. Measures for thoroughly disinfecting infected houses, persons and goods, and for cleansing places liable to infection, have been vigorously prosecuted; arrangements for treating the sick have been further improved, and the employment of Haffkine's prophylactic treatment has been extended. There has been no relaxation of the care and diligence with which all out-going vessels, crews, and passengers are examined at plague-infected ports, whereby the departure of infected or suspected goods or persons is prevented. Under this procedure the number of persons medically inspected (in some cases two or three times before departure) at the port of Bombay alone, during 1900, the latest year for which figures are available, was 1,173,000.

The report of the Plague Commission has now been published. The questions referred to the Commissioners by the Government of India were: (1) the origin of the different outbreaks of plague; (2) the manner in which the disease is communicated; (3) the effects of curative serum, and (4) the effects of preventive inoculation; the object of the appointment being an investigation of a scientific character. The Commissioners found, however, that it was impossible to report fully on the matter without dealing with plague administration. They therefore included in the Report, besides chapters on the four subjects mentioned above, a discussion of the measures for the suppression of plague and on the organisation of the Sanitary Department in India. It is impossible within present limits to do more than indicate the general trend of the various recommendations and opinions

PLAGUE.

recorded by the Commission. They describe the origin and growth of the epidemic, and the character of the disease. They state that no case is established in which the incubation period was longer than five days, and deal with the various means of its conveyance by land and sea. In regard to Haffkine's preventive inoculation vaccine, they hold that it confers a protection which lasts certainly for some weeks, possibly for a number of months. They consider that, on the whole, a certain amount of advantage accrued by the use of the curative sera of Yersin and Lustig, but they do not recommend the extension of the treatment in the existing state of knowledge on the subject. With regard to measures for the suppression of plague the Commission give it as their opinion that the measures likely to be most successful are those adopted in all countries for infectious disease in general. They recommend for towns the measures of disinfection, preventive inoculation, and possibly isolation of the sick and the evacuation of specially infected quarters. In respect of villages, they advise less active measures, on the ground that the available staff and plant would be insufficient. The President, Professor Fraser, has made a more precise statement of the measures which he would recommend in an appendix attached to the Report.

CHAPTER III.

JUSTICE AND POLICE.

CRIME AND POLICE.

CRIME AND
POLICE.
Bengal.

The police of Bengal are divided into four separate bodies : the town police of Calcutta and other towns, the district police, the railway police, and the military police. The last form an armed reserve to deal with any serious or organised disturbances that may arise, and during 1900 detachments from three out of the four companies were sent to Ranchi in connection with the disturbances which occurred in Chutia Nagpur among the Munda population. Even in 1899 the Government of Bengal considered the police force of the province to be undermanned both in the superior and subordinate grades; and during the year under review plague, census and, in some places, scarcity added to the difficulties against which the police had to contend. The whole question of the police administration of the province is under the consideration of the Government, and a comprehensive scheme for its improvement is in the course of preparation.

The total strength of the police force in the town of Calcutta and its suburbs was, at the close of the year, 3,296; the strength of the superior staff of the District Executive Police throughout the province was the same as in 1899, that the subordinate staff rose from 23,695 to 23,763. Military police numbered 393 and railway police 830, while the sanctioned strength of the town police (apart from the Calcutta force) showed an increase of 1 head constable and 28 constables on the figures of 1899. The question of the improvement of the *chaukidars* or village watch is engaging the active attention of the Government of Bengal; the pay of these watchmen is small, and the classes from which they are drawn generally poor and ill-educated. A better organisation, bringing them into closer relations with the regular police, is being introduced, and the Local Government has inculcated the advantage of recognising good work by more frequent payment of rewards, while at the same time punishing misconduct. During the year under notice only 7·9 per cent. of the force were rewarded, while 41·1 per cent. were fined for misconduct. The *dafadar* system has now been fully established, and appears to be working well; but in order to obtain men of the right stamp it is essential that the *dafadars* should be more highly paid and treated with greater consideration than the rest of the *chaukidars*.

The work of the police was, on the whole, disappointing, and better results might have been anticipated in spite of the difficulties referred to above and the considerable increase in the volume of crime that took place. On the whole, they failed conspicuously in dacoity and burglary cases. The percentage of convictions to true cases reported fell to 36·3, the lowest figure recorded for the last eight years. In Sessions cases the percentage of convictions also decreased. As regards the conduct of the force, there were 4 cases of torture and a considerable number of extortion, though the improvement of recent years in this respect was maintained. The number of judicial punishments of members of the police rose slightly during the year, but the number of fines inflicted departmentally decreased to a most satisfactory extent.

The total number of cognisable* crimes reported in the province rose from 167,642 to 178,896, of which 110,462 were investigated by the police. There was an increase of 8,107 in non-cognisable crimes. Riots declined from 2,194 to 1,989, the lowest figure returned during the last decade; but riots ending in loss of life increased in number. Serious offences against person and property were also more numerous. It is remarked that of the murder and grievous hurt cases reported only about 32 per cent. resulted in conviction. In the towns and suburbs of Calcutta cognisable crimes totalled 38,353 and non-cognisable crimes 35,053, as compared with 34,282 and 41,790 respectively, in the previous year. Several of the dacoities committed in the province were traced to gangs resident in Calcutta, which clearly indicates the necessity for a closer communication between the city and district police.

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

CRIME AND
POLICE.
N.W.P. and
Oudh.

The total volume of crime reported in the North-West Province and Oudh during the year shows an increase of 17 per cent. on the returns for 1899. The agricultural conditions of the year were not favourable in certain tracts, while prices ruled high throughout the provinces, owing to the export of grain to other parts of India where famine prevailed. The result was pressure on the poorer classes, which is accurately reflected in the increased number of offences against property. It worthy of remark that (if offences against sanitary and local laws be excluded) the increase in burglaries and thefts accounts for 90 per cent. of the net increase of crime over the figures of the previous year. It is also, no doubt, true that the higher figures recorded are, in some measure, due to improved reporting, and do not therefore fairly represent the actual increase in criminality.

Of the total number of cognisable crimes reported (217,336, as against 185,613 in 1899), the police investigated 48 per cent., and in 48·2 per cent. refused enquiry. Of cases investigated, 60·4 per cent. were sent before the magistrates, and in 31·3 per cent. no clue was obtained. Convictions were obtained in 85 per cent. of the cases sent up—a slight improvement on the figures of 1899.

The returns of non-cognisable crime show a rise of nearly 6 per cent. on those for 1899. The main increase, however, was in offences against municipal bye-laws, and against local and special laws, matters which do not indicate increased criminality in the ordinary acceptance of the term. The most unsatisfactory feature of the year was the increase in dacoity. Doubtless many of the cases were technical dacoities only, but no fewer than 151 true dacoities were committed by armed gangs. Two of these gangs have now been broken up, and there is therefore reason to hope that the returns for 1901 will show a decrease in organised crime of this nature. The three worst districts for cases of a professional type, in which arms were used, were Aligarh, Jhānsi and Agra, of which the last two border on native states. Strong measures for the suppression of dacoity were taken before the close of the year, and resulted in the arrest of some of the leaders of the gangs. In other cases, however, the police were less successful than might have been expected, though they had to contend with the evident connivance of the zamindārs of the village where two noted ringleaders had been harboured.

Cases of robbery and rioting declined during the year; murders were almost stationary both in respect of the number reported and the success obtained in their prosecution.

The total strength of the provincial police in 1900 was 24,020; of the municipal and cantonment police, 2,213; and of the railway police, 916. In addition there were 635 *jamadārs* and 6,932 *chaukidars* employed in municipalities and in towns administered under Act XX. of 1856. The actual expenditure during the calendar year of 1900 on all classes of police was £540,148. Some progress was made in raising the pay of the town police, and in substituting village *chaukidars* paid in cash for the *jāgīr* system in Oudh. The punishment roll of police officers was lower than that in the previous year, particularly in the case of departmental dismissals. There was, however, an increase in the number of judicial punishments. Charges of torture declined from eight to five, of which two were brought home to the offenders. The list of rewards, either by promotion or in cash, was smaller than in 1899.

The sanctioned strength of the police force in the Punjab was 20,462, the cost being £246,766. Discipline was well maintained during the year; the total number of punishments inflicted on members of the force declined from 2,153 to 2,042, 158 men being punished judicially and 1,884 departmentally. The number of literate officers and men showed an increase on the figures for the preceding year. In all, literate officers formed 82 per cent. and literate constables 21 per cent., respectively, of the total strength.

The increase in serious crime noticed in the report for the previous year continued during 1900. Robberies and dacoities increased in number, but the strong measures that have been adopted have, it is hoped, stamped out the outburst of criminality to which this increase was due. The working of the police showed a distinct improvement as compared with the record of recent years; 61,980 cases were reported to the police during the year under review, and of these investigation was refused in 796 cases; 501 cases

CRIME AND
POLICE.

were investigated under magistrates' orders after investigation had been at first refused. The total number of cases exceeded that recorded for 1899 by 2,291, the increase being entirely under the head of offences against property; other cases decreased. Offences against the State, public tranquility, &c., against property and against the person totalled 42,929. In these cases the percentage of convictions obtained by the police was 35 as compared with 30 in 1899, while the percentage of persons convicted to the number arrested by the police was 61 as against 54 in the previous year. The percentage of property recovered to the total stolen fell from 42 to 39.

Burma.

The sanctioned strength of the civil police in Burma was almost the same as in the previous year, the only material change being in the railway police, the strength of which was slightly augmented in consequence of extensions of the open line and increase of passenger traffic. The higher grades of police officers were revised, the pay of the Deputy Inspector-General was increased, and concessions in respect of allowances granted in some cases. In consequence of these much-needed improvements the cost of the force was one per cent. higher than in 1899. The conduct and discipline of the force, if judged by the number of dismissals and desertions, were less satisfactory than in the preceding year, but the rise in the figures seems to have been due to some extent to more accurate returns. Recruiting was more successful, and the force of the province was only about three per cent. below strength at the close of the year. The proportion of illiterate members of the force declined from 18·17 to 16·96 per cent.

There was a large decrease in cognisable crime; the total number of cases reported was 40,380 (including Rangoon Town), of which the police investigated 97 per cent. Robberies and thefts of all kinds fell off, but cases of serious hurt continued to increase. Violent crime, on the other hand, declined; the aggregate number of violent crimes for the whole province (exclusive of simple murders and cognate offences and of cases of house-breaking) was 310 as compared with 336 in 1899. Detection of violent crime, however, hardly showed a corresponding improvement. Marked success was attained in the suppression of cattle-theft. There were fewer prosecutions under the preventive sections of the Code of Criminal Procedure, and the proportion of prosecutions was slightly lower than in 1899. The systematic application of the preventive sections played an important part in the reduction of cattle-theft in the Tharrawaddy district, where the number of such prosecutions was higher than in any other locality. A satisfactory feature was the way in which village headmen of their own accord brought forward suspects.

The strength of the military police was increased by three Gurkha companies, which took over four forts in the Southern Shan States previously garrisoned by regular troops. No difficulty was found in recruiting the force, which, on the 1st January 1901, numbered 15,075 officers and men, or only 199 below the sanctioned strength. The conduct of the force was satisfactory, while the health statistics show a considerable improvement on the previous year.

Central
Provinces.

The year under report was one of famine, and the circumstances of the year are reflected in the record of crime. The excess of crime, indeed, was not so high as in 1897, though the famine affected a larger area. It was, however, very marked, and indicated that, despite all the efforts made to relieve distress, there were strong inducements to crime. In spite of the increase of crime and of the additional work entailed on the police by famine, the results of police action were decidedly satisfactory. The only district in which a really unsatisfactory state of things existed was Sambalpur; there the increase of crime was exceptionally great and, for a time at all events, the police failed to cope with it adequately. The lawlessness in the adjacent Patna state, and the impunity with which crime could there be committed, seems to have exercised a bad influence on the neighbouring British territory.

There was an increase from 133 to 209 in the number of murders committed during the year, but with this exception the more serious offences against the person decreased in number. It is remarked that murders were most frequent in districts that felt the famine very badly. Offences against property increased considerably, as was to be expected in a year of famine,

CRIME AND
POLICE.

and there was a serious rise in the number of dacoities from 56 (in 1889) to 119. In only two districts, however, were the dacoities really important, either by reason of their frequency or the methods of the dacoits. In the Sambalpur district dacoity threatened to assume alarming proportions, but happily the special measures taken to suppress it prevented consequences of a serious nature, and in the end the police got the upper hand. The most notable dacoit, Bakria Binjwal, was arrested *in flagrante delicto* just after the close of the year. Cases of coining also increased, but were for the most part of the usual petty type.

The total number of cognisable offences which came before the police during the year was 41,000. The normal number in a year is about 24,000 (in 1899 it was 23,995); in the famine year of 1897, however, the figure was about 50,000, while 37,000 were recorded for 1896. The police investigated 67 per cent. of the cases reported (as against 72 per cent. in 1899), while 80 per cent. (as against 75·45 per cent.) of arrested persons were convicted.

The police force for the year (including railway police) numbered 1,428 officers and 7,264 men. Twelve officers and 85 men were dismissed as against 22 and 78 in 1899. Departmental punishments of members of the force declined from 693 to 634, while judicial punishments rose from 47 to 70; 149 deaths occurred in the force as against 124 in 1899 and 230 in 1897. The difficulty of obtaining suitable recruits as well for the rank of constable as for the higher positions was again felt.

The actual strength of the total police force in Assam at the close of 1900 was:—military police, 3,038; civil police, 2,765; union police, 15; rural police, 6,789. A slight rise in numbers is to be recorded in all branches of force except the union police, who remained stationary. It is satisfactory to observe that judicial punishments of members of the force show a steady decrease. The percentage of policemen punished departmentally was, however, 15 as against 10·7 in 1899. This rise was chiefly due to the districts of Sibsagar and Cachar. The total number of cognisable crimes for disposal during the year was 17,328, as against 16,336; the increase was spread over all branches of crime. Altogether 8,066 persons were convicted of cognisable crime in the province during 1900, against 8,005 in the previous year. The number of murders committed rose from 50 to 61; cases of ordinary theft show an increase from 3,685 to 4,088, nearly all districts being responsible for the rise in number.

The sanctioned strength of the police in the Hyderabad assigned districts was 2,901 as in the previous year. With regard to the conduct of the force, punishments rose from 1,354 to 1,564 (including 51 dismissals), while rewards numbered 105 as against 61.

The total number of cognisable crimes rose during the year from 5,396 to 8,956; this was no doubt due to the famine that prevailed, and it may be remarked that the figure, large as it is, is considerably below that recorded for 1897, the previous famine year, when the number of cognisable offences was 10,296. Dacoities declined from 210 to 186, but the number of thefts was more than double that for 1899. Some progress was made in effecting a control over the Banjaras in the province generally. A body of punitive police, consisting of one head constable and four constables, was imposed for a period of six months on some troublesome Rohillas in a village in the Wun district.

With regard to the results of police action in cognisable cases, 64·6 per cent. of the total number of cases investigated by the police resulted in conviction, while the percentage of persons convicted to persons arrested was 76·1.

The actual strength of the police force in the Presidency, inclusive of the city of Madras, was 23,305 as against 23,445 in 1899. The total cost of the force was £292,925, an increase of about £1,905 on the previous year's figures. There were 1,505 enlistments, while casualties rose from 1,700 to 1,790. The conduct of the force was less satisfactory than in 1899; the percentage of members punished for offences (other than absence without leave) rose from 20·7 to 22·3, while dismissals numbered 345 as against 328. Judicial convictions, however, declined from 273 to 245. The proportion of men able to read and write increased from 86·7 to 87·2 per cent.

CRIME AND
POLICE.

The year was one of high prices with a correspondingly high crime rate. Tinnevely was the scene of a serious outbreak of robbery and dacoity, while a disturbance among the hill people of the Vizagapatam district was only prevented by the prompt action of the police from assuming formidable proportions.

The total number of cognisable crimes for the year rose from 180,202 to 185,755, the increase being attributed mainly to the high prices of food-grains that prevailed. The ratio of convictions was 78·8 per cent. of cases and 70·1 per cent. of persons against 79·1 and 68·6 per cent. respectively, in 1899. Offences under the Indian Penal Code increased from 43,030 to 48,936, while public and local nuisances rose from 81,913 to 82,900 in the year under report. There was, however, a falling off in offences under special and local laws; 524 murders were reported as against 506 in the preceding year, while dacoities increased by 189 to 677. The percentage of convictions under each of these two heads was 21·9.

Bombay.

The total number of reported cognisable cases in the Bombay Presidency (excluding Sind) was 37,663, showing an increase of over 10,000 on the return for 1899. The year was one of very severe famine, and the increase showed itself, as was to be expected, mainly in major and minor offences against property. Dacoities numbered 1,488, as against 1,007, and cases of house-breaking and theft showed a similar serious advance. 12,824 persons were tried in cognisable cases (as compared with 27,195 in the preceding year), and the percentage of convictions rose from 67·95 to 72·80, which in the circumstances may be regarded as a satisfactory result. In Sind, cognisable offences totalled 8,020 as against 7,962. The increase was entirely caused by the considerable rise in the number of cases under the Indian Penal Code; other offences were fewer than in 1899.

The existence of professional crime of a serious nature was revealed by the "Giri" cases, in which the operations of a gang of prisoners, conducted on a large scale, were successfully unravelled. Satisfactory progress was made throughout the year by the Criminal Identification Department. Attention has once more been drawn by the Government to the matter of false complaints and the means to reduce their number; the number of complaints classified as maliciously false dropped (in the Presidency proper) from 561 to 526, but the abnormal stress of work devolving on the police throughout the year rendered it difficult for them to devote much attention to prosecutions in such cases.

The total strength of the police for the year was 15,759 in Bombay and 4,170 in Sind. The total cost of maintenance was £276,937, as compared with £256,115 in 1899. The number of judicial punishments inflicted on members of the force was 119 in the Presidency proper and 52 in Sind, while departmental punishments numbered 2,407 and 598 respectively. Dismissals totalled 96 for the whole province. The number of punishments inflicted in the Presidency proper was somewhat in advance of the figures for 1899, but there does not appear to have been any real deterioration in the conduct of the force.

The conditions of the year were particularly trying and, in the circumstances, the work of the police was satisfactory.

Coorg.

The total number of cognisable offences in Coorg was 923, as against 901 in the previous year. There was a satisfactory decrease under the head of serious offences against the person, but an advance in the number of ordinary thefts. The sanctioned strength of the police force was 226 (as in 1899), but the actual strength was 17 men short of that figure. During the year 13 members of the force were dismissed and 94 punished departmentally, the corresponding figure in the previous year being 22 and 77 respectively.

CRIMINAL
JUSTICE.

CRIMINAL JUSTICE.

Bengal.

The total number of offences reported during the year rose from 331,118 to 343,415. In spite of this increase, however, the figure was still lower than that for 1898, when the number returned was 350,610. Of the total number of offences reported, 281,846 (as against 274,844 in 1899) were considered to be true. Of these, 197,637 cases were brought to trial, and

CRIMINAL
JUSTICE.

the percentage of persons convicted was 64·8, as compared with 64·5 in the preceding year. There were 4,370 (as against 4,278) reported offences against the public tranquillity, while 416 murder cases were found true, 223 persons being convicted in connection therewith. The corresponding figures for 1899 were 399 and 223 respectively. The number of reported offences against property rose from 91,514 to 105,185.

At the close of the year there were 434 stipendiary magistrates of varying powers and 1,714 honorary magistrates, excluding Calcutta, in both cases. The average number of days during which each case lasted before magistrates of all classes was 8·2.

The number of cases committed to the Courts of Session, or referred to the session judges, fell from 1,816 to 1,778, while the number disposed of rose from 1,671 to 1,841; the pending file was thus reduced to a satisfactory extent. The average duration of trials was 55·4 days, while the percentage of persons convicted fell from 64·2 (in 1899) to 62·1.

The number of persons tried by jury rose from 984 to 1,187, and of the persons so tried, the sessions judges approved the verdict of the jury in 1,065 cases, and disapproved in 122 cases. In the case of 70 persons the sessions judge disagreed with the verdict so completely as to consider it necessary for the ends of justice to make a reference to the High Court under section 307 of the Criminal Procedure Code. Inclusive of 12 cases pending from the previous year, the High Court determined 49 such references, with the result that the verdict of the jury was accepted in 13 cases, modified in 4, and set aside in 32. The number of persons tried with the aid of assessors was 2,164.

Of the total number of cases brought to trial, 42,089 were before presidency magistrates, and 155,657 before magistrates in the interior. Cases disposed of numbered 41,856 and 155,182 respectively.

The number of appeals preferred to the High Court rose from 898 to 987, and the number decided from 871 to 1,005, leaving a pending file of 65 at the close of the year. The judgment of the lower courts was upheld in 73·1 (as against 87·02) per cent. of the cases decided. Appeals to the sessions court numbered 6,368, and to the courts of district magistrates 5,015. The percentage of decisions confirmed was 66·2 in the case of the former, and 72·6 in the case of the latter.

The total number of persons imprisoned by the various courts during the year fell from 31,020 to 29,351, while capital sentences were passed against 51 persons.

The North-Western Provinces and Oudh are united for legislative purposes, 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. N.W. Pro-
vinces.

In the North-Western Provinces 136,167 offences were reported, of which 106,320 were returned as true, and 97,891 were brought before the courts, the corresponding figures for 1899 being 125,751, 99,063, and 89,806 respectively. The increase was chiefly confined to offences against property, and may be ascribed to the high prices of food prevailing during the year. Dacoity was unusually prevalent, 1,235 persons being convicted as against 958 in 1899. In all 159,037 (as against 147,464) persons were brought to trial, of whom 88,815 (as against 80,528) were convicted; 3,169 persons remained under trial at the close of the year, so that the proportion of persons convicted to persons tried was just under 57 per cent.

Of 97,932 cases disposed of by the several classes of magistrates' courts, 20,813 were tried by special honorary magistrates and benches of magistrates. The average duration of cases in subordinate stipendiary magistrates' courts was 10 days, and in the courts of district and divisional magistrates three days. Courts of session disposed of 2,284 cases. Of the 5,097 persons for trial before them, 550 remained under trial at the close of the year.

Sentences to death fell from 105 to 91, but sentences to transportation (as a result of the increase in dacoity) rose from 270 to 496. Sentences to fine increased from 51,443 to 52,799, while whipping was inflicted 8,154 times as against 5,635 in 1899.

With regard to appellate jurisdiction, there were 20,443 appellants before all the courts during the year; 6,217 persons preferred appeals to magistrates of districts, who disposed of 4,726, the appellants being wholly

CRIMINAL
JUSTICE.

unsuccessful in 4,367 cases. Courts of Session disposed of 11,161 appeals, the number of cases in which appellants were wholly unsuccessful being 8,534. In the High Court appeals were preferred by 2,548 persons; 544 appeals were rejected, while in 1,253 cases the decrees of the lower courts were confirmed. The total number disposed of was 2,174, 374 being left pending at the close of the year; 216 persons were tried by jury during the year, the juries' verdicts being approved by the judge in 201 cases.

Oudh.

Out of 45,073 reported cases in Oudh (as against 43,002 in 1899), 33,022 (as against 32,101) were brought before the courts. The increase in the number of reported cases is 5 per cent. on the returns for 1899, while the cases returned as true show a decrease of 2 per cent. The increase in reported crime occurred in offences under the Penal Code, noticeably under the head of criminal trespass (813), theft (661), and hurt (429); there was a falling off in offences under the Code of Criminal Procedure and under special and local laws. The percentage of convictions in all courts fell from 52·9 to 49·64, the steady decline since 1897 (when it stood at 59·1) being thus maintained in the year under notice. The falling off was particularly marked in the courts of special magistrates and of honorary magistrates sitting singly, and was also noticeable in the courts of stipendiary magistrates.

The average duration in magisterial courts was, in consequence of the increase of work, slightly higher than in 1899, the figures being 7·84 against 7·47 days. In courts of session it rose from 34·76 to 37·11 days. The number of punishments awarded declined in consequence of the falling off in convictions, though the sentences were, on the whole, heavier than in the previous year. Whipping was ordered in 36·8 per cent. of cases in which it might have been awarded—an improvement on the returns for 1899. The provisions of the Code as to first offenders were more freely exercised, but the action taken under the preventive sections of the Code compares unfavourably with the record of the previous year—an unsatisfactory state of things in view of the increase in crime.

The statistics of appellate and revisional work before Sessions Judges and district magistrates vary but slightly from those of 1899, though the proportion of successful appeals was a trifle higher.

The Court of the Judicial Commissioner, which consisted of only two judges throughout the year, dealt with the cases of 1,131 persons, or 107 less than in 1899, when the court consisted of three judges; the average duration of cases was, naturally, higher than in 1899, rising from 37·6 to 38·8 days. Appeals fell from 703 to 554, out of which the sentences were upheld in 389 cases, as against 511 in the previous year.

Punjab.

In the Punjab reported and admitted offences numbered respectively 180,746 and 131,627, as compared with 181,965 and 128,524 in 1899. There was an increase in thefts, robberies and dacoities, scarcity driving many persons to steal. The large number of robberies and dacoities were the effect, and it is hoped the last effect, of that outburst of violent crime which was commented upon in last year's statement. Strong measures have been taken for its suppression, and an improvement in the record of 1901 is confidently anticipated. Thirty-three per cent. of the persons brought to trial were convicted, but in calculating this percentage it must be remembered that many of the cases should have been thrown out at a preliminary hearing.

Offences affecting life rose from 1,222 to 1,231. The increase in thefts and robberies and dacoities has already been remarked. The Peshawar district is once more at the head of the list in respect of murders and other offences affecting life. The most marked rise in dacoities and robberies was in Hissar, where famine was most severe, and 111 offences were recorded as against 46 in 1899. It is explained, however, that most of the robberies were of a petty character, while only two of the dacoities were of a daring and violent nature. In Jhang the same class of crime shows a rise of 34.

217,408 persons were brought to trial during the year, of whom 83,972 were convicted. With regard to punishments, the Chief Court confirmed the sentence of death upon 161 persons, as against 84 in the previous year; 12,675 persons were sentenced to solitary confinement, while whipping was inflicted in 4,642 cases. The latter figure shows an increase of 1,796 on the

CRIMINAL
JUSTICE.

previous year, whipping being largely used as a punishment for petty theft. Forfeiture of property was ordered in 139 cases.

Criminal appeals to the Chief Court increased from 972 to 1,260, and disposals from 825 to 1,039. The pending file thus rose from 147 to 221. Of the 22,024 persons who preferred appeals in all Appellate courts, 36 per cent. had their sentences reduced or altered or proceedings quashed. The average duration of appeals was ten days.

The total number of offences reported during the year in Lower Burma was 57,060, and in Upper Burma, 17,512; making a total of 74,572, against 77,856 in 1899. Offences affecting the human body rose in Upper Burma from 2,521 to 2,598, while in Lower Burma they numbered 7,454 (an increase of 372). Offences against property declined in Upper Burma from 3,275 to 3,243, and in Lower Burma from 11,474 to 10,869. The number of cases tried by magistrates of all classes during the year in Lower Burma was 53,976 (including 92,041 persons) and in Upper Burma 17,297, against 16,597. The number of persons tried by district magistrates under their special powers increased by 88 in Lower Burma, but decreased by 49 in Upper Burma. The work done by honorary magistrates was less than that of last year in Lower Burma. The Rangoon Bench worked zealously, but is reported to require an addition to its numbers. The work done by honorary magistrates in Upper Burma decreased considerably in volume, owing chiefly to the large falling off in Mandalay. The manner in which they discharged their duties is again highly commended.

The percentage of convictions by magistrates was 62·56 in Lower Burma, and 68·43 in Upper Burma. Less activity was shown in prosecutions under Chapter VIII. of the Code of Criminal Procedure than in 1899. There was a large decrease in the number of petty cases tried in Mandalay.

20,223 persons were convicted in Upper Burma, an increase on the figures for 1899. The number of whippings fell from 746 to 716, which is not regarded as satisfactory, while the large fall in the number of sentences of solitary confinement is also regretted. Only 86 persons were imprisoned in default of furnishing security for good behaviour, against 111 in 1899. In Lower Burma the total number of persons who were criminally punished in the magisterial courts during the year was 53,497; of these 73·25 per cent. (as against 61·48 per cent. in 1899) were sentenced to fine only. Cases of rigorous imprisonment without solitary confinement have fallen from 25·14 to 17·61 per cent., and with solitary confinement from 1·39 to 1·04 per cent. The number of whippings has also decreased. It is still considered that imprisonment is sometimes awarded in cases where a whipping would be a more suitable punishment.

The total number of cases committed to courts of session in Lower Burma was 416, involving 727 persons. The corresponding figures for the previous year were 413 and 718 respectively. The percentage of convictions (62·88) shows a considerable falling off. In Upper Burma sessions courts tried 139 persons, and convicted 81·9 per cent. of them.

The number of appeals preferred in Upper Burma declined from 1,330 to 1,226 and in Lower Burma from 5,057 to 4,755. In Lower Burma 4,647 cases were disposed of by all Appellate courts; the percentage of convictions and sentences confirmed being 70·28 as compared with 75·39 in 1899. In Upper Burma the number of disposals fell from 1,321 to 1,209. Appellants were more successful than in the previous year, only 60·94 per cent. having their sentences confirmed against 64·74 per cent. in 1899. The average duration of appeals was 14 days in Lower and 13 days in Upper Burma.

The main features of the year in the Central Provinces were the increase in offences against property (due to famine) and the decrease in offences affecting the body and under local and special laws. 31,749 cases were reported, of which 30,039 were returned as true; the corresponding figures for 1899 being 26,764 and 24,139 respectively. Under the head of heinous crime, the most important increase was once more in cases of criminal trespass for the commission of serious offences; cases of dacoity and murder were also considerably more numerous than in the previous year. Robbery also showed an increase, but cases of aggravated hurt and of rape were fewer. The percentage of convictions before the magistrates rose from 55·1 to 63·1, and that of convictions before Sessions Judges from 61 to 64·6. This rise in the

CRIMINAL
JUSTICE.

percentage of convictions is ascribed to the character of much of the crime that had to be dealt with. The increase in offences against property is attributed to the presence of famine, but high as the figures are in this respect, the total remained much below that of 1897, when the conditions were similar. The total number of persons punished in magisterial courts during the year rose from 22,969 to 31,069, of whom 10,534 were sentenced to fine only, and 9,800 were sentenced to whipping only. The number of persons who preferred appeals to the district magistrates, to courts of sessions, and to the Judicial Commissioner totalled respectively 1,512, 1,685, and 307; and the number of appeals disposed of 1,135, 1,554, and 282, respectively, as against 1,221, 1,307, and 186 in the previous year. Of the total number of all kinds, the original decisions were left undisturbed in 70·2 per cent.

On the whole it may be said that crime was for the most part of a petty nature; the dacoities were in many cases little more than thefts by bodies of persons. In Sambalpur there was some organised crime, but the ringleaders were captured and have been sentenced since the close of the year.

Assam.

Of 32,105 offences reported in Assam (as against 31,752 in 1899) 21,725 were found to be true. Of this number 14,589 were brought to trial in the courts of magistrates. The number of persons affected was 21,908, and of these 12,166 were convicted. Of the number of cases reported, the percentage rejected or struck off as false in 1900 was 30 in the Assam Valley districts and 35·4 in the Surma Valley districts, as compared with 28·9 and 31·9 respectively, in the previous year.

As in the previous year, 2 Sessions Judges and 8 district magistrates were employed in the province; 54 stipendiary magistrates were also employed, as well as 17 honorary magistrates. The Sessions Judges in their original capacity tried 215 persons, and convicted 137. There were during the year 36 cases in which European British subjects were involved, 41 persons being implicated in them; of these 1 was committed to the sessions, and the remainder were tried by magistrates. 61 appeals were disposed of by the High Court during the year, in 47 of which the original convictions were upheld. Subordinate courts, on their appellate side, disposed of the cases of 1,305 persons during the year; original sentences were upheld by the courts of session in 73 per cent. and by the magistrates' courts in 52·1 per cent. of the cases appealed.

Hyderabad
Assigned
Districts.

The Hyderabad Assigned Districts Report on Criminal Justice covers not only Berar but the cantonment of Secunderabad, the Residency Bazzars, and certain railway lands in the Nizam's dominions, besides six Hyderabad Contingent stations. The total number of offences reported was 19,300 (as against 19,632 in 1899), and the number returned as true was 17,791, as compared with 17,487. The total number of cases brought to trial in 1900 was 17,981, affecting 28,044 persons, of whom 18,611 were convicted. The corresponding figures for 1899 were 17,608, 30,818, and 16,494 respectively; there was, therefore, a considerable increase in the percentage of persons convicted.

In Berar the number of offences brought to trial rose from 12,590 to 13,189, an increase of 599 in what may be called the famine area. Offences against property show an increase of no less than 109·9 per cent., whereas prosecutions under the Police, Municipal, and Excise Laws, and for other minor offences, have decreased considerably. People had neither time nor money to waste in court over petty private quarrels. With regard to punishments, 22 persons were sentenced to transportation as against 5 in 1899. The percentage of whippings has increased somewhat, the natural result of the famine conditions prevailing. In the year under review 1196 appeals were disposed of, the original decisions being upheld in 73·1 per cent. of the cases.

Madras.

The total number of offences reported in the Madras Presidency in 1900 rose from 333,704 to 334,188. The number of cases returned as true was 321,513, a slight decrease on the previous year's figures. There was a decrease in offences under the Indian Penal Code, but an increase under the special and local laws, more especially under the District Municipalities Act and the Salt and Forest Acts. The number of persons under trial during the year was 462,752, of whom 265,651 were convicted. Ninety European British

CRIMINAL
JUSTICE.

subjects were brought before the courts for trial (as against 144 in 1899); the number convicted was 46.

In magistrates' courts in the mufassal 227,935 cases were instituted, as against 232,760 in 1899, and 375,836 persons were brought to trial during the year. The percentage of convictions rose to 51·84, the highest yet attained. As in 1899, the percentage was highest in the Nilgiris (75·25), Vizagapatam Agency (70·94), and Bellary (70·27); it was lowest in Górávari (38·13). Sentences of imprisonment considerably increased, while those of fine slightly decreased. Sentences of whipping were much more freely imposed than in the previous year. 67,071 cases were instituted before the presidency magistrates in the town of Madras, an increase on 1899, which is chiefly attributed to a larger number of prosecutions under the City Police Act and to an increase in cases of theft. The percentage of convictions rose from 90·7 to 91. The number of cases committed to the sessions courts in their original jurisdiction was 1,519, an advance of 203 on the figures of the previous year. Of the persons dealt with 42·2 per cent. were convicted, as compared with 48·9 per cent. in 1899 and 40·8 per cent. in 1898. 2,182 persons were tried by jury, 2,234 with the aid of assessors, and 49 by jury and assessors.

The High Court on its original side received 39 cases, affecting 58 persons. In the cases disposed of the percentage of convictions, as in the previous year, was 82.

With regard to appellate jurisdiction, magistrates received 7,952 appeals during the year, preferred by 15,617 persons. These figures show a decrease of 316 appeals as compared with 1899. The percentage of appeals confirmed was 63·46. Sessions courts received 1,398 appeals from 2,124 appellants; the percentage of appeals in which the sentence appealed against was confirmed was 69·82. The High Court received 941 appeals; in 68 per cent. of the total number of cases decided the proceedings of the lower courts were not interfered with.

Criminal jurisdiction was exercised in the Bombay Presidency by the Bombay following courts:—

Regulation Provinces.

The High Court.	4 Presidency magistrates.
17 Sessions Judges and Joint Sessions Judges.	160 first class magistrates.
3 Assistant Judges.	222 magistrates of the second class.
1 Substitute Judge, invested with powers of an Assistant Sessions Judge at Dhulia.	243 magistrates of the third class.
16 district magistrates.	14,958 police patels (who exercise petty criminal jurisdiction, under Bombay Act VIII. of 1867, within their villages).

Sind.

3 Sessions Judges.	39 magistrates of the first class.
1 Assistant Judge.	63 magistrates of second class.
5 district magistrates.	49 magistrates of third class.

The total number of reported offences of all kinds was 296,256 against 311,947 in the previous year. The decrease occurred mainly in cases under the District Municipal Act. Murders declined from 256 to 221, but there was a considerable increase in other serious offences. Thefts rose from 10,161 to 18,304; robberies and dacoities from 725 to 1,262. The increase is ascribed to the continuance of famine conditions during the year. Of the total number of reported offences, 231,207 were returned as true, while 256,708 cases (including those that remained undisposed at the close of the previous year) were brought to trial, involving 398,331 persons. The corresponding figures for 1899 were 198,441 and 399,347 respectively. Of the persons actually tried (288,311), 153,501 or 53·24 per cent. were convicted, while 46·76 per cent. were acquitted or discharged.

The cases disposed of during the year by criminal courts of all classes fell from 221,091 to 208,776, 133,638 being decided by stipendiary magistrates,

CRIMINAL
JUSTICE.

39,737 by honorary magistrates and benches of magistrates, and 31,049 by special magistrates. Of convicted persons 55 per cent. were tried summarily; the average duration of cases was 13 days, as against 5 days in the preceding year. Sentence of death was passed against 68 persons as compared with 67 in 1899, while the number of whippings inflicted (2,913) represented 14·25, as against 10·99, per cent. of the total number of punishments.

The total number of appellants before the courts during the year was 9,269. Of the appeals decided, 49 per cent. were rejected and in 28 per cent. of the cases the sentences were confirmed. In the remaining 23 per cent., the decisions of the lower courts were reversed or modified, or fresh proceedings were ordered. The number of appeals preferred on behalf of the Government was 28 against 22 in the previous year. Applications for revision of proceedings were made in 3,789 cases, of which 1,588 were rejected. The power of enhancement of sentence on revision was exercised against 56 persons, as compared with 10 in 1899.

The number of persons tried by jurors increased from 689 to 883, and that of persons tried with the aid of assessors from 2,194 to 3,210. In courts of session the verdicts of juries were approved in 98 per cent. of cases against 93 per cent. in 1899. In 68 per cent. of the cases there was complete agreement between judge and assessors.

The Supreme Courts, on their original side, had 135 persons before them during the year, of whom 107 were convicted and 23 discharged or acquitted. On the appellate side, 1,629 persons preferred appeals, while there were 1,245 applicants for revision. Of the appeals, 1,303 were wholly unsuccessful.

Coorg.

1,984 offences were reported during the year (as against 2,311 in 1899), and of these 1,645 were returned as true. The total number of cases brought to trial was 1,679, affecting 2,890 persons, of whom 690 were convicted. 184 appellants, in all, were dealt with during the year, of whom 139 were wholly unsuccessful. 15 appeals were preferred to the court of the Judicial Commissioner, the sentence being confirmed in two cases, while eight appeals were summarily rejected.

JAILS.

JAILS.

The average number of prisoners in jail was considerably higher than in 1899. The figures indeed are the highest recorded for the last five years. The increase occurred in every province, except Burma and Assam, and is in all cases attributable to scarcity or famine. In Burma, which was not affected in this manner, the admissions to jail were fewer than in any of the previous four years. There was an increase in the numbers convicted of offences connected with property of nearly 40 per cent.

The variations of the jail population during the last five years are best given in tabular form:—

	1900.	1899.	1898.	1897.	1896.
Jail population on 1st January	109,406	102,125	109,942	109,934	101,061
Admissions during the year	586,895	484,420	465,921	568,348	476,180
Aggregate	696,301	586,545	575,863	678,282	577,241
Discharged during the year	581,281	477,167	473,736	568,429	467,307
Jail population 31st December	115,020	109,378	102,127	109,853	109,934
Convict population on 1st January	97,196	93,828	101,035	99,597	94,052
Admissions during the year	207,437	174,060	174,110	215,065	182,023
Aggregate	304,733	267,888	275,145	314,662	276,075
Released during the year	194,924	167,358	177,403	209,227	172,279
Casualties	4,796	3,326	3,912	4,400	4,207
Convict population on 31st December	105,013	97,204	93,830	101,035	99,589

JAILS.

In consequence of the high prices prevailing there was an increase in the average cost of maintaining a prisoner in jail as compared with 1899. An increase in the cost per head is shown in the reports of every province, with the exception of Bengal and the Central Provinces, and is due (except in Burma) to the rise in dieting charges. The cash earnings of prisoners, though lower than in 1899, were considerably in excess of those for the famine year of 1897. In view of the character of the year, the general financial results were satisfactory and bear witness to economical and efficient management. With regard to statistics of sickness and mortality, the total death rate over all the jails and subsidiary jails in British India was 33·46 per thousand. The figure is higher than that of the preceding year, but compares favourably with the return for 1897. It also compares favourably with the rate of mortality recorded in 1900 among the free population (38·6 per 1,000). The year was naturally an unfortunate one for the jail population, and the only localities where the death-rate was lower than in 1900 were the North-Western Province and Oudh, Assam and Coorg. It was necessary to cope with a suddenly increased demand for accommodation, and a large proportion of the persons confined entered prison in a weaker condition than in a normal year.

There were in use during the year 41 central jails, 190 district jails and 501 subordinate jails and lock-ups, of which 304 were in the Madras Presidency alone. These figures show a decrease of one district jail, and an increase of one subordinate jail as compared with 1899.

The total number of persons admitted to jail rose from 484,420 to 586,895. The increase was fairly evenly distributed over the various provinces, but was most marked in Bombay, where there were over 35,000 more admissions than in the previous year. Forty-three prisoners escaped during the year, as against 39 in 1899 and 57 in 1898.

Classified according to religion, Muhammadan convicts numbered 53,221; Hindus and Sikhs, 13,842; Buddhists and Jains, 14,025; Christians, 1,770; all other classes, 6,650. Compared with the figures of the preceding year, the number of Muhammadans, Hindus, and Sikhs shows a decided advance, that of Buddhists and Jains a slight decline, while Christians were almost stationary. Classified according to age, 2,695 convicts were under 16 years of age, 163,035 between 16 and 40, 38,128 between 40 and 60, and 3,660 above 60 years of age. The corresponding figures for 1899 were 1,715, 137,624, 31,255, and 3,269 respectively. There has therefore been a rise under each head, but the increase in the number of juveniles (under 16) is disproportionately large. The Government of India once again draw attention to this point, and lay emphasis on the inexpediency of imprisoning juvenile offenders, except when no other alternative is possible.

Of the convicts admitted to jail in 1900, 19,555 were able to read and write, 4,995 could read only, while 182,958 were illiterate. The corresponding figures in 1899 were 18,976, 4,494, and 150,393 respectively.

Of 194,562 male convicts, 108,430 were persons engaged in agriculture or with animals, 18,365 were in service, 8,860 employed in commerce and trade, while 6,556 were professional persons. An increase on the returns for the previous year was recorded under every head, but was proportionally most noticeable in the number of persons in service.

Female convicts numbered 12,946, as against 9,770 in 1898, and their condition was as follows:—Married, 7,799; unmarried, 845; widows, 3,789; prostitutes, 513.

The percentage of persons previously convicted to the total number of admissions during the year rose from 13·75 to 14·15. The proportion of such prisoners was once more highest in Burma and the Central Provinces. Attention was given to the latest systems of identifying convicts with generally satisfactory results. In Madras the system of taking finger-tip impressions of all prisoners in jail was introduced during the year, while both in Bombay and Bengal a larger number of convicts were identified by this means than in the previous year. In the North-West Provinces and Oudh particular attention was devoted to the system, and the work of the Criminal Identification Bureau could once more point to improved results.

Discipline was successfully maintained in the jails throughout the year under review. In spite of the material increase in the jail population, the total number of punishments inflicted increased very slightly. The ratio of

JAILS.

punishments to the daily average population declined in Madras, Bombay, Bengal, the Punjab, Burma, the Central Provinces, and Berar. It increased slightly in the N.W. Provinces and Oudh. In Assam the total number of punishments increased by nearly 58 per cent., a result which may in part be attributed to the stricter enforcement of prison discipline. The number of corporal punishments was less than in any of the five previous years, and 10 per cent. below the figure for 1899. The general results are satisfactory in this respect, indicating as they do that it was found possible to maintain discipline over a materially increased number of convicts with a very small addition to the total number of punishments.

Recorded offences committed by convicts rose from 184,782 to 186,644, of which 261 were dealt with by criminal courts, as against 340 in 1899. The figures showing the ratio of offences to the daily average population in the jails of the various provinces are given below in tabular form:—

OFFENCES DEALT WITH BY SUPERINTENDENTS.

	1900.		1899.		1898.	
	Daily Average Population.	Offences.	Daily Average Population.	Offences.	Daily Average Population.	Offences.
Madras	10,435	14,299	8,801	14,865	9,150	14,965
Bombay	11,805	9,499	9,145	9,064	8,575	10,789
Bengal	18,453	41,576	17,265	39,484	17,183	38,439
N. W. Provinces and Oudh	28,767	43,859	27,439	39,734	30,246	35,163
Punjab	13,911	28,311	12,080	31,133	11,524	31,010
Burma	12,187	39,244	12,205	41,775	12,360	45,353
Central Provinces	5,163	6,521	3,812	6,133	4,776	5,987
Assam	1,163	1,548	1,491	978	1,439	694
Coorg	99	312	102	226	78	199
Berar	1,740	1,211	1,250	1,150	1,521	1,603
	104,023	186,380	93,590	184,442	96,852	184,202

The number of major punishments inflicted declined from 30,174 to 29,927, the decrease being mainly brought about by the figures for the Central Provinces, the N.W. Provinces and Oudh and the Punjab. The punishment of separate cellular and solitary confinement was once chiefly employed in the Punjab. The figures for that province, however, shew a decrease from 2,399 to 2,153, though the return for all India is almost identical with that of 1899. The number of cases in which fetters were imposed rose from 16,365 to 16,926, whereas corporal punishment showed a decrease from 1,686 to 1,511. The punishment of penal diet with solitary confinement was practically stationary, though a decline was recorded in Madras, Bengal and Burma. In Assam and Coorg this form of punishment is almost unknown. The general proportion of corporal to total punishments was 0·8 per cent., as against 0·9 per cent in 1899.

The total number of convicts who came under the mark system declined from 30,927 to 29,344, of whom 79 (as against 107) failed to earn remission. Of the 29,265 convicts who earned remission, 22,573 were under sentences not exceeding two years. The maximum remission (2,377 days) was gained by a convict in the Central Provinces, under a sentence exceeding 10 years. The maximum gratuity (Rs. 53) was, as in 1899, paid to a convict released in the Bombay Presidency. The average gratuity earned fell from Rs. 2-5-9 (in 1899) to Rs. 2-0-2 in the year under review.

Attention was again paid during the year to the provision of the cellular accommodation for prisoners, and the reports from nearly all the provinces bear witness to an improvement in this respect. In the Punjab, provision was made for the construction of 50 cubicles in connection with the extension of the Bannu Jail. In Bengal and the N.W. Provinces and Oudh similar progress was made, while in Madras cellular accommodation for more than a quarter of the daily average population is now available.

JAILS.

The gross expenditure on jails rose from £410,550 to £501,981; the gross cost per head of average strength increasing at the same time from Rs. 59-10-5 to Rs. 64-9-3. The increase in gross expenditure extended over all the provinces, but was proportionately smallest in Burma. The cost of establishment rose from £172,063 to £245,799, while hospital charges increased from £19,510 to £23,351, the average hospital expenses of sick prisoners being highest, as in the preceding year in Bengal (Rs. 134-8-10) and lowest in Burma (Rs. 63-15-1). In the Hyderabad Assigned Districts a considerable decline in the average cost per head was recorded, the figures falling from Rs. 134-8-7 to Rs. 100-13-3. The average in the Central Provinces was also considerably less than in 1899, but in Assam it rose from Rs. 80-13-0 to Rs. 120-2-7. The cash earnings of prisoners during the year totalled £84,652, the average per head being highest in the Central Provinces (Rs. 32-11-0) and lowest in Bombay (Rs. 4-4-0). Deducting these earnings, the net cost to Government was £417,329, averaging Rs. 53-11-1 per head of average strength. The corresponding figures for the preceding year were £321,161 and Rs. 46-10-7, respectively.

With regard to health statistics, the ratio per 1000 of admissions to hospital rose from 792·05 (in 1899) to 851·83. In spite of this increase, the figures for the year were considerably below those recorded for any of the three years preceding 1899. Reference has already been made to the death-rate, which increased from 21·86 to 33·46. The increase was most marked in the Hyderabad Assigned Districts and in the Central Provinces.

The main features of the year's administration were the famine conditions prevailing, the resulting strain on the accommodation of the jails, and the lowered standard of health among the prisoners, while the cost of maintaining them in jail was swelled by the high price of food. The general result of the year, in the face of these difficulties, was satisfactory.

The total convict population for the year was 12,810, while the number of prisoners remaining at the close of the year was 11,974, an increase of 509 on the figures for 1899-1900. Offences rose from 2,905 to 3,589, but the greater number of them consisted, as usual, of petty breaches of discipline. The ratio of punishments to average strength rose, in the case of male convicts, from 26·61 to 31·3 per cent., and in that of women from 10·47 to 19·86 per cent.

The area under tea cultivation aggregated 518½ acres, and the weather conditions were on the whole favourable to the industry, the total out-turn being 12,060 lbs. in excess of the previous year's yield. The concentration of the labour supply on building operations, however, militated against the efficient working of the tea industry.

The number of convicts that escaped rose from 38 to 46; of this number 42 were recaptured. About half of the fugitives were Burmans.

CIVIL JUSTICE.

The number of suits for disposal on the original side of the Calcutta High Court was 2,383, as against 2,236 in 1899; 831 (as against 786) suits were decided, the number pending at the close of the year being 1,552, or an increase of 102 over the corresponding figures for the preceding year.

The number of first and second appeals to the High Court from the decrees and orders of subordinate courts fell from 3,616 to 3,495, the number decided being 2,836 as compared with 2,857 in 1899. The pending file at the close of the year had risen from 5,904 to 6,563. Of the 2,193 appeals from appellate decrees, 555 were uncontested.

In civil courts subordinate to the High Court, 648,525 suits were instituted during the year. This number exceeds that of 1899 by 40,895, and is the highest ever recorded. The number of disposals was 659,052, which exceeded the number for 1899 by 39,415 and was a considerably larger figure than in any previous year. The pending file continued to increase, and at the close of the year stood at 110,892. The pending suits represent 14·4 per cent. of the total number brought before the courts; 2,185 of them were more than a year old, 7,276 more than 6 months, and 38,576

Penal settlement at Port Blair.

CIVIL JUSTICE. Bengal.

CIVIL
JUSTICE.

more than three months. It has, however, to be remembered that the longest vacation of the civil courts falls at the beginning of the fourth quarter of the year, and that in the ordinary course of things it must usually be impossible in that quarter to overtake the outstanding cases filed just before or during it.

In Appellate courts subordinate to the High Court, the number of appeals instituted rose from 18,309 to 18,572, while the number determined fell from 19,462 to 18,191. The pending file increased by 821. The percentage of appeals to appealable decisions was 24·03, as compared with 23·97 in 1899. In 10·7 per cent. of the cases the decision of the lower court was modified, and in 17 per cent. it was reversed.

In the Presidency Small Cause Court institutions fell from 21,366 to 21,167 and the number of cases decided from 22,242 to 21,278. The total number of suits for disposal (including 85 reviews and 712 revived cases) was 23,169, of which 39 were transferred to other courts; as a result of the heavy decrease in the number of disposals the pending file rose from 1,205 to 1,852. The provincial small cause courts disposed of 14,163 original suits, of which 2,733 were contested.

N.W. Pro-
vinces.

Institutions of civil suits in the N.W. Provinces rose from 87,440 in 1899 to 95,573, of which 68,286 were for money or movable property; the total for disposal rose from 98,633 to 106,503, and the number disposed of from 90,099 to 97,239. The pending file shows an increase from 8,534 to 9,264. Institutions and disposal of civil suits in 1899 were abnormally low; the figures of the year under notice show a tendency to return to normal conditions.

The percentage of contested suits was 28·5; 30,294 suits were decided *ex parte*. In contested suits the average duration declined from 68 to 64 days, the average duration in uncontested suits being 28 days.

The number of appeals for disposal in courts other than the High Court, rose from 13,873 in the previous year to 15,334 in 1900, of which 11,730 were disposed of, 3,604 being left pending at the close of the year (as against 5,102 in 1899). The decisions of the lower courts were upheld in 6,861 cases.

The High Court had before it 3,666 cases (332 less than in 1899), disposed of 1,171, and left a considerably increased pending file of 2,495. Of the cases decided, the appeal was unsuccessful in 676.

Oudh.

In Oudh the number of civil suits instituted during the year rose from 48,842 to 52,489, the continued falling off since 1894 being thus checked. Of this increase suits for money or moveable property contributed 1,901, or rather more than half. The total number of suits for disposal was 60,020, and the number disposed of rose from 48,313 to 54,053, so that (in spite of the increased institutions) the pending file had, at the close of the year, been reduced from 6,468 to 5,967. There was a further increase in the work done by honorary Munsifs.

In subordinate judges' courts there were 1,814 regular appeals for disposal as compared with 1,865 in the previous year; district judges disposed of 694 (as against 726) appeals. The average duration of appeals improved considerably in both classes of courts. Appellants were more successful than in 1899. The percentage of interference with decrees was 42·5 in subordinate judges' courts and 35·1 in district judges' courts, as against 40·3 and 30 respectively in the previous year.

In the Court of the Judicial Commissioner the number of cases for disposal fell from 2,635 to 2,562. Disposals totalled 1,531 as compared with 1,774 in 1899. The file of cases pending at the close of the year rose from 861 to 1,031.

Punjab.

The number of civil suits for disposal in the Punjab in 1900 fell by 4,998; the number disposed of fell by 7,687 to 240,041, which is the lowest figure recorded during the past six years. There was a marked decrease in the number of cases disposed of in no less than 13 districts, the most conspicuous instances being Karnal, Amritsar, Jhelum, and Gujrat.

The large increase in the number of suits for foreclosure and other suits for possession by mortgagees is remarkable, 9,857 being instituted as against 6,889 in 1899. This was, no doubt, due to the anticipated effect of the

CIVIL
JUSTICE.

Punjab Agricultural Land Act, which became law in October 1900. There was a considerable decrease in the number of suits for money and movable property, whereas suits for land rose from 20,282 to 22,566. Compared with the figures of 1897 and 1898, however, there was a decrease both in the number of institutions and in the value of suits for land. The total value of suits was £1,601,609; the figures for 1899 being £1,464,221, and for 1898 £1,632,972. The average duration of suits was 45 days for contested and 26 for uncontested cases. The averages in the previous year were 42 and 24 days, respectively. It is noticed that the average duration of contested suits has been gradually rising of late years, and in the opinion of the Punjab Government this increase cannot adequately be accounted for by the growing complexity of civil law and the increased tendency to employ pleaders.

1,275 appeals were instituted in the Chief Court during the year, and in 41 per cent. of the cases the decision of the lower court was affirmed. Disposals rose by 73, and, with a fall in the number of institutions, the pending file was reduced by 309 (from 2,054 to 1,745). It is still too early to draw any conclusions as to the effect of Act XXV. of 1899 on the work of the court.

In Lower Burma two important events happened during the year. The remodelling of the courts by the new Courts Act, and the constitution of a Chief Court of four judges, in the place of a Judicial Commissioner and a Recorder, removed many anomalies and effected something towards placing the civil courts on a satisfactory footing. In Lower Burma the total number of civil suits instituted in the various courts of original jurisdiction was 41,714 as against 40,555 in 1899. The increase was common to all districts. The total value of suits rose from £468,215 to £503,884. The number of suits actually disposed of was 41,840, 20 per cent. being dismissed for default and 24 per cent. decreed *ex parte*. In Upper Burma institutions rose from 13,702 to 15,281; and of the 16,013 cases before the courts, disposals numbered 13,623, as against 15,237. The pending file increased by 61 to 776. As in the previous year the increase in litigation fell mainly under the head of suits for money or moveable property. The average duration of cases increased slightly in Upper Burma and considerably in Lower Burma.

304 (as against 382) appeals were preferred to the Chief Court, Lower Burma, during the year, while the number actually disposed of was 481. The percentage of confirmation was 63·82, as against 61·1 in the previous year, and 58·9 in 1898. The number of appeals preferred to district courts fell from 1,953 to 1,895. The decrees of the lower courts were confirmed in 58·95 per cent. of the cases disposed of.

In Upper Burma appellate work increased considerably in all courts, but while in the district courts the percentage of confirmation fell from 61·6 to 58·7, in the court of the Judicial Commissioner there was less interference with the decrees of the lower courts than in 1899.

The total number of suits filed in the Central Provinces declined from 72,514 (in 1899) to 64,958. In 1898 the number recorded was 97,838. These figures clearly reflect the unfavourable agricultural conditions which developed in 1899 and culminated in the famine of 1900. Of the total number of suits, 46,538 were for money or movable property. The percentages of suits disposed of by small cause courts, Naib-Tahsildars, Tahsildars, Munsifs, assistant and extra-assistant Commissioners were, respectively, 10·2, 20·6, 22·6, 34·1, and 11·3. The corresponding figures for the previous year were 9·1, 22·9, 25·8, 29·7, and 11·2. The average duration of contested suits was 92·8, and of uncontested suits 50·8 days. The total number of appeals instituted declined from 5,950 to 5,237. The number of appeals for disposal by district appellate courts was 5,344 (as against 5,916 in 1899), 4,496 (as against 4,955) being disposed of. The number of regular second appeals instituted in the Court of the Judicial Commissioner decreased from 525 to 488. The number of disposals, however, rose from 556 to 613. The number of appeals pending at the close of the year was reduced from 182 to 57, and the number pending over four months from 26 to 3.

The number of civil suits instituted in Assam rose from 27,335 (in 1899) to 29,895. This increase was almost entirely confined to Sylhet. In Cachar there was a slight falling off from the previous year's figures. The total

Civil
Justice.

value of the suits decreased from £175,369 to £158,931, the figures for 1898 being £149,812. 30,119 suits were disposed of, of which 6,352 were contested. The total number of suits for disposal (including 1,784 received by transfer, under remand or review, or revived under various sections of the Civil Procedure Code) was 36,349, and the pending file at the close of the year rose from 4,668 (in 1899) to 5,099.

1,033 appeals were instituted in appellate courts subordinate to the High Court, as against 936 in 1899. 1,120 were disposed of during the year, the number pending at its close being 521. Of the appeals decided after hearing, the decrees of the lower courts were upheld in 65·3 per cent.; 64 appeals were summarily rejected.

112 appeals were preferred to the High Court, of which 73 were decided. The decrees of the lower courts were upheld in 49 instances, while 12 appeals were summarily rejected.

Berar.

40 officers were employed on civil judicial work at the close of 1900 as against 36 in 1899. The number of suits instituted during the year was 15,714, and shows a decrease of 40·3 per cent. as compared with the average of the preceding five years. As compared with 1899, institutions decreased in all districts except Wun. Litigation in Berar was undoubtedly much affected by the famine. The total number of suits for disposal was 20,176, and of these 13,067, or 64·8 per cent., were disposed of. Owing to the abnormal conditions of the year the civil courts in each district were practically closed for long periods, and in the circumstances it is hardly surprising that the pending file rose from 16 to 35·2 per cent. of the total number of cases for disposal. Of the suits instituted 13,003 were for money or movable property, while the aggregate value of suits was £276,775. The proportion of contested cases to the total number of suits disposed of fell from 30·2 to 24·5, while the number of civil suits referred to arbitration once more shows a decrease. The proportion of non-contested cases shows a considerable rise, the increase being specially noticeable in suits decreed *ex parte*. Including 249 cases pending from 1899, there were 1,002 appeals for disposal during the year (as against 1,386 in 1899 and 1,547 in 1898), and of these 786 (as against 1,061) were disposed of.

Madras.

In the Madras Presidency, besides the Presidency Court of Small Causes, the City Civil Courts and the High Court, the following tribunals exercised civil jurisdiction during 1900:—

- 5,192 Village Courts.
- 64 Revenue Courts.
- 1 Cantonment Court of Small Causes.
- 139 District of Munsifs' Courts.
- 21 Subordinate Judges' Courts.
- 23 District Courts.

The number of original suits instituted in all courts decreased from 371,826 to 361,785, and that of appeals from 10,617 to 10,137. The number of institutions in village courts was 93,819, or 8,885 suits less than in the previous year, when the highest figure on record was attained. Of the total number for disposal, 94,249 were disposed of during the year, leaving a reduced pending file of 7,804. The number of suits filed in the Presidency Court of Small Causes decreased by 414 to 20,237; 19,847 cases were disposed of, 2,545 being contested. Arrears (1,877) showed an increase, which was due to numerous institutions at the end of the year.

On the original side of the High Court the number of suits instituted fell from 311 to 237, and of 355 suits in all for disposal 252 were settled, of which 118 were contested. Arrears declined slightly, but the number of cases pending for over a year rose from 7 to 14. On the appellate side, the appeals received numbered 1,876, as against 2,027 in 1899, the average number recorded in 1895-1899 being 2,407. The amount of work for disposal on the whole shows a slight decrease, but there was a more marked decrease in the number of disposals, and consequently arrears increased in all classes of appeals. Of appeals before the High Court, 1,280 were received from district courts, as against 1,509 in the preceding year, and 493 (as against 417) from Subordinate Judges' Courts. The aggregate and average values of appeal from original degrees were £265,264 and £743, respectively,

CIVIL
JUSTICE.

as compared with £226,944 and £602 in 1899; the corresponding figures for appeals from appellate decrees being £24,787 and £18, respectively, as against £30,987 and £20 in the preceding year.

The number of cases disposed of by the District Mansifs, which was considerably less than in 1899, included 83,566 ordinary suits and 130,546 small causes. Of these 38,810 and 28,016, respectively, were contested.

In Subordinate Judges' Courts the files of both ordinary suits and small causes were less heavy than in 1899. 1009 (as against 1071) ordinary suits were disposed of during the year, 697 of them being contested. Arrears of ordinary suits decreased from 596 to 574, and of small causes from 2,576 to 2,201. The number of ordinary suits pending for over a year, and of small causes pending for more than three months, also decreased.

The total number of civil suits instituted in the Bombay Presidency (including Sind) in 1900 decreased from 183,301 to 169,557. The decrease may be attributed to famine and plague. The aggregate value of the claims involved, however, rose from £2,191,402 to £2,496,749, the increase in the value of suits being most marked in the High Court and the district courts. Of the total number of suits before the courts (205,241), 167,243 (as against 189,411 in the previous year) were disposed of, and the pending file showed an increase from 34,071 to 37,998. Of the total number of suits decided, about 27 per cent. were contested.

The number of appeals instituted in the course of the year was 4,616, and 4,212 (as compared with 6,282 in 1899) were decided. Of the appeals disposed of, 852 were not prosecuted or were dismissed for default under Section 551 of the Civil Procedure Code. Of the remaining appeals, the decree of the lower court was confirmed in 2,063, or about 62 per cent. of the cases. Arrears increased from 3,228 to 3,632. The average duration of appeals declined from 235 to 208 days. The total number of applications for the execution of decrees was 198,092, while the sum recovered by all the courts was £270,824, as compared with £308,382 in the preceding year.

The total number of appeals before the High Court during the year was 1,466. Of these, 1,014 were disposed of, leaving a pending file of 452. In 802 cases the appellants were wholly unsuccessful. The average duration of appeals before the High Court was 139·3 days. On their original side the superior courts at the Presidency or Seat of Government had 2,689 cases before them, and disposed of 1,499, the pending file at the close of the year being 1,190. 287 cases were contested. The Presidency Small Cause Court disposed of 20,055 suits (out of 22,086 for disposal), thus leaving a pending file of 2,031. Of the cases decided, 3,704 were contested.

There were 4,685 suits for disposal in village courts under the Deccan Agriculturists' Relief Act, and of these, 4,297 were disposed of in the course of the year, leaving a pending file of 388. There were 89 village Munsifs and 237 conciliators appointed under the Act at the close of the year.

The total number of suits instituted in Coorg during the year was 1,985, while the number disposed of was 2,184. The corresponding figures for 1899 were 2,346 and 2,396, and for 1898 2,835 and 2,913, respectively. Appeals numbered 72 (including 3 pending from the preceding year), and of these 69 were disposed of, 40 being wholly unsuccessful.

CHAPTER IV.

REGISTRATION.

REGISTRATION.

General.

The Registration Law of 1877 makes compulsory the registration of non-testamentary documents affecting immovable property of the value of 100 rupees and upwards. Under the Transfer of Property Act of 1882, deeds of sale of immovable property of whatever value require to be registered, though if the value of the property affected is less than 100 rupees, transfer may, as an alternative, be effected by delivery. This latter Act is in force now generally throughout India, with the exceptions of Sind, the Punjab, and Burma, in which provinces, if the value is less than 100 rupees, registration of the sale of deeds is optional. In Upper Burma, which is under special conditions, registration is required of all deeds affecting immovable property. In all provinces the registration of other documents is permitted, at the option of the executing parties. 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. At the end of 1900-01 there were in British India more than 2,000 registration offices; the total number of documents registered during the year was 3,011,000, or 8 per cent. more than in 1899-1900; this total does not include the 144,000 registrations under the Dekkhan Agriculturists Act. The total registration receipts of the year 1900-01 were £312,600, as compared with £288,000 in the preceding year; and the cost of the registration offices was £169,600, leaving a surplus of £143,000, against £120,000 in the year 1899-1900.

Bengal.

There was in 1900-01 an increase in the total number of deeds registered in Bengal from 1,259,000 to 1,334,000, attributed in part to an insufficient harvest. The rise occurred entirely in deeds were under the compulsory heading, which numbered 901,000. The aggregate value of the property affected by the documents registered amounted to £14,096,000, against £14,013,000 in the previous year; about one fifth of that amount is contributed by the comparatively small number of deeds (3,275) registered in Calcutta. The number of registered transfers of holdings by tenants paying at fixed rates or enjoying occupancy right was 260,900, compared with 246,800 in 1899-1900; the transfer was made in 180,100 cases to other ryots, and in 27,600 cases to traders or money-lenders. Occupancy holdings realised 16·8 years' purchase, against 15·6 years' in the preceding year and 11·6 years' in 1898-99, when the price of these holdings was exceptionally low. Registrations under the Bengal Tenancy Act rose from 27,700 to 83,700, owing to the admission to registration of fractional parts of holdings.

Registrations under the Bengal Land Records Maintenance Act of 1895 were in progress during the year 1900-01 in parts of the Champaran and Mozaffarpur districts, but the operations are on a small scale, and show a tendency to decrease. Voluntary registrations under the Act of Successions or other minor transfers numbered 4,063 in 1897-98, the first year of the full working of the Act, but were only 1,093 in the year under review.

North-Western Provinces and Oudh.

The number of documents registered in the North-Western Provinces and Oudh rose from 207,200 to 243,050, of which 207,200 affected immovable property. The number of registered sales of such property rose from 47,400 to 51,700, and that of mortgages from 80,800 to 91,700, the value of the immovable property affected by the two classes of transactions being £4,638,000, or rather less than in the preceding year. The value of property affected by all deeds registered during the year was £7,607,000, against £7,287,000 in the year 1899-1900.

Punjab.

The number of documents registered in the Punjab in the year 1900-01 was 134,900, or 12 per cent. less than in the preceding year. The fall

REGISTRATION.

occurred in mortgages chiefly, the number of deeds of sale having increased. It is too early to say whether, or to what extent, the Punjab Alienation of Land Act, which did not come into effect until the end of the year, has affected transfers of land, and though the fall in mortgages might naturally be attributed to this cause, there were such differences in the fluctuations shown in the various districts that no generalisation can be made. Some part of the decrease may have been due to the improved agricultural situation. Registrations of deeds affecting movable property numbered 127,700, of which 48,700 were sales and 72,400 were mortgages, against 47,400 and 91,000 respectively in the previous year. The total value of all classes of property transferred under the documents registered was £3,648,000, of which £3,177,000 is under sales and mortgages of agricultural land.

The number of registrations in Lower Burma increased from 19,300 to 22,300, the increase occurring both in optional registrations and in deeds of which registration is compulsory, and the aggregate value of immovable property affected was £1,966,000, or rather more than in the previous year. Of this total, more than one third, or £773,600, represents property in Rangoon town.

Burma.

The registration system of Upper Burma was altered during the preceding year 1898-99 by a notification that all documents of which the registration is not compulsory are permitted to be registered; it still differs from that of Lower Burma in that all deeds relating to transfers of land, however small the value, must be registered. The question of bringing Upper Burma under the Registration Act was postponed for another year. The registered deeds affecting immovable property showed a considerable increase in 1900-01 as compared with the previous year, and the value of the property affected was higher, amounting to £236,000; 377 deeds affecting movable property were filed under the new system. The total number of documents registered was 7,300.

There was a moderate recovery in the number of registrations in the Central Provinces during the year, as is shown in the margin; up to 1896-97

Central Provinces.

there was a steady increase, but the recent famine period has been marked by a very low ebb in registration, the difference being perhaps partly due to the amount of agricultural loans issued. The low figures may also be partly due to restrictions on registration introduced by the

Central Provinces Tenancy Act, which came into force in 1898. Of the 20,404 registrations, 14,800 were compulsory, the increase in this class being 10 per cent., compared with 1899-1900. The aggregate value of the property affected rose from £460,000 to £515,000, which included £184,000 under sales, and £180,000 under mortgages of immovable property. The greater part of the increase in the case of immovable property comes under the head of non-agricultural land. The proportion of sales of agricultural land to agriculturists and to others remains about the same.

In Assam 44,900 documents were registered, or 10 per cent. more than the total of the preceding year; 75 per cent. of the registrations occurred in the Sylhet district; 38,600 of the deeds related to transactions affecting immovable property, which were considerably more numerous than in the previous year, owing to a poor harvest in the Surma valley. The aggregate value of property affected by the deeds registered was £520,000, of which 409,000 related to immovable property; the corresponding figures of 1899-1900 were £458,000 and £358,000. The number of registrations in the optional class rose from 10,000 to 11,000.

Assam.

In Madras the number of registrations rose from 854,000 to 967,000, the highest on record. The number of registered sales of land was 339,600, or 25 per cent. more than in the preceding year; of that number more than half affected land worth less than 100 rupees; the number of other deeds affecting immovable property was higher than in 1899-1900, while those relating to movable property show a decline. The value represented by the registered sales and mortgages of immovable property amounted to £10,127,000, by deeds affecting movable property £721,000; in each case the figures being higher than in 1899-1900.

Madras.

REGISTRATION.
Bombay.

The number of registrations in Bombay was 197,700, or 11 per cent. more than in 1899-1900, owing to reaction from the depression caused by famine and plague in many districts. The increase occurred in practically all classes of deeds. Registered deeds of sale or exchange, and mortgages of immovable property, numbered 70,900 and 81,000 respectively, against 62,700 and 72,200 in the previous year; but the registration of deeds transferring land of value less than 100 rupees is not compulsory in Sindh. The aggregate value of the property affected by instruments registered in the year was £6,290,000, or £283,000 more than in 1899-1900.

Under the special law for the protection of agriculturists in the four Deccan districts of Poona, Satara, Ahmednagar, and Sholapur, there were 144,000 registrations, which was 5 per cent. above the total of the previous year. The registered sales, leases, and mortgages of agricultural land, numbered 116,700, of which slightly more than 50 per cent. were between agriculturists on both sides. The aggregate value of property concerned in these special registrations was £454,000.

Berar.

The number of registrations in Berar amounted in 1900-01 to 34,600, compared with 40,000 in the preceding year. The decrease is held to indicate a return to normal conditions after the pressure of the famine. It occurred in all classes of deeds affecting immovable property. The total value of property transferred, £614,100, shows a proportionate decrease, the value of the land mortgaged and sold having been considerably less.

JOINT
STOCK
COMPANIES.

JOINT STOCK COMPANIES.

The Report on Joint Stock Companies for 1900-01 for the whole of India was not received in time for inclusion in this Statement, but particulars relating to Bombay and Madras are given for that year under the provincial headings. During the year 1899-1900, in all provinces of India, the number of new joint stock companies registered was 91, with a nominal capital of £1,616,000, and a paid-up capital of £308,500; while 170 companies, with a paid-up capital of £1,824,000, ceased to work. The number of new companies registered in the previous year was 179. At the end of the year there were in operation 1,340 companies, with a nominal capital of £33,444,000, and a paid-up capital of £23,626,000. The companies work chiefly in the provinces of Bengal and Bombay, and 84 per cent. of all the paid-up capital pertains to those two provinces; in Madras the number of companies (335) was almost as large as in Bombay, but the paid-up capital was only about one sixth as large; in the North-Western Provinces the paid-up capital of the 71 companies aggregated £1,011,000; in no other province did the aggregate paid-up capital of registered companies reach £500,000. The Bombay companies are, taking the figures as they stand, the richest, the average of paid-up capital for the 344 companies in that presidency being £28,500; while for the 402 companies of Bengal it is £24,900, for the 335 of Madras £5,000, and for the 71 of the North-Western Provinces and Oudh £14,200; the average in Bengal has risen much in the last two years, owing to the extinction of most of the native provident societies with practically no paid-up capital. In Bombay, on the other hand, companies of this kind are still active, and though the number of them started during the year was less than the number of those which ceased to exist, there were still 182 of them at work in March 1900. The distribution of paid-up capital among registered companies for different classes of industry was somewhat as follows:—

	Paid-up Capital.		Paid-up Capital.
	£		£
Banking and insurance	- 3,162,000	Mills and presses	- 11,951,000
Trading and shipping	- 3,839,000	Tea and planting	- 2,305,000
Mining and quarrying	- 1,106,000		

The group of companies with the largest aggregate subscribed capital, £11,951,000, were for weaving and spinning or for pressing cotton, jute,

JOINT
STOCK
COMPANIES.

wool and silk; and nearly two-thirds of the capital of such undertakings belonged to the Bombay Presidency. The capital invested in mills of these kinds increased by about two per cent. during the year, but the number of the companies was less by two than in 1898-99. In the 16 years from 1884-85 to 1899-1900 the number of joint stock companies at work has risen from 694 to 1,340; the paid-up capital has risen from 13½ to over 23½ millions of pounds.

In Bengal 15 new companies were registered during the year 1899-1900, with a paid-up capital of £267,000; while 102 companies, with a paid-up capital of £1,087,000, were wound up during the year. Of the 356 Native provident companies, many of them possessing little or no paid-up capital, which were working at the end of 1896-97, all but 27 had been wound up by the end of 1899-1900. The total number of companies working in Bengal at the end of 1899-1900 was 402, with a paid-up capital amounting to £1,002,000. The province contains nearly all the tea companies, and the great bulk of the mining and quarrying companies of India.

In Bombay 13 new companies were registered in the year 1900-01, compared with 44 in the previous year. The depression in the mill industry, combined with the failure of some Gujarat provident societies, checked the formation of new companies. Sixty-one companies went into liquidation, many of them provident societies. Nearly all these societies, which were of a speculative character, have now ceased to work, though some of them are still on the register. At the end of the year 474 joint stock companies were in existence, of which 344 companies had a paid-up of capital of £9,793,000, and the rest no paid-up capital at all; 221 companies, with a paid-up capital of £8,832,000, were working cotton and other mills and presses.

In Madras 42 new companies were registered in the year 1900-01, or four more than in the previous year. The total number of companies working at the end of 1900-01 was 361, with a paid-up capital of £1,624,000, as compared with 335 companies, possessing a paid-up capital of £1,687,000, in the previous year. In each of the last two years there has been an increase in the number of companies, accompanied by a decrease in the total paid-up capital. Of the newly registered companies, 33 were banking and loan associations and six were trading, manufacturing, or planting companies; two had no share capital; the nominal capital of the other 40 companies was £203,000, and the paid-up capital £18,600. The number of companies wound up or removed from the register during 1900-01 was 15, with a paid-up capital of £63,900.

PATENTS AND DESIGNS.

PATENTS.

The total number of applications filed in 1900, the latest year for which statistics are to hand, for the registration of inventions under the Patents Law was 492, or 11 more than in the preceding year. Of these, 36 were refused or abandoned, and 89 were undecided at the end of the year. Forty-five only of the applications were made by natives of India, 142 by Anglo-Indians, and 305 by other persons. The number of specifications filed during the year was 410, or five less than in the preceding year. The number of exclusive privileges kept alive by payment of the prescribed fees was 399. There were 22 applications for the registration of designs, of which 12 were rejected. Of the inventions for which protection was sought, 42 were connected with railways, 54 with electrical contrivances, 11 with lamps and burners, 8 with acetylene gas, 14 with the treatment of fibres, 10 with telegraphy, and seven with the manufacture of indigo.

CHAPTER V.

FINANCE.

FINANCE.

FORM OF ACCOUNTS.

In the Moral and Material Progress Statement for 1898-99 an explanation was given of the change that had been made in the form of the accounts of the Government of India. From 1886-87 to 1898-99 the accounts were so rendered as to show the revenue and expenditure under each head, both in India and in England, in tens of rupees (Rs.). But, since sovereigns have been made legal tender in India, and are at present interchangeable with rupees at the rate of one sovereign for fifteen rupees, the accounts of the Government of India have been drawn up so as to show the total revenue and expenditure under each head in pounds, the rupee being taken as one-fifteenth of a pound. The comparatively small sums which have to be brought to account owing to the facts that the remittances are not effected at exactly sixteen pence to the rupee, and that the Government is under obligations to carry out various transactions at fixed rates differing from the rate of sixteen pence to the rupee, are included in a single line under the head of Exchange in the Miscellaneous group of Revenue and Expenditure.

The new system was adopted in the Moral and Material Progress Statement for 1898-99; and has been followed in subsequent issues.

GROSS REVENUE AND EXPENDITURE.

Gross Revenue and Expenditure.

The gross revenue and expenditure of British India in 1900-01 may be thus compared with the figures for 1899-1900:—

	1899-1900.	1900-01.	Difference.
	£.	£.	£.
Revenue - - - - -	68,637,164	75,272,291	+ 6,635,127
Expenditure - - - - -	65,862,541	73,602,087	+ 7,739,546
Surplus - - - - - £	2,774,623	1,670,204	— 1,104,419 (worse)

In the gross revenue are included very large receipts, amounting altogether to about one-third of the whole, which (being derived from the working of the railways and canals, the operations of the Postal and Telegraph Departments, the interest received on loans to municipalities, landholders, &c., and on the investments of the Currency Department, the contributions by officers towards their pensions, the sale of stores, and the receipts of the various administrative departments), are rather of the nature of a set-off against the corresponding charges than revenue proper; and, on the other hand, there are included in the gross expenditure, first, the refunds and drawbacks, assignments and compensations, which are a direct set-off against the revenue; secondly, the charge incurred for the production of opium, which is subject to variations caused by the state of the season and of trade; thirdly, the charge for the maintenance of public works, which necessarily increases as more works are brought into operation. The financial position of the Government can be much better appreciated by looking at the Return of Net Income and Expenditure, which is annually laid before Parliament.* The following is a statement for 1899-1900 and 1900-01 of the net revenue, i.e., the revenue after the deduction of the refunds and drawbacks, assign-

* See Parliamentary Paper H. of C. 93 of 1902.

ments and compensations, and opium charges; and the net expenditure, i.e., the expenditure after the deduction of the various departmental receipts:—

FINANCE.

Net Revenue and Expenditure.

NET REVENUE.						
	1899-99.		1900-1901.		Net Revenue Increase (+) or Decrease (—).	
	£	£	£	£	£	£
Land Revenue &c. :						
Land Revenue - - - - -	16,444,825		16,755,477		+ 310,652	
Forests - - - - -	1,232,685		1,293,452		+ 60,767	
Tributes from Native States - -	586,603		551,173		— 35,430	
		18,264,113		18,600,102		+ 335,989
Opium : Net Receipts - - - - -	—	2,670,589	—	3,312,663	—	+ 642,074
Taxation :						
Salt - - - - -	5,573,775		5,709,923		+ 136,148	
Stamps - - - - -	3,225,920		3,304,786		+ 78,866	
Excise - - - - -	3,810,539		3,892,634		+ 82,095	
Provincial Rates - - - - -	2,495,458		2,559,474		+ 64,016	
Customs - - - - -	3,058,795		3,274,404		+ 215,609	
Assessed Taxes - - - - -	1,292,729		1,313,731		+ 21,002	
Registration - - - - -	287,164		311,758		+ 24,594	
		19,744,380		20,366,710		+ 622,330
Miscellaneous Receipts :						
Mint - - - - -	289,183		20,116		— 269,067	
Miscellaneous - - - - -	99,382		75,094		— 24,288	
		388,565		95,120		— 293,445
Exchange - - - - -	—	— 50,949	—	— 31,849	—	+ 49,100
TOTAL NET REVENUE - £	—	40,986,698	—	42,342,746	—	+ 1,356,048

NET EXPENDITURE.

		1899-1900.		1900-01.		Net Expenditure Increase (+) or Decrease (—).
		£	£	£	£	
Debt Services:						
Interest on Public Debt (other than that charged to Railways and Irrigation) and other Obligations.		—	1,342,283	—	1,487,467	+ 145,184
Military Services:						
Army - - - - -		14,165,743		14,265,525	+ 99,782	
Military Works - - - - -		801,782		747,187	— 54,595	
Special Defence Works - - - - -		874		6,864	+ 5,990	
			14,968,399		15,019,576	+ 51,177
Collection of Revenue - - - - -		—	4,448,839	—	4,531,711	+ 82,872
Commercial Services:						
Post Office - - - - -		— 126,068		— 134,942	— 8,874	
Telegraph - - - - -		— 105,891		— 113,129	— 7,238	
Railways - - - - -		— 76,756		— 325,124	— 248,368	
Irrigation - - - - -		— 136,357		— 235,592	— 99,235	
			— 445,102		— 808,787	— 363,685
Famine Relief and Insurance - - -		—	2,098,848	—	4,156,344	+ 2,057,496
Civil Services:						
Civil Departments - - - - -		9,597,544		9,728,546	+ 131,002	
Miscellaneous Civil Charges - - -		3,513,138		3,501,033	— 12,105	
Civil Work - - - - -		2,891,990		2,863,886	— 28,104	
Construction of Railways charged to Provincial or Local Revenues		2,356		— 822	— 3,178	
Provincial and Local Surpluses or Deficits.		— 206,220		190,588	+ 396,808	
			15,798,808		16,283,231	+ 484,423
TOTAL NET EXPENDITURE - £		—	38,212,075	—	40,672,542	+ 2,460,467

FINANCE.
Net
Revenue
and Ex-
penditure.

Thus there was an increase in the net revenue by £1,356,048, and in the net expenditure by £2,460,467, making the position worse by £1,104,419, and producing a surplus of £1,670,204 in 1900-01, as compared with a surplus of £2,774,623 in 1899-1900. This is the result of an increase in the net revenue in India by £1,353,596, an increase of net expenditure in India by £1,604,437, and an increase of £853,578 in the net disbursements of the Home Treasury.

The increase of £1,356,048 in the net revenue was due to an improvement in every one of the main heads except the Tributes from Native States, some of which had to be suspended in consequence of the famine, while the receipts of 1899-1900 had been swollen by exceptional payments. Nearly half of the increase (£642,074) occurred under opium, the sales in Calcutta having been larger by 3,600 chests, and the average price better by 140 rupees per chest; the collection of land revenue was greater by £310,652, the receipts from customs by £215,609, and from salt by £136,148, while all other heads gave a net improvement of £51,565, after allowing for a reduction of the mint receipts by £269,067, in consequence of the decision (mentioned in last year's report) that, with effect from the 1st of April 1900, the profit on the coinage of silver should be credited to the gold reserve fund and not taken to revenue.

Of the increase of the net expenditure in India by £2,460,467, no less than £2,057,496 was under the head of Famine Relief and Insurance, the payments for relief having risen from £2,074,918 to £4,125,230, while the outlay on the construction of protective irrigation works was greater by £7,184. The net charge for interest on ordinary debt was augmented by £145,184, mainly through the discount incurred in the issue of £3,000,000 India 3 per cent. Stock. The gain on the commercial services was enhanced by £363,685, of which the chief portion was an improvement of £248,368 under railways. In the civil departments the net charge was heavier by £131,002. The net expenditure on the army was larger by £99,782, while other charges were reduced by £6,120, but the allotments to the Provincial Governments on account of their unspent balances were greater than in the previous year by £396,808.

The tables in the Appendix show the net revenue and expenditure in India of the several Provinces under the chief heads for the years 1899-1900 and 1900-01, and the net payments in England. The revenue and expenditure of Berar, which form no part of the general finances of the Government of India, are not given in this chapter, but are referred to under Hyderabad, in the chapter on Native States. The surplus revenues of the various Provinces, as shown in the summary on page vi of the Appendix, were applied to meet the general charges in India and in England in approximately the following proportions:—In 1899-1900: Bengal 37·72, North-Western Provinces 20·98, Madras 15·13, the Punjab 11·08, Bombay 8·44, Burma 7·73, and Assam 1·43, while the Central Provinces showed a deficit of 2·51 per cent. In 1900-01, Bengal contributed 41·13 per cent., the North-Western Provinces 21·28, Madras 17·10, the Punjab 10·27, Burma 8·51, Bombay 7·41, and Assam 1·44, there being a deficit of 7·14 per cent. in the Central Provinces.

CAPITAL OUTLAY ON PUBLIC WORKS.

FINANCE.
Capital
outlay on
public
works.

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

	1899-1900.	1900-01.
Amount supplied by Ordinary borrowing or from the Cash Balances, without being charged against the Revenue of the year:	£	£
State Railways - - - - -	2,437,712	1,434,865
Irrigation Works - - - - -	597,960	590,483
Amount met by Debenture Stock issued by the East Indian and South Indian Railway Companies - -	1,057,487	2,015,610
Amount defrayed from Revenue:		
Provincial Railways - - - - -	2,356	—822
Surveys of Railways charged to Revenue in previous years - - - - -	8,784	—
Protective Irrigation Works - - - - -	23,930	31,114
Other Irrigation Works* - - - - -	15,723	4,207
TOTAL Direct Outlay by the State -	4,143,952	4,075,457
Outlay by companies guaranteed or subsidised by Government - - - - -	2,734,200	1,896,754
Outlay by railways outside Government accounts -	360,967	206,020
Outlay by Local Boards - - - - -	—	14,394
TOTAL CAPITAL OUTLAY ON RAILWAYS AND IRRIGATION - - - - - £	7,239,119	6,192,625

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

DEBT.

The following table shows the alteration in the amount of the debt that took place in 1900-01, 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 1900.	Amount of Debt on 31st March 1901.	Increase.	Decrease.
In India (permanent) - - - - £	74,983,134	76,887,937	1,904,803	—
„ (temporary) - - - - £	—	301,942	301,942	—
In England (permanent) - - - - £	119,644,401	128,435,379	8,790,978	—
„ (temporary) - - - - £	4,500,000	5,000,000	500,000	—

In India a loan of three crores of rupees (£2,000,000) was issued at an average price of Rs. 94.0.1.17 per cent., £95,197 of debt was discharged, and £301,942 was borrowed from Maharajah Sindhia, in Gwalior coin, at 3½ per cent., repayable in September 1901 in Government rupees. In England the permanent debt was increased by £8,922,350, of which £5,922,350 was the debenture debt of the Great Indian Peninsula Railway Company, the liability for which was assumed on the purchase of the undertaking; £3,000,000 India 3 per cent. Stock was issued at a fixed price of 95½ per cent., to meet the expenditure on the relief of famine and advances to Native States; and £131,372 of India £3 per cent. Stock was discharged. Temporary debt was also incurred to the amount of £500,000, sterling Bills for £5,500,000 being issued at average rates varying from £3 6s. 2d. to £3 17s. 8d. per cent., while only £5,000,000 was paid off.

SAVINGS BANKS AND OTHER OBLIGATIONS.

FINANCE.
Savings
banks and
other
obligations.

The following table shows the amount received and paid on account of savings banks, loans to municipalities, and other obligations in India :—

	1899-1900.	1900-01.
	£	£
Savings Banks, &c. (net increase in deposits) - - -	254,748	378,319
Loans to Port Trusts, Municipalities, Native States, &c. by the Imperial Government (net disbursements) - - -	— 706,194	— 2,457,269
Loans by the Provincial Governments (net disbursements) - - -	— 153,665	— 769,196
Other obligations (net receipts) - - -	60,009	101,079
TOTAL - - - £	— 545,102	— 2,747,067

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.	
	1899.	1900.	1901.	In 1899-1900.	In 1900-01.
In India - - - £	11,177,669	8,425,827	10,598,981	— 2,751,842	+ 2,173,154
In England - - - £	3,145,768	3,330,943	4,091,926	+ 185,175	+ 760,983

COINAGE AND PAPER CURRENCY.

Coinage
and Paper
Currency.

The value of the coinage at the Mints in India was :—

	1899-1900.	1900-01.
	£	£
Silver - - - - -	1,483,983	12,942,465
Copper - - - - -	50,087	40,313
TOTAL - - - £	1,534,070	12,982,778

The silver coinage in 1900-01 consisted of 171,479,318 rupees, 1,605,819 quarter rupees, 6,143,609 eighth rupees, and 9,469,991 British dollars for use in Singapore, Penang, and Hong Kong. Of the whole rupees that were coined, 135,970,779 were for use in British India, and 35,508,539 were for the Native States of Baroda, Radhanpur, Navanagar, Jodhpur, and Ulwar.

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

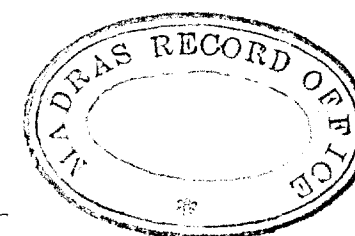
	1899-1900.	1900-01.
	£	£
Receipts - - - - -	345,901	3,172,875
Expenditure - - - - -	55,908	3,152,759
Net Receipts - - - - -	289,993	20,116

The net profit on the coinage of rupees, amounting to £3,031,294, was transferred to the Gold Reserve Fund, which, on the 31st March 1901, consisted of £1,200,000 in gold in India, and £1,831,294 held in the Treasury balances.

On the 31st of March 1901 the value of notes in circulation was £19,910,600, being greater by £752,450 than on the corresponding date in 1900. The reserve was, in gold £5,778,518, in silver £7,465,419, and in Government securities £6,666,663.

RATE OF EXCHANGE.

In 1899-1900 the Secretary of State for India in Council sold Bills and Telegraphic Transfers on the Treasuries in India for Rs. 28,48,00,943, and received for them £19,067,022; the average rate was thus 1s. 4·067662d. per rupee. The Bills and Telegraphic Transfers sold in 1900-01 amounted to Rs. 19,98,37,693; the sterling received was £13,300,277; and the average rate was 1s. 3·9732953d. per rupee.



CHAPTER VI.

SURVEYS AND SETTLEMENTS.

SURVEY OF INDIA, ETC.

SURVEYS. THE work of "The Survey of India" is divided under five heads, namely :—

1. Trigonometrical Survey.
2. Topographical and Forest Survey.
3. Cadastral Survey.
4. Special Surveys and Explorations.
5. Map Production.

Cadastral Surveys are separately treated below. The account given of progress under heads one, two, four and five relates to the work of the survey year ending on the 30th September 1900.

The field operations of the year were carried on by one double and 15 ordinary parties and four detachments. Of these, one party was employed on trigonometrical surveys; eight parties on topographical surveys; one double and one ordinary party on forest surveys; two parties on cadastral surveys; four detachments on traverse surveys; and three parties on scientific operations. The operations of the Forest Survey Branch were continued in addition to the above.

**Trigono-
metrical.**

The party (No. 24), which in 1898-99 linked up the principal triangulation in India with the Burma triangulation, was divided in the year under report into two detachments, which were employed in running a minor series of triangulations to connect the Manipur meridional series with the Coast series near Akyab.

**Topo-
graph**

The number of parties employed on topographical work was eight, of which four were in Burma. The total area topographically surveyed during the year was 14,547 square miles, against 18,280 square miles in 1898-99. Parties Nos. 10, 11, and 21 were engaged in Upper Burma, and the aggregate area completed by them amounted to 7,210 square miles on the one-inch scale, while 11,161 square miles were triangulated in advance. The two latter parties were again to some extent hampered by having to supply surveyors for the Burma-China Delimitation Commission. Another party, No. 3, engaged on the Arakan Yoma hills, completed 1,837 square miles of survey and 3,757 square miles of triangulation, in a hilly and thickly wooded country. No. 12 party continued the survey of Sind on the two-inch scale, and completed an area of 2,383 square miles, besides a special survey of the boundary of the Khairpur State. The work of No. 15 party consisted in topographical survey of 3,911 square miles, chiefly in Rawalpindi district and in Kashmir, but also in the Secunderabad cantonments in Madras, besides triangulation over 2,033 square miles, and reconnaissance survey of 27,500 square miles. The Himalaya party, No. 18, surveyed 1,240 square miles on different scales in the Punjab, and began a special large scale survey of the Simla municipality. The survey of the Lushai hills was carried on by party No. 14, and 759 square miles were surveyed. The physical difficulties of the country render the latter an arduous and costly survey.

**Forest
Survey.**

The general scale upon which the reserved forests are surveyed is that of four inches to a mile; but in the case of teak forests this is often changed to eight inches, and the 16-inch scale is used for *babul* reserves. In Madras two amalgamated Forest Survey parties (Nos. 9 and 19) completed detailed survey on the four-inch scale over 1,524 square miles, besides triangulation over 1,429 square miles, and 312 miles of traverse survey. Surveys of reserved forests were carried on in the Kurnool, Cuddapah, and Coimbatore districts. In Bombay a party (No. 17) completed the following work: in the district of North Kanara, 379 square miles of forest reserves on the four-inch scale; in Thana and Nasik, 236 square miles of teak forest on the eight-inch scale; and in Sholapur, 55 square miles of *babul* reserves on the sixteen-inch scale. The total outturn of forest surveys during the year amounted to

4,723 square miles, of which 2,421 square miles were surveyed by the Forest Survey Branch. This branch, with which party No. 20 was amalgamated in 1897-98, has up to date surveyed 27,301 square miles, of which 20,633 square miles were on the four-inch scale. The work has been done chiefly in the Central Provinces, the North-Western Provinces and Oudh, the Punjab, and Burma, but also in Berar, Assam, and Bengal.

The work of the cadastral and traverse survey parties is noticed below under each of the provinces where they were employed.

Two parties (Nos. 22 and 23) were employed on latitude observations. The former party worked on the Bilaspur Meridional Series, taking observations at seven stations. The latter was engaged in latitude operations at ten stations, with a view to the examination of the variation of Himalayan attraction. Experiment was made with a new instrument for the measurement of base lines by means of suspended wires.

The number of new maps or sheets, and new editions, in hand in the Engraving Office during the year was 281; these included three quarter sheets of the Atlas of India (scale of four miles to the inch) which were completed, and 75 which were in progress. A new map of India on the scale of 64 miles to the inch has been projected, as it has become impossible to bring the existing map on that scale up to date. Besides these, a large number of provincial maps were corrected.

The recording of tidal curves by self-registering tide gauges, their reduction, and the publication of tide tables, were continued during the year at 13 stations, of which seven are permanent and six are temporary, besides personal observations at five stations. The observations at Diamond Island having been completed in 1898-99, that station was closed, and work was started at Port Albert Victor. The Bushire observatory was to be closed, and work started in the ensuing season at Bassein. The number of Indian ports for which tide tables for 1901 have been published is 39. The programme of levelling operations included taking a double level from Calcutta to Damukdia, a distance of 124 miles, and single levelling on portions of the Eastern Bengal State Railway, fixing the height of a large number of bench marks and of two Great Trigonometrical stations.

A magnetic survey of India is under consideration, and steps are being taken to provide the necessary instruments and suitable observing stations, one of which is to be fixed at Dehra Dun.

Under this head are included surveys and reconnaissances which are executed on the scale of half an inch to a mile or smaller scales. During the year an area of 3,256 square miles of survey on the half-inch scale was completed in Kashmir, and a very large addition made to our knowledge of the Indian frontier geography, including 27,515 square miles of quarter-inch and eighth-inch survey on the North Western frontier; the total area reconnoitred on the Eastern frontier during the year amounted to upwards of 92,000 square miles.

The marine survey vessels "Investigator" and "Nancowry" began and completed a survey of the Kanara coast on the western side of India, and subsequently surveyed the Coromandel coast on the eastern side, between Cuddalore and Point Calimere. The "Nancowry" was then despatched to the Gulf of Kutch to undertake the survey of Salaya harbour for the Navanagar State. The chief ports and special portions of the coast, which were selected for survey in 1892, having now been completed, the systematic survey of the coast has been taken in hand, and a beginning was to be made on the Burma coast.

The Geological Survey Department during the year 1900-01 was again engaged in the investigation of the gold fields of Burma, the Wynaad in Madras, Chota Nagpur in Bengal, and Mysore. In Burma gold was found in "paying" quantities in the Wuntho district, but it is doubtful whether there is enough to repay working on a large scale. In the Wynaad, inquiry in two of the mines opened in the early 'eighties, and subsequently deserted, showed that the ore is not "payable." Dr. Hatch, the specialist in gold

SURVEYS. mining, reported on the Kolar goldfields of Mysore. The examination of the Jherria coalfield was in progress, in connection with the Jherria coalfield railway scheme. A compilation was published during the year on the subject of recent artesian experiments in India. The work of geological survey proper was carried on by officers of the Department in Madras, the Central Provinces, Burma, Assam, the Himalayas, and Baluchistan.

**Archaeo-
logical.**

The work of the Archaeological Survey of Western India consisted in a survey of the archaeological remains at Abu, and in visits to Chitorgarh, Ajmer, Ahmadabad and Elephanta Island. The expenditure on the conservation of antiquarian remains in the Bombay Presidency amounted to £760. In the North-Western Provinces attention has been chiefly directed to the shrines and temples at Agra, Sikandra, and Fatehpur Sikri, and reports were made with a view to conservation work, on which £8,700 were spent in the province during the year from Government revenues, besides £1,200 from other sources. In the Punjab an Archaeological Surveyorship was created during the year, and Dr. Vogel was selected to fill the post. In Madras, in the early part of the year, survey work was in progress in the Malabar district, and excavations were carried out at a prehistoric site in the Tinnevely district, described as an "inexhaustible field of archaeological research of the most valuable description." The Archaeological Department in Burma devoted its attention chiefly to conservation of ancient monuments. A list of buildings of archaeological interest is being prepared, with a view to their conservation by Government. Additional inscriptions were discovered at Tagaung, and are being deciphered and prepared for publication.

METEOROLOGICAL DEPARTMENT.

**Meteoro-
logical
Depart-
ment.**

Meteorological observations were recorded during the year 1900-01 at 229 stations, of which 183 are maintained by the Government of India. Of these latter, seven were first-class observatories and 39 second-class, the remaining 137 belonging to class 3, in which less frequent observations are taken. The area under observation 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. Besides observing stations, inquiries are made from ships entering Indian ports, which give valuable meteorological data. The points investigated are rainfall, snowfall, barometric and thermometric readings, cloud movements, storms and earthquakes; daily charts and weekly and monthly reviews, as well as seasonal forecasts and storm warnings, are issued. The monthly reviews contained, among other information, rainfall data from 2,326 stations.

The forecast of the probable rainfall for the monsoon of 1900, published in June of that year, was founded mainly on information regarding the snowfall on the mountain region to the north and north-west of India, and on the distribution of barometric pressure in India and over the Arabian Sea during the month of May, as compared with the meteorology of previous years. The forecast predicted a rainfall of about normal strength on the average of the whole season, though it was anticipated that the Bombay monsoon current might be late. This forecast was, on the whole, in very fair agreement with fact. The rainfall did not vary from the average by more than 20 per cent. in any province excepting Assam, where it was 22 per cent. in defect, and the Punjab, where it was 29 per cent. above the average. In Bombay the monsoon set in late, and the fall was 3 per cent. below normal.

The forecast of the winter rains, from December 1900 to February 1901, was issued in December 1900, and predicted slightly deficient rainfall in Upper India and in the Gangetic plain, and slight excess in Central India, the North-Western Provinces, and the Central Provinces. The result showed, however, a rainfall in all parts of India, excepting Assam, greater than the normal; and in the western part of Bengal and the Central Provinces the excess was considerable.

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. On the Bay of Bengal 21 ports received warnings, three of them on the "brief" system. On the western side of India warnings were sent to 23 ports, to seven of them on the "extended" system. The system of flood warnings to canal, civil, and railway officers, to military officers, and to private firms, continued to be useful; 509 such warnings were issued by the Meteorological Department during the year. The warnings are generally stated by the recipients to have been timely and satisfactory, but criticisms and suggestions are invited, and, in cases where they have been received, have been adopted.

The average rainfall and the actual rainfall of the three years 1898 to 1900, in the regions into which India has been divided, were as follows:—

Meteorological Division.	Area, Square Miles.	Number of Stations.	Normal Rainfall.	Actual Rainfall.		
				1898.	1899.	1900.
			<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>
Punjab Plains - - -	120,000	29	21·71	18·67	8·93	24·48
North-Western Provinces and Oudh.	83,500	44	38·07	43·35	35·43	36·97
Rajputana, East - - -	67,000	29	27·02	19·28	{ 11·90	28·69
Rajputana, West - - -	58,000	10	12·51			
Central India States - -	91,000	26	44·26	46·36	24·29	42·18
Behar - - - - -	30,000	15	44·75	54·92	62·65	43·64
Western Bengal - - -	38,000	14	52·75	55·19	50·71	61·93
Lower Bengal - - -	54,000	28	65·53	70·38	76·63	71·66
Assam and Cachar - - -	61,000	17	95·19	89·80	105·57	82·23
Orissa and Northern Circars	27,000	32	52·75	47·85	42·18	54·79
Central Provinces, South -	61,000	19	53·46	48·49	26·11	58·68
Berar and Khandesh - -	43,000	13	36·41	28·50	14·79	34·46
Gujarat - - - - -	54,500	13	33·82	29·30	7·33	29·32
Sind and Cutch - - -	68,000	10	8·59	5·44	77	6·13
North Deccan - - - -	48,000	13	30·83	35·40	18·79	27·55
Konkan and Ghâts - - -	16,000	11	139·95	150·62	71·96	155·79
Malabar and Ghâts - - -	18,000	8	114·50	107·79	89·98	126·69
Hyderabad - - - - -	74,000	17	34·58	30·57	16·53	30·77
Mysore and Bellary - - -	58,000	18	29·28	31·93	21·57	25·90
Carnatic - - - - -	72,000	36	36·94	47·65	31·00	33·08
Arakan - - - - -	11,000	6	152·36	142·15	180·49	131·41
Pegu - - - - -	32,500	7	72·24	71·25	74·52	78·55
Tenasserim - - - - -	10,500	4	173·30	178·30	162·29	179·15
Upper Burma - - - -	?	13	39·02	37·81	44·93	44·19

Over the whole of India the rainfall of 1900 was half an inch below the normal.

In the first two months of 1901 the rainfall was considerably above the low average in most parts of India, excepting the Indus Valley and Western Rajputana. In April the West Coast, Bengal and Assam had good rain, but the Burma fall was defective. In June the setting in of the monsoon was delayed on both sides of the peninsula. A considerable amount of rain fell in the west coast districts, but elsewhere the fall there was a deficiency varying between 26 and 84 per cent. In July the rainfall was irregular, and was more or less below the average in all tracts excepting the Burma Coast. In the succeeding months the rainfall was more favourable over northern and eastern India, but parts of Bombay, Rajputana and the south-western Punjab suffered from deficient rain.

SETTLEMENTS AND CADASTRAL SURVEYS.

The term "settlement" is sometimes applied in Indian revenue affairs to the process of fixing the rents payable by tenants to their landlords, but more generally to the process of assessing the land revenue payable to the State. Occasionally, in newly acquired or specially backward tracts, the land revenue is assessed for a short term of years on a general review of the circumstances and capabilities of the land and people concerned; such a process is called a summary settlement. But a regular settlement is a more complicated affair, and consists of many stages. In

**SETTLE-
MENTS AND
CADASTRAL
SURVEYS.**

the first place, every separate estate or holding is demarcated by permanent marks on the ground; and disputes between neighbouring right-holders are investigated and decided. Every estate or holding is then surveyed and mapped, all boundary marks, wells, and buildings being shown on the field or cadastral maps. Sometimes these field surveys and maps are made by trained professional surveyors belonging to the Survey Department. When the field surveys are made by local or village surveyors, such agents are trained by and their work is independently tested by professional surveyors. The work of the professional survey, whether cadastral maps or traversing, is based on and is checked by the independent scientific work of the Grand Trigonometrical and Topographical Surveys. After the field maps are prepared, the next process is to classify or record each field according to its productive value, as evidenced by its soil, by the amount of its produce, or by the rent it pays. A record is at the same time drawn up of all rents paid, and of all rights, whether landlord rights, or tenant rights, or rights of user, over all the ground, buildings, wells, and trees shown in the map. Then the assessing officer (or settlement officer, as he is often called) compiles the information obtained for all the lands in a circle of villages; and on a review of all these data, of the past fiscal history, of the tract, of the range of prices, of the accessibility of markets, and of other general considerations, he proposes rent rates or revenue rates for the several classes of lands in the circle. In the determination of rent rates or revenue rates for any tract, the rainfall, the subsoil water level, and irrigation facilities are important factors; but improvements made by the owners or occupiers themselves are not held to enhance the assessable value of the land. In re-settlements in the North-Western Provinces and Oudh, the rents now enjoyed by the owners of the land are practically the main basis on which the new land revenue is assessed. The rent rates or revenue rates proposed by the settlement officer, and the grounds on which they were based, are then investigated by a superior officer, and are not adopted until they have been accepted or modified by the latter.

In provinces where the zemindari tenure prevails, that is, where single proprietors or proprietary brotherhoods possess large estates of several hundreds or thousands of acres, the State revenue is assessed at an aliquot part (usually about one-half or less) of the ascertained or assumed rental. The revenue, though it is fixed with reference to acreage rates on the land actually cultivated, is assessed on, and is payable by, each estate as a whole; the assessment remains unchanged for the 30 years or other period of the settlement; the proprietor can bring as much as he likes of his waste or fallow land under the plough; and it is only on re-assessment at the end of the term of the settlement that the State obtains any increase of revenue on account of the extensions of cultivation during the settlement period. In provinces where the ryotwari tenure prevails, that is, where each petty proprietor holds directly from the State, generally cultivates his own land, and has no landlord between himself and the Government, the revenue is separately assessed at an acreage rate on each petty holding, and land revenue becomes payable at once, or after a short term of grace in the case of uncultivated lands, on all extensions of cultivation. The ryotwari proprietor is at liberty to throw up his holding or any portion of it, at the beginning of any year, after reasonable notice; the zemindar or large proprietor engages to pay the revenue assessed upon him for the term of the settlement.

After the revenue is assessed and the assessment is sanctioned, copies of the field map, of the schedule of fields, and of the record of rights are made; one copy is given to the proprietor; one copy is lodged in the district court house; and usually a third copy is placed in the subdivisional or tahsil office. Through the agency of the local officials of each village or circle the field maps and record of rights are corrected or written up year by year, so as to make them at all times faithful accounts of current rural facts and circumstances. When revisions of assessment are undertaken at the end of the settlement, the village maps and records serve, after adequate testings and corrections, as the basis for re-assessment; and in this way a re-settlement is a shorter and less costly affair, and causes much less harassment to the people than is involved in an original settlement. At the present time re-settlements have been practically completed in Bombay, and are

being made in some districts of Madras, the Punjab, Oudh, Berar, and the Central Provinces; also in parts of Bengal. Original settlements are still being prosecuted on the west coast of Madras and in Lower Burma; while in Upper Burma the first settlement of the land revenue has been begun.

Settlements and cadastral surveys in the permanently settled districts of Bengal are undertaken under the Tenancy Act for the benefit of the landlords and their tenants. The Bengal report brings the account of survey and settlement affairs down to the end of September 1901. The outturn of survey work included 3,695 square miles of traversing, 1,244 square miles of cadastral survey, and 1,416 square miles of preliminary record writing, besides topographical survey over 121 square miles. The cadastral survey was chiefly in private estates in the Monghyr and Darbhanga districts. The record writing is carried out by the Survey Department under the instructions and supervision of the Settlement Department. It is reported that the attitude of the inhabitants was generally satisfactory, though petty landlords in Monghyr gave some trouble. No active opposition was encountered in Backergange. Survey operations in Darbhanga are practically completed. Settlements were in progress in ten districts. The area embraced was 11,824 square miles, and the number of villages dealt with was 14,504. Records were attested in 1,212 villages and finally published in 1,309 villages. In North Behar cadastral settlements were in progress in the North Monghyr and Darbhanga districts, the total area of which is 4,580 square miles. In the Mozufferpore and Champaran districts operations had been brought to a conclusion, and the final reports were submitted after the close of the year. In Saran all that remained was to settle disputes and recover costs in a small area, and to submit a final report on the whole. In Darbhanga the preliminary record writing was supervised in the 600 square miles remaining to complete the district, and attestation was carried out over 1,105 square miles. From statistics compiled during the course of the operations, and relating to an area of 1,214 square miles in Darbhanga, it appears that of the 4,000,000 cultivators comprised in it 98½ per cent. have occupancy rights, the cash rent averages nearly Rs. 3½ per acre, and sub-tenants cultivate only 1½ per cent. of the area at a rent about 7 annas per acre in excess of the above rate. Figures were also compiled for 113 villages showing the number of transfers of holdings during 10 years; they show that of the total area 8 per cent. has changed hands, and that the average price obtained at the sales was Rs. 67 per acre, which is 19 years' purchase of the above rent. A commencement was made with the settlement of the Backergange district, and work was also in progress in private estates in Gaya and Singhbhum and in the Sonthal Parganas. A feature of the latter settlement has been the extensive cancelling of illegal transfers, embracing 5 per cent. of the whole area, the eviction of the intruders, excepting those who had been in occupation for 12 years, and the resettlement of village ryots on the land.

In the North-Western Provinces and Oudh cadastral surveys were completed over 3,882 square miles and records were written for 3,106 square miles. The work was for the most part performed by the village accountants, whose mapping is said to be excellent, though their record work is not so good. The settlements in Oudh are nearly completed. The Fyzabad report was sanctioned during the year ending in September 1900. The Kheri settlement is complete, though not sanctioned finally during the year. The work in the Hardoi district was also finished. Gonda was the only Oudh district under formal assessment. In the North-Western Provinces the settlement of the Meerut district was completed, and the inspection and assessment were finished in Shahjahanpur. In the Bareilly, Pilibhit, Farrukhabad, Aligarh and Naini Tal districts work was in progress. Owing to special circumstances the settlement of the Etawah and Fatehpur districts was postponed for 10 years. Moderation in the assessments has been enjoined and enforced, and it is claimed by the local government that recent settlements, while yielding a considerable enhancement of revenue, are not burdensome to the landowning class, and that this has been acknowledged by influential classes of landlords.

In the Punjab a detachment of the Survey of India completed a traverse Punjab survey in some villages in Kohat. Some work was done by provincial

SETTLEMENTS AND
CADASTRAL
SURVEYS.

detachments in boundary surveying and the laying down of base lines in riverain tracts. Control of the proceedings has now been placed in the hands of the Settlement Commissioner. Settlement operations were in progress in parts of seven districts. In the Jhelum, Mooltan, Dera Ismail Khan, and Hazara (Agror Valley) districts, measurements have to a greater or less extent been completed, but no new assessments were announced. In the Ferozepore, Kohat, and Mozuffergarh districts, and in parts of Hazara, measurements are in progress, the settlement in the latter having been begun during the year.

Burma.

Demarcation prior to survey was completed over about 700 square miles, and 755 miles of traverse survey were executed, partly by a detachment of the Survey of India (No. 7). In the Lower Chindwin district 800 square miles were cadastrally surveyed. Revisions of survey were carried out in nine districts. The area still requiring re-survey is said to be 2,884 square miles. The area under supplementary survey, that is, the area for which the field maps and records are tested and corrected yearly, increased from 23,860 to 24,926 square miles in Lower Burma, and it was 4,944 square miles in Upper Burma. The 21 Government survey schools (13 in Lower and eight in Upper Burma) had 538 students on the rolls at the end of the year, including many sons of village headmen. Regular original settlement work was in progress in the Thayetmyo, Pegu, Magwe and Shwebo districts. The Myingyan summary settlement was completed, and progress was made in Yamethin. The year also saw the introduction of original settlement or revised settlement rates in Hanthawaddy, Pegu, Toungoo, Bassein, Myaungmya and Meiktila districts, while the direct system of assessment of non-State lands was started in Mandalay and Kyaukse. The new rates produced a large increase in the Lower Burma districts, while in Upper Burma a favourable season caused enhanced receipts under the new system. But it is not expected that on the whole the new system will produce much more than the old in Upper Burma.

Central
Provinces.

Assessment operations in the Central Provinces were practically brought to a standstill in the year ending in September 1900 owing to the famine. The settlements of Bhandara and Balaghat were completed, but no work could be done in Chanda, Raipur and Bilaspur. The final orders on the Nagpur settlement were issued during the year. The revised revenue showed an increase of 18 per cent. on the revenue fixed in the year 1864, and represented about 59 per cent. of the rental. In connection with the comparatively small area held on the ryotwari tenure in the Central Provinces assessments were made in parts of four districts, but work was hampered by the famine. The area of waste lands allotted during the year was 16,700 acres, and over 401,000 acres, or more than the total area allotted, still remains for allotment.

Assam.

Cadastral surveys are now carried out in Assam by local agency on the basis generally of a theodolite traverse. During the year 1900-01, besides traversing over about 235 square miles, cadastral survey was thus carried out in the Kamrup and Sylhet districts, over an area of 33 square miles. Effect was given during the year to the re-settlement report of Cachar, noticed in a previous Statement. The report on the settlement of the temporarily settled estates of the Sylhet district was received, and the rates approved. They are very little above the rates previously in force; the result of the operations is an increase of the demand by 17 per cent. The period of the settlement is 20 years. The settled area now constitutes 40 per cent. of the total area in Cachar, 87 per cent. in Sylhet, and 19 per cent. (omitting permanently settled estates) in the Brahmaputra Valley.

Madras.

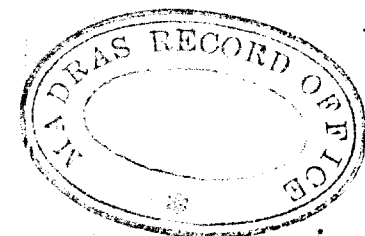
In Madras cadastral re-survey prior to re-settlement was in progress during the year 1900-01 in the Kistna, Kurnool and Nellore districts, and the area covered was 1,754 square miles, including revision, against 1,284 square miles in the preceding year. Besides this work, 95 square miles of original survey was carried out over Government lands excluded from former surveys, and 802 square miles in proprietary estates, under the Act of 1897, which authorised the survey of such estates, either upon the request of the landholders or, in special cases, on the initiative of the Government. The work was done under

SETTLEMENTS AND
CADASTRAL
SURVEYS.

the Madras Survey Department in six divisions and very little of the work is found on inspection to need doing over again. For the ensuing year the estimated outturn was fixed at 2,757 square miles of survey and re-survey altogether. Settlement parties were at work in the Nellore, South Canara, Godavery, Kistna, and Malabar districts, chiefly engaged on minor operations. The re-settlement of the Godavery district and of the Masulipatam portion of the Kistna district was completed, and orders on the settlement schemes of Malabar were received, work being begun during the year. No final settlement report was approved during the year. A certain amount of re-survey was accomplished in Kurnool and Salem. The total cost of survey and settlement operations, since operations began in 1858, has been £2,510,000; while the net increase of revenue secured was about 20 per cent. on the outlay.

The Bombay Survey Department ceased to exist in October 1900, but small establishments were maintained during the year 1900-01 for special work in Gujarat, the Deccan and Sind. These special operations do not require notice. No new settlements were introduced into any district during the year, but proposals were submitted to Government for a few villages, chiefly in the Central division. The total approximate cost of the Bombay revision settlement up to the 31st March 1900 was £510,000; this expenditure has resulted in an increase in the revenue demand of £310,000, or 30 per cent. on the former revenue, being equal to a return of 61 per cent. on the total expenditure.

The field operations of the revision survey of Berar had been brought to a close in June 1899, and there was no work of the nature done in the year ending in July 1901. Settlement registers were completed for 2,596 villages. Proposals for revision settlement of two talukas in the Wun and Basim districts were prepared and submitted during the year, and sanction was given to four other revised settlements, the introduction of the new rates of assessment being postponed until 1902-03 owing to the famine. In that year it is estimated that the land revenue of Berar will be increased by some £50,000. The settlements will be for a period of 30 years, and provision is made for the gradual introduction of the higher rates.



CHAPTER VII.

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

The subjoined table shows the receipts and disbursements on account of land revenue for each province, as entered in the public accounts for the financial year 1900-01.

DETAILS of LAND REVENUE and EXPENDITURE.

	India, General.	Bengal.	North- Western Provinces and Oudh.	Punjab.	Burma.	Central Pro- vinces.	Assam.	Madras.	Bombay.	TOTAL.
REVENUE.	£	£	£	£	£	£	£	£	£	£
Ordinary Land Revenue - -	76,814	2,608,444	4,323,119	1,180,000	1,189,076	310,510	384,412	3,307,098	2,054,755	16,119,347
Recovery of Survey and Settle- ment Charges.	—	41,755	—	—	—	—	—	—	—	41,755
Sale of Proprietary Right of Go- vernment in Land.	5	449	14	1,562	—	13	—	—	—	2,434
Assessment of alienated lands, less quit-rents.	—	5,766	—	13,349	—	—	—	—	618,423	637,538
Sale of Waste Lands and Redem- ption of Land Revenue.	71	13,193	1,313	55,545	1,267	1	599	7,736	—	80,055
Capitation Tax, or House Tax levied in lieu.	900	219	—	—	690,057	—	—	—	—	691,167
Receipts for the Improvement of Government Estates.	—	32,795	—	—	—	—	—	—	—	32,795
Fisheries and other Receipts classed as Miscellaneous.	7,862	13,704	50,048	71,083	252,036	2,825	20,272	179,731	16,862	607,023
Total Gross Revenue - - £	85,652	2,721,607	4,354,551	1,621,998	2,133,036	313,340	414,313	3,384,555	2,720,940	18,252,114
Deduct portion credited to Public Works for irrigation.	—	—	82,739	65,243	—	—	—	496,658	104,413	749,053
Total credited to Land & Revenue for 1900-01	85,652	2,721,607	4,271,815	1,556,755	2,133,036	313,340	414,313	3,387,907	2,616,527	17,503,061
Total for 1899-1900 - - £	74,910	2,746,749	4,304,633	1,471,592	1,984,006	384,003	418,702	3,301,722	2,618,930	17,575,056
EXPENDITURE.										
District Administration - -	17,550	210,022	231,069	134,766	138,186	59,020	39,104	280,239	205,455	1,315,461
Survey and Settlement - -	9,497	55,952	31,778	35,440	54,618	10,530	2,498	46,370	17,979	264,671
Land Records and Agriculture -	9,156	5,551	245,263	104,794	33,331	41,120	13,740	130,667	153,410	733,332
Charges directly connected with the collection of Land Revenue.	837	31,078	14,240	2,808	112,408	417	10,441	234,875	94,775	501,963
Total Charges in India - - £	37,340	302,603	522,350	277,808	344,543	111,106	63,783	682,151	471,619	2,815,423
Charges in England - -	—	—	—	—	—	—	—	—	—	176
Total Charges, 1899-1901 - -	—	—	—	—	—	—	—	—	—	2,815,600

In India the State, or the monarch, has always enjoyed a share in the rent or profits from the land. This revenue is levied according to an assessment fixed, either permanently or periodically, on estates or holdings. The assessment was fixed permanently 100 years ago on certain tracts paying about £2,850,000 a year; and it is fixed periodically, for terms of 12 to 30 years, over the rest of India. On large estates, ranging in extent from a few

LAND
REVENUE.

hundreds to many thousands of acres, the periodical assessment is a share, generally rather less than one-half, of the rental enjoyed by the proprietors; on small estates cultivated by peasant proprietors the periodical assessment is imposed on the cultivated area at rates per acre fixed with reference to the productiveness of the land, and varying in different provinces from one-fifth to one twenty-fifth part of the gross value of the produce. The permanently settled tracts comprise the greater part of Bengal, about one-third of Madras, and certain eastern districts of the North-Western Provinces. Of the temporarily settled tracts, the North-Western Provinces, the Punjab, Oudh, the Central Provinces, and Orissa mainly contain estates held by proprietary brotherhoods 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 land held under various tenures, and the amount over which proprietary right was transferred, either by order of court or by voluntary gift or sale (including generally mortgage with possession, and excluding inheritances and temporary transfers) during the year 1899-1900. The figures are in thousands of acres:—

	Ryotwari (peasant proprietors).	Zamindari (larger proprietors) and Village Communities.		Total.	Transfers.
		Permanently settled.	Temporarily settled.		
Upper Burma - - - -	50,488	—	6	50,494	22
Lower Burma - - - -	53,316	5	155	53,476	432
Assam - - - - -	21,328	3,930	1,225	26,483	82
Bengal - - - - -	—	81,879	16,136	98,015	*
North-Western Provinces -	—	6,160	46,437	52,597	882
Oudh - - - - -	—	1,113	14,225	15,338	432
Punjab - - - - -	—	—	70,975	70,975	993
Sind - - - - -	18,823	—	11,141	29,964	*
Bombay - - - - -	44,632	—	3,941	48,573	*
Central Provinces - - -	1,350	—	42,848	44,198	582
Berar - - - - -	11,333	—	—	11,333	309
Madras - - - - -	60,773	29,665	—	90,438	476

* Figures not available.

In the permanently settled tracts of Bengal the land revenue falls at about two-thirds of a rupee 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 the North-Western Provinces the incidence is about Re. 1½ per acre of cultivated land; in the similar tracts of Madras it is considerably lower than this. The average advantages of soil and climate are on the whole greater, and the prevailing rates of rent are, on the whole, higher in the permanently settled than in the temporarily settled tracts. In the latter tracts the land revenue represents usually 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 cultivated land in the temporarily settled tracts, as given in the returns for 1899-1900, is approximately Rs. 2 in the North-Western Provinces and Oudh, Re. 1½ in the Punjab, Re. 1½ in Berar, Rs. 2 in Lower Burma, Rs. 2½ in Assam, Rs. 2½ in Sind, Re. 1½ in Bombay, 8½ annas in the Central Provinces, Rs. 2½ in Madras, and rather over a rupee in Bengal. Rates of rent and revenue vary greatly according to the productive power of the land, according to the advantages of climate and rainfall, and according to the facilities for carrying produce to markets or to the sea-board. 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; but the State demand on any land is not enhanced on account of increased productiveness due to improvements made by the proprietors or occupiers themselves.

LAND
REVENUE.

The fluctuations of the land revenue in past years may be seen in the following table :—

	Land Revenue Receipts excluding Receipts due to Irrigation.	Increase or Decrease.
	£	Per Cent.
1861-65 (five years' average) - - - - -	13,287,000	—
1866-70 " " " " " " - - - - -	13,227,000	+0.3
1871-75 " " " " " " - - - - -	13,977,000	+5.0
1876-80 " " (includes the great famine of South India). - - - - -	14,076,000	+0.7
1881-85 " " " " " " - - - - -	14,748,000	+4.8
1886-90 " " " " " " - - - - -	15,444,000	+4.7
1891-95 " " " " " " - - - - -	16,521,000	+7.0
1895-96 " " " " " " - - - - -	17,467,000	+5.7
1896-97 (famine year) - - - - -	15,983,000	-8.5
1897-98 " " " " " " - - - - -	17,123,000	+7.1
1898-99 " " " " " " - - - - -	18,307,000	+6.9
1899-1900 (famine year) - - - - -	17,205,000	-6.0
1900-01 " " " " " " - - - - -	17,503,000	+1.2

A part of the increase during later years was due to the acquisition of Upper Burma, which yielded £111,000 of land revenue in the year 1886-87, and about £650,000 in the year 1900-01.

The total advances made by Government to cultivators in the financial year 1900-01 are given as follows in the accounts :—

	By the Government of India.	By provincial Governments.	Total.
	£	£	£
Advances for improvement of land - - - - -	13,290	192,113	205,403
" " relief of agriculturists and other purposes. - - - - -	26,321	1,170,553	1,196,874
Total - - - - -	39,611	1,362,666	1,402,277

The details for the agricultural year will be found below under each province.

The progress of the land revenue and the condition of the landed classes are now noticed province by province. The figures are taken from the land revenue reports, and differ in some instances slightly from those given above, which are from the corrected Accounts of the Government of India.

Bengal.

The rainfall of 1900-01 was generally unfavourable in Bengal owing to its bad distribution, excessive rains having fallen in many parts of the province during the winter months. The early autumn crops, consisting chiefly of millets and rice, covered rather less than 16 millions of acres, or about a quarter of a million below the figure of 1899-1900, and the yield was 89 per cent. of the normal; the important winter rice crop was a comparatively poor one, both in area and in yield, covering less than 29 millions of acres, against an average of 31½ millions; the outturn was finally estimated at 88 per cent. of the normal; the spring crops, which covered an area of 15½ millions of acres, were much affected by deficient rain, and the outturn is estimated at 81 per cent. of the normal.

The collections of land revenue during the last three years resulted as follows :—

	1898-99.	1899-1900.	1900-01.
	£	£	£
Demand on account of current year - - - - -	2,625,884	2,656,709	2,666,560
" " arrears - - - - -	110,176	114,356	85,003
Collection on account of current year - - - - -	2,535,628	2,590,019	2,592,966
" " arrears - - - - -	84,168	87,667	57,885
Remissions - - - - -	12,924	8,125	11,612

LAND
REVENUE.

The total amount collected during the year under report, including arrears, was 99½ per cent. on the current demand, 96½ per cent. of the current year's demand being realised in the year. These percentages are up to the average of recent years, though lower than the very high percentage of 1899-1900. The number of estates which became liable to sale for non-payment of Government dues was 14,129, and of these 1,578, or 11 per cent., were sold, against 1,686 in the previous year. Under the Public Demands Recovery Act 228,500 certificates were filed for recovery of arrears of revenue, cesses, &c., compared with 226,400 in the previous year; attached property was sold in 9,945 cases, and 146 defaulters were imprisoned. Defaulters may deposit the amount due, with a penalty, within 30 days after the sale of the property, and thus have the sale set aside. The current demand for the three years was thus distributed :—

	1898-99.	1899-1900.	1900-01.
	£	£	£
Permanently settled estates - - - - -	2,154,654	2,154,841	2,155,031
Temporarily settled estates - - - - -	211,066	228,218	232,502
Estates under the direct management of Government. - - - - -	260,166	273,650	279,027

The gross rental of the 43 districts in which the Bengal Cess Act was in force was returned for road cess purposes at £11,206,000 for the year 1900-01, which is £143,000 above the assessment of the previous year, as compared with £8,755,000 for 40 districts in 1873. The three added districts represent a rental of £307,000. The estates assessed to cess in the 43 districts numbered 404,000, of which 257,000 were revenue paying, 49,000 revenue free, and 98,000 rent free holdings. The current demand of land revenue in these districts amounted to £2,641,000 or about 23½ per cent. of the rental valuation.

The number of estates under Government management was 2,939, of which 240 belonged to private individuals. The current demand on the Government estates was £240,000, and on the private estates £39,000; the cost of management was £17,000, or 6 per cent., and £11,500 were spent on works of improvement, agricultural and sanitary. The condition of the tenants on Government estates is reported to have been generally good, though in some places crops were spoilt by floods and some distress was caused.

Advances to agriculturists under the Loans Acts amounted to £21,400 as compared with £8,200 in the previous year and £104,000 during the year 1897-98, in which the effect of the previous famine was still felt.

The Bengal Tenancy Act continues to work smoothly, and the tenants are reported to be more and more learning their rights under it and seeking to maintain them.

The latest report on land revenue affairs in the North-Western Provinces and Oudh relates to the year ending 30th September 1900. The season of 1899 was an abnormal one, the rainfall being too heavy in the early part of the monsoon, and subsequently deficient or irregular. The result was that in the western part of the provinces crops were only about half the normal, and three-quarters in the rest. The average rice yield was about 70 per cent., though late rice was practically a failure. The spring crops were more successful, as wheat gave a return, on the average, of 85 per cent.; pulses, which form an important part of the crops, returned 80 per cent. of a normal crop; but barley and sugar-cane were both less successful than this. The year was one of high prices. The total area of crops was 39½ millions of acres, as compared with 41 millions of acres in 1898-99, and with 40½ millions of acres in 1897-98. The wheat area fell to 6½ millions of acres; rice covered 7½ millions; millets, 6½ millions; and pulses 9 millions.

North-
Western
Provinces
and Oudh.

LAND
REVENUE.

The demand and collections of land revenue in the North-Western Provinces and Oudh for the last three years, also of various rates, cesses and other sources of income connected with the land, are given as follows:—

	1897-98.	1898-99.	1899-1900.
	£	£	£
Land revenue { Current demand - - -	4,077,324	4,137,305	4,151,792
" collections - - -	4,009,210	4,046,787	4,040,743
Rates, cesses, &c. and arrears { demand - - -	2,654,585	2,017,791	1,784,661
of land revenue { collections - - -	1,635,858	1,645,029	1,573,045

The amount of the year's land revenue collected was again nearly 98 per cent. of the demand; of the recoverable balance, nearly half was outstanding in the Allahabad division. The demand on account of arrears of land revenue from previous years was £226,900, of which £160,800 were collected and £23,700 were under suspension. Of coercive processes for recovery of sums due to Government under these heads, there were 32,500 writs, 3,969 arrests, 11,323 cases of attachment of movables, 1,640 of attachment of estates, and 9 sales. These figures are on the whole below those of the preceding year.

The suits instituted under the Rent Law, both in the North-Western Provinces and in Oudh, show another large increase, chiefly under the heading of suits for ejectment; and the number of applications for decision of points connected with tenancy and rent was nearly 50 per cent. greater than in 1898-99. In Oudh, suits for arrears of rent, and on the other hand for "recovery of occupancy" also increased, to a less degree. The total number of suits in the whole province was 174,388, against 161,282 in 1898-99, the latter figure being the highest previously recorded. This increase of litigation is said to have been due to the desire of landlords to realise famine arrears before they were barred by lapse of time. The area of holdings in the North-Western Provinces is given as 27½ millions of acres, of which 2½ millions were uncultivated; of this total, 8½ millions were held by tenants with occupancy rights, over 10½ millions by tenants without declared rights, and one million by ex-proprietary tenants with privileged rights, while the remainder was rent free or nominally rented. In Oudh, the holdings amounted to over 9 millions of acres, of which all but 2 millions were held by tenants without declared rights. The rent-rolls for all districts of the North-Western Provinces and Oudh show that the rental demand of the year 1898-99 was £8,241,000, against which the landlords realised £7,493,000 during the year, £1,281,000 being on account of arrears of previous years. The percentage of rent collections to the total rent demand in the year under report fell from 90 to 89 per cent. in the North-Western Provinces, but remained at 96 per cent. in Oudh as in the previous year. The rent-rolls include the reduced rents paid by privileged tenants, and do not take into account any computed rents on account of lands cultivated by proprietors.

The total number of land transfers in the North-Western Provinces increased as compared with the previous year, while the number for Oudh was rather smaller; the following table shows the numbers for the last seven years, putting aside transfers by order of court or by succession:—

	Sales of Revenue Paying Land.		Mortgages.	
	N.W.P.	Oudh.	N.W.P.	Oudh.
1893-94 - - - - -	17,107	2,539	7,655	6,483
1894-95 - - - - -	17,052	2,717	8,256	7,144
1895-96 - - - - -	20,030	3,070	9,486	8,255
1896-97 - - - - -	22,599	3,487	13,388	8,205
1897-98 - - - - -	21,329	4,035	12,077	8,606
1898-99 - - - - -	18,935	4,944	8,262	10,874
1899-1900 - - - - -	20,803	4,646	9,241	10,477

LAND
REVENUE.

The amount of the loans sanctioned under the Land Improvement Loans Act and the Agriculturists Loans Act was £47,000, showing a considerable growth owing to the unfavourable conditions of the year. The total outstandings of these loans up to and including the year under report were £164,000, of which £58,700 were collected. The outstanding balance at the end of the year under both Acts amounted to £105,300, almost all the heavy advances made in 1896-97, largely without interest, having been recovered.

The latest Punjab land revenue report is for the year ending on the 30th September 1900. The year was one of drought over the whole of the Punjab plains. The early cessation of the monsoon, after a promising beginning, resulted, as regards the autumn harvest, in the destruction of sown crops over large areas. The spring harvest was also very bad owing to small sowings and deficient rainfall. The cultivated area decreased by 110,300 acres, and stood at 27·9 millions of acres, of which 14·9 millions bore no crop during the year. The remainder, the cropped area, was 13 millions of acres, and on this area 23½ millions of acres of crops were sown, 8½ millions of which failed to mature. The area of matured crops was therefore 15 millions of acres, compared with 20½ millions in 1898-99, and with 26 millions in the good year 1897-98. Of this crop area, 9½ millions were irrigated by canals or otherwise, including 3½ millions of acres of wheat land, which is 2 millions below the normal area; 1½ millions of acres in addition to this were riverain or other "wet" lands.

The total collections of land revenue, current and arrear, amounted to £1,430,000 or nearly 15 per cent. less than the collections of the previous year; these figures include fluctuating and miscellaneous land revenue, which together amounted to £237,000 in 1899-1900. The amount of fixed land revenue under suspension at the close of the year was £402,000, including £114,800 due on account of arrears of previous years. Besides this, remissions amounted to £20,900; the rule being that remissions should not be given until the revenue has been under suspension for three years. The "fluctuating" system of land revenue is applied for the most part either to canal-irrigated lands or to lands subject to floods, and it is reported to be generally popular. The number of writs and warrants issued against defaulters rose from 49,900 to 52,400; but the local government state that "it is certain that no undue pressure was put on to make people pay who could not." The advances during the year under the Agricultural Loans Act amounted to £187,000, and £21,800 were advanced under the Land Improvements Act in connection with the Chenab colonization.

Fifty-three per cent. of the cultivated land in the Punjab is now held by rent-paying tenants. In 1888-89 the proportion so held was 40 per cent., and it has grown steadily since that date. At the same time, the number of tenants-at-will has been increasing, until in the year 1899-1900 it was 80·6 per cent. of the total number of tenants. There has been an increase in recent years of the number of tenants-at-will paying in kind; the area so held in 1899-1900 was 7½ millions of acres. Rent rates in kind vary between 25 and about 50 per cent. of the produce; the rates are given as "half produce or more" in the case of 1½ millions of acres.

The following table gives details regarding transfers of cultivated land during recent years:—

	Area of Cultivated Land.			Average Prices realised per Acre of Cultivated Land sold.
	Mortgaged.	Redeemed.	Sold.	
Average of five years 1888-93	Acres.	Acres.	Acres.	Rs.
1893-94 - - - - -	381,760	211,936	164,952	54
1894-95 - - - - -	465,410	317,453	218,703	56
1894-95 - - - - -	432,573	259,584	185,823	64
1895-96 - - - - -	453,661	292,505	203,469	59
1896-97 - - - - -	471,809	309,572	199,160	71
1897-98 - - - - -	554,959	413,412	218,940	73
1898-99 - - - - -	491,089	345,727	208,098	75
1899-1900 - - - - -	430,697	273,953	212,910	74

LAND
REVENUE.

The last column shows the average price paid for all ownership or occupancy rights together; for simple ownership the price in 1899-1900 was Rs. 79 per acre. The total area of cultivated land under usufructuary mortgages at the end of the year was rather more than $3\frac{1}{2}$ millions of acres, or 12·7 per cent. of the whole. The area of cultivated land sold or mortgaged to "new agriculturists" was 3 per cent. larger than in the previous year, and amounted to nearly 30 per cent. of the area so transferred. The following table shows the course of land prices in the Punjab for 38 years:—

	Price per Acre of Cultivated Revenue Paying Land	Number of Years' Purchase of the Land Revenue which the Price represents.
	Rs.	
Average for the period 1861-65	(approx.) 7	9
" " 1866-71	11	18
" " 1871-75	16	26
" " 1876-81	19	28
" " 1881-86	18	36
" " 1889-92	57	54
" " 1893-97	65	62
1897-98	73	70
1898-99	75	72
1899-1900	74	73

Burma.

In Lower Burma, except in the Arakan division, the monsoon rain was generally timely, abundant and well distributed. The area under cultivation again showed a considerable increase, to $7\frac{1}{2}$ millions of acres, and it is still capable of wide expansion. The increase under the rice crop was specially great. In Upper Burma the rainfall was less local than usual; the harvests were generally up to the average, and the food supply was amply sufficient. The gross demand for the whole province under the various

	1899-1900.	1900-01.
	£	£
Land Revenue	1,066,008	1,202,860
Household tax	390,568	389,384
Fisheries	158,721	155,001
Capitation tax	295,289	300,266
Other sources	101,225	96,759
Total	2,011,811	2,144,270

heads of revenue under review is shown in the marginal table. The only important difference between the two years is in land revenue proper, which rose by 13 per cent. in 1900-01, owing partly to the extension of the area assessed and partly to the revision of assessments in certain tracts. Remissions amounted to £4,400 only, and the collections were £2,108,870, leaving an outstanding balance of £29,000, most of which was recovered shortly after the close of the year. The number of persons assessed to capitation tax increased to 1,082,000, and the yield showed a substantial increase. There was some diminution in the yield from the household tax, or *thathameda*, owing to the reduction of the rates in parts of the Meiktila and Minbu districts, consequent on the direct assessment of non-State land for the first time to land revenue in those tracts. This change is to be continued in other parts of Upper Burma, and the "ordinary land revenue" may therefore be expected to grow at the expense of "household tax." The ordinary land revenue includes in Upper Burma the revenue from State lands, which is levied either by assessment or by payment of a share of the produce as rent. The river and other fisheries are a considerable source of revenue in both the upper and the lower parts of the province. In Upper Burma, however, the state of the river proved disastrous, and some remissions were necessary. The heading "other sources" includes receipts from petroleum royalties (£28,000), from ruby mines (£16,700), and from water rate (£11,400). The amount of agricultural advances was £7,400, compared with £17,400 in the preceding year.

About one-fifth of the occupied area in Lower Burma is cultivated by tenants at an average rent, paid generally in kind, equal to about Rs. 8 per acre, which is less than one-third of the gross produce. There was an increase during the year in the areas sold in Lower Burma, and the area

LAND
REVENUE.

mortgaged rose by 34 per cent., the rise in the number of mortgages redeemed being rather greater than this. In some of the coast districts, and particularly in the Hanthawaddy district, in which Rangoon is situated, a considerable amount of land is held by non-agriculturists and non-Burmans. The price of paddy at Rangoon showed a good deal of fluctuation during the year, and rose at one time to the high rate of Rs. 116 per hundred baskets. It stood at Rs. 91 at the end of March 1901.

The latest land revenue report from the Central Provinces is for the year ending in September 1900. This year was one of the most disastrous which

Central
Provinces.

the province has ever experienced. The monsoon, early and late, proved a complete failure. The crop area fell from 17 to $14\frac{1}{2}$ millions of acres, and $6\frac{1}{2}$ millions of acres were not cultivated out of the total area of holdings, this figure including ordinary fallows, land on which crops failed, and land which has fallen out of cultivation. The area irrigated by tanks or wells amounted only to about one-third of a million acres. Rice was grown on $4\frac{1}{2}$ millions of acres, wheat, either alone or in conjunction with some other crops, on $1\frac{1}{2}$ million. The yield of rice varied from practically *nil* to 40 per cent. of a normal crop, but the latter rate was exceptionally high. The yield of the millet crops was little better. Wheat yielded a crop less than half the normal in 12 out of the 18 districts. The figures given in the margin afford a comparison between the results of the harvests of recent years, taking into account both area and yield. Of the year's crop area, 24 per cent. was under the more valuable spring crops, compared with 33 per cent. in 1898-99 and 44 per cent. in 1893-94. Prices began to rise sharply in August and September 1899, and they reached their highest point in the wet season of 1900, when communications were impeded. As a whole, the average in the worst tracts was about 19 or 20 lbs. per rupee, and almost everywhere the prices were not so high as in 1896-97. The gross demand on account of the land revenue of the year stood at £575,100, but after suspensions amounting to 66 per cent. of this total, and taking into account the remissions, &c., the actual amount demanded was £188,400 only. Collections on account of this reduced demand were on the whole good. The arrears outstanding on account of the preceding years were £131,000, but of this amount £61,200 were suspended; the collection during the year on this account was £21,600. There was a further demand for arrears and current dues, or on account of cesses, land revenue not on the roll, and miscellaneous revenue, amounting in all to £56,900, deducting suspensions; and the receipts under these heads came to £25,500. Coercive processes on the whole showed a considerable decrease, and the number of cases in which estates were attached and sold was 53. Advances under the Land Improvements Act and the Agriculturists Loans Act amounted to £35,800, against £41,100 in the previous year. The total amount of these loans outstanding at the end of September 1900 was £169,100. The areas transferred during the last five years compare as follows:—

	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.
	Acre.	Acre.	Acre.	Acre.	Acre.
Private sales	385,945	337,044	391,470	322,280	230,279
Sales by order of court	142,184	84,944	111,936	158,214	203,138
Mortgages with possession and leases	97,198	64,651	98,642	90,036	65,187

Generally speaking, the extent to which tenants resort to the means of relief provided by the Tenancy Act continues to be trifling. The relations between landlords and tenants were generally satisfactory; but the information collected is not sufficiently exact to show the details of demand and collection of rent, or the extent to which remissions of rent were granted by the *malguzars* or landlords.

Taking Assam as a whole, the year 1900-01 was one of deficient rainfall, badly distributed. The area under crops was more than two millions of acres, but

Assam.

LAND
REVENUE.

rather less than in 1899-1900, the falling off being chiefly in rice; and the out-turn, especially of rice which is by far the most important food crop, was unsatisfactory. There was a rise in the price of rice throughout the province owing to this partial failure. The current land revenue demand rose from £383,400 to £386,800, the increase being due chiefly to the resettlement of the Cachar district. Including arrears, the amount collected was £379,800, or about 90 per cent. of the total demand, collections being difficult in some parts of the province owing to the unfavourable season. The number of sales of land for non-payment of revenue was 599, against 462 in 1899-1900 and 688 in the previous year. A small portion of the land revenue in Assam is obtained from permanently settled estates in Sylhet and Goalpara. Of the other revenue some is obtained by annual resettlement, some by periodical revisions. The permanently settled area was 3,930,000 acres, including a considerable proportion of waste, and it yielded a revenue of £25,100; the area under periodical or annual settlement was 3,561,000, and paid about Rs. 2½ per cultivated acre.

Madras.

For the Madras Presidency the latest report available deals with the year ending on the 30th June 1900. This year was on the whole unfavourable, the rainfall for the Presidency being 30 per cent. below the normal. The result was a great increase in the amount of land lying fallow, which amounted to 1½ millions of acres in the area held by ryots, or about 21 per cent., including all fallows. The area of crops sown was 25½ millions of acres, of which 25 per cent. was under rice, 55 per cent. under other food grains, and 5 per cent. under cotton. As compared with the previous year, there was a decrease of two millions of acres, all of which occurred in the food grain area. Other crops showed an increase, though they were below the average of recent years. The out-turn of the year may be said to have been generally fair, although there were exceptions. There was a general rise in the prices of food grains. The total demand on account of the year for land revenue, water rate and cesses was £4,157,000, and the total collections were £3,977,000. The uncollected balances at the end of June 1900 amounted to £287,600, the highest on record since the famine of 1891-92; but more than three-fourths of this amount had been either collected or written off before the end of the calendar year.

Of the above demand, a sum of £404,700 represents land revenue and cesses due from permanently settled estates, and £68,400 revenue from villages held under special tenures, the remainder coming for the most part from the assessment and water rate paid by peasant proprietors. The number of ryotwari (peasant proprietors') villages was 22,900, and the area of their holdings was 22½ millions of acres. The unfavourable character of the season did not lead to any considerable diminution in the extent of the holdings, but the amount of land left fallow was much increased. The land revenue demand on this area was £2,814,000, after deduction of remissions and putting aside cesses. If certain miscellaneous items be taken into consideration, the figures stand at £3,272,000, against £3,457,000 in the preceding year. The decrease of the demand is due to the large remissions, amounting to £197,300, granted on account of bad crops or failure of the irrigation sources. The number of notices for attachment of property issued was large, though not so large as in the previous year. The same is true of notices of sale, which numbered 248,900. Sale was carried out in 17,605 cases. The area of land so sold was 52,852 acres, against 60,800 acres in the previous year; 23,000 acres were bought in by the Government. The area sold represents 23 per cent. of the total extent of holdings; while the amount of the revenue, for non-payment of which the sales were made, came to one-half per cent. of the total revenue due. Advances under the Land Improvements Act and the Agriculturists Loans Act amounted to £30,900.

Bombay.

The latest report available from Bombay is for the year ending in October 1900. The monsoon of 1899 was disastrously weak throughout the province, and every district suffered to some extent from the unfavourable season. The result was that the crop area sown was 19½ millions of acres, or about 20 per cent. less than in 1898-99 in the Presidency proper, and 3 millions, or 9 per cent. less, in Sind; and, further, that the failure of crops was so great that of these areas only 7½ millions and 2½ millions of acres respectively came to maturity. In fact the area of matured crops in Bombay

LAND
REVENUE.

was 70 per cent. below the figure of the previous year, and in Sind the corresponding fall was 28 per cent. It was in Gujarat that the worst failure occurred, and there the lands lying fallow amounted to 72 per cent. of the occupied area. A further blow was dealt to the economical resources of the country by a fodder famine.

In the Presidency proper the gross demand of land revenue for the year was £2,042,800, which showed a slight increase over the demand in the preceding year, owing to revisions of assessment. The collections, however, amounted to £1,445,000, including receipts for arrears of previous years. The remissions granted during the year amounted to £27,600, and the outstanding balance on the 1st August 1900 was £624,400, of which £584,600 represents arrears of current revenue. Out of this amount a very considerable sum will eventually be remitted; and these remissions will be shown in the reports for the next two years. As a further measure for the relief of agriculturists the Bombay Government decided that no revision survey proposals entailing an increase in the revenue demand in any district affected by the famine should be submitted until 1904-5. The severer forms of pressure for recovery of land revenue were little resorted to during the year. The area forfeited was 43,100 acres, of which 19,200 acres were returned to the defaulters, 1,157 acres were sold, and the rest remained in the hands of the Government. The amount of agricultural loans advanced during the year was £540,300, compared with £35,400 in the preceding year.

In Sind the season was again very unfavourable, as the inundation was very defective. The collections of land revenue and village cess on account of the year amounted to £471,000, as compared with £468,000 in 1898-99 and with £585,500 in 1897-98, the demand having fallen to a corresponding extent by the exemption from assessment of lands lying fallow; £13,200 were collected on account of the outstanding arrears of the previous year. Remissions amounted to £45,000, and the outstanding balance at the end of the year was £28,700. Agricultural advances amounted to £40,700, compared with £18,700 in the previous year. The number of coercive processes for the collection of the revenue was not large, but the cases of distraint rose from 91 to 99. This was the second very bad year in succession, and in the tracts distant from the river there was severe famine and great mortality of cattle, while in more favoured regions the conditions approached as nearly to a famine as is ever likely to be the case.

The rainfall of 1900-01 was rather below the average and was so distributed as to be favourable to the autumn crops, chiefly large millet and cotton, and unfavourable to the spring crops, which are wheat, linseed and pulse. The autumn crops included 90 per cent. of the area cropped. The area from which crops were harvested was rather less than 7 millions of acres, of which nearly 3 millions were under the large millet and 2½ millions under cotton. The area irrigated, almost entirely from wells, comprised 63,000 acres. The land revenue demand for the year 1900-01, including cesses, amounted to £518,400, of which £495,800 were collected or remitted during the year, and the rest was collected shortly afterwards. The arrears outstanding after the famine of the previous year amounted to £140,300, of which £123,100 were collected during the year under review, and £3,100 remitted. Further remissions to the amount of £7,400 were under consideration in the Buldana district. No defaulter was imprisoned for non-payment of revenue and the number of sales of land on this account fell from 98 to 31, personal property being sold in 103 cases, against 41 in the previous year. The amounts advanced under the Land Improvements Act and the Agriculturists Loans Act amounted to £26,300. The total area of land sold was 319,188 acres, compared with 564,443 acres in the preceding year; the average price received varied between 15 and 21 years' purchase of the assessment.

Berar.

WARDS' ESTATES.

In most of the larger provinces a Court of Wards has been established, which undertakes the management of estates belonging to minors, idiots, or other persons declared incapable of managing their own affairs. The position and powers of the Courts of Wards are prescribed by law; and recent

WARDS'
ESTATES.

WARDS'
ESTATES.

enactments have enabled indebted proprietors to place their estates voluntarily under the Court of Wards. The duty of the Courts is to manage the estates under their charge to the best advantage 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. During the year reported on below, *i.e.*, generally the year ending in September 1900, the number of estates managed by Courts of Wards in different parts of British India was about 600, besides some 1,200 small estates in northern Bombay, and their total annual income amounted to about £1 $\frac{3}{4}$ millions. The period for which an estate remains under the Court of Wards is generally from 10 to 12 years.

Bengal.

In Bengal 66 wards' estates and 69 other estates were under the management of the Court of Wards for the whole or part of the year 1900-01, with a total revenue receipt of £792,000. Ten of the estates had a rental demand of over £3,500, and five of over £14,000. Eleven estates were taken under management and eight were released. Of the latter the most important was the Lachmipur estate, with an income of £14,700, which was released after two years' management, the debts having been decreased by £11,800. The management charges of the estates under the Court for the whole of the year amounted to 7 per cent. of the current rental demand, or 14 $\frac{1}{2}$ per cent. of the net income. There was spent on schools and dispensaries, on surveys, improvement and maintenance of estates, taxes, &c. a sum of £151,200, and £126,700 for the maintenance and education of the wards. Debts to the amount of £91,400 were paid off during the year, and the outstanding debts due from all wards' estates were £772,700 at the close of the year. The cash balances at credit of the estates were £94,400 on the 31st March 1901, and the investments in Government securities were valued at £184,200.

North-
Western
Provinces
and Oudh.

The number of estates under the Court of Wards in the North-Western Provinces and Oudh for the whole or part of the year ending in September 1900 was 202, with a yearly rental of £506,700. Fifteen fresh estates were taken under management and 14 estates were restored to their proprietors during the year. All of the latter estates had been relieved, some entirely and some partially, from debt, either out of surplus income or by sale of portions of the property, and in many of them improvements had been carried out. The most important were the Bhinga estate, with a rental of £8,000, in which many improvements had been made; an estate in the Rae Bareilly district, with an income of about £2,500, on which, during 23 years of management, debts to the amount of £27,600 had been paid off; and the important Bulrampur estate, the income of which rose during the seven years of the Raja's minority from £115,600 to £144,500 per annum. One of the estates which came under management was the Tiloi estate, with an income of £18,300, which was under the Court a few years ago, and is therefore practically free from debt. The total liabilities amounted at the end of the year to £1,067,400, against which are to be set £506,200 of various assets. The total debts paid off since the estates came into the management of the Court, either by raising cheaper loans or by other means, aggregated £1,984,500. The cost of management averaged 7 $\frac{1}{2}$ per cent. on the total receipts, compared with 7 $\frac{1}{4}$ per cent. in the preceding year. The amount spent on improvements was £13,700, compared with £19,600 in 1898-99. Of the current rental of the year 90 per cent. was collected, leaving the total balance, current and arrear, at £114,000.

Punjab.

At the end of September 1899 the number of estates under the management of the Punjab Court of Wards was 66, and during 1899-1900 eight estates were released and one brought under management; the total at the end of the year was therefore 59. Four of the estates have an income of over £3,500 a year, and five of them have an area of about 10,000 acres or more, but there are still many petty estates under management, including seven with an income below £70 per annum. Of the estates released, the most important were the Kunjpura estate, of about 20,000 acres, handed over with a large invested balance on the ward's attaining his majority; and an estate in the Montgomery district of 3,000 acres, which was cleared from

WARDS'
ESTATES.

debt. The estate taken over was that of the Raja of Goler, with an income of about £1,600, and debts to the amount of £22,400. The gross income of the 59 estates was £55,800, and the expenditure was £42,500. The cost of management was 8 $\frac{1}{2}$ per cent., against 7 $\frac{1}{2}$ per cent. in the previous year, of the gross income; £4,800 were spent out of the income on paying off debts and interest; the debts of all the wards, which had been £195,700, were reduced to £73,700 by the end of the year. The expenditure on works of improvement was £6,300, and on personal expenses, family allowances, and education of wards, £12,700.

In the Central Provinces the number of estates under management of the Court of Wards or revenue officers at the end of September 1900 was 163, as compared with 180 at the beginning of the revenue year. The total receipts of these estates amounted to £71,200, showing a fall of £37,300 as compared with the preceding year. Under almost every head, too, the receipts compare unfavourably with those of the famine year 1896-97. The amount of rent collected, after making allowance for liberal suspensions, was satisfactory. The expenditure was only £62,500, showing a reduction of £33,300, mainly owing to the suspensions of Government revenue demand, amounting to £15,300; £4,600 only could be spent on improvement of the estates and £6,300 on repayment or on consolidation of debt. As was to be expected in an unfavourable season, both the improvements and repayment of debt suffered by the want of funds. The cost of management, which cannot be varied easily according to the seasons, was 21 per cent. of the receipts. The total indebtedness of the estates under management at the close of the year was over £162,100.

Three estates in Madras were released during the agricultural year ended on 1st July 1901, and three taken under management, so that 39 remained under the control of the Court, as in the previous year. None of the three released estates were of importance. The season was, on the whole, favourable on most of the estates; 582,000 acres, or 79 per cent. of the total area of all holdings on these estates, was cultivated. The rent collections during 1900-01 on account of the current year amounted to £149,000, or 72 per cent. on the current demand; the demand on account of arrears amounted to £118,700, of which £35,000 were collected during the year. The balance at the credit of all estates, invested and uninvested, at the end of the year was £348,900; the debts due were £757,200, of which no less than £695,100 was owed by two estates, Karvetnagar and Kalahasti, taken under management two years before. The expenditure on works of irrigation and other improvements was £9,800, or about 7 per cent. of the ordinary charges; and £12,500 was spent on the education and maintenance of the wards.

In Bombay the estates under Government management during the year ending in September 1901 were of several kinds, namely:—Estates under the management of collectors, those in charge of the Talukdari Settlement officer, and encumbered estates in Sind. Outside Gujarat the estates were of small area. The estates of the second category are all in Gujarat. The failure of the late rains again seriously affected the revenues of these estates. Out of a total demand of £80,000, only £24,000 were realised. The total number of these Gujarat estates was 603, many of them having been handed over to the Talukdari Settlement officer's charge in order to enable the talukdars to obtain loans during the famine. The Indian Famine Relief Fund granted £6,200, and £16,500 were also advanced for the purchase of bullocks or for seed or subsistence. The manager of encumbered estates in Sind had 561 estates in charge, against 499 at the close of the preceding year. Forty of these were handed back to their owners during the year, 26 of them having been freed from debt. The year's revenue of these Sind estates amounted to £58,800, and the charges included £10,400 for maintenance of owners, £15,900 for payment of debts, and £25,700 for Government dues. The cost of management was £5,500. The debts at the close of the year stood at £102,600, 25 per cent. of them having been liquidated.

There were no wards' estates under the management of public officers in Burma, &c. Burma, Berar, or Ajmere during the year.

CHAPTER VIII.

OPIUM

OPIUM REVENUE AND TAXATION.

OPIUM.

General.

THE opium revenue is raised partly by a monopoly of opium in Bengal and partly by the levy of a duty on all opium exported from Native States. Though the poppy can be grown in most parts of India, its cultivation in British territory is permitted only in parts of Bengal and of the North-Western Provinces; and the area on which cultivation is permissible is calculated each year with a view of obtaining a stated amount of opium. A few thousand acres of opium are grown in the Punjab for local consumption. The cultivator of opium in the monopoly districts receives advances to enable him to prepare the land for the crop, and he is required to deliver the whole of the produce at a fixed price to opium agents, by whom it is despatched to the Government factories at Patna and Ghazipur to be prepared for the foreign market. The price for some years had been Rs. 5 per seer (two lbs.); and was raised to Rs. 6 per seer with effect from the spring of 1895. The chests of manufactured opium 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. Opium (known as Malwa opium) is grown in the Native States of Rajputana and Central India. Some of these States have agreed to assimilate their internal opium arrangements to the British excise system, and to prevent contraband dealings. They levy heavy dues on opium exported from their territories for the China market, and such opium pays to the Indian Treasury a duty, which had been £40 per chest (of 140 lbs.) for several years until December 1894, when it was raised to £43½. The duty was reduced to £40 in July 1896, and to £33½ in October 1897.

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

	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.
Opium Receipts:*	£	£	£	£	£
Auction sales of monopoly opium.	3,233,568	2,660,697	2,775,878	3,394,290	4,109,249
Duty on Bombay or Malwa opium.	892,189	647,092	888,909	852,792	835,117
Cost of opium issued to the Excise and other Departments, and miscellaneous.	147,068	145,392	152,099	154,900	157,877
Total	4,272,825	3,453,181	3,816,886	4,401,982	5,102,242
Opium expenditure, chiefly in Bengal.	1,657,795	1,592,744	1,582,193	1,727,154	1,785,875
Net Opium Revenue	£ 2,615,030	1,860,437	2,234,693	2,674,828	3,316,367

* These receipts are outside the provincial opium receipts of £681,372 shown below under "Excise."

The number of chests of Bengal opium sold, and the average price obtained per chest in recent financial years, are as follows:—

	Number.	Average Price.		Number.	Average Price.
		Rs.			Rs.
1890-91	57,000	1,037	1899-1900	31,700	1,217
1895-96	37,695	1,390	1900-01	45,300	1,361
1897-98	39,300	1,023	1901-02	48,000	1,297

OPIUM.

The exports of Bombay opium to China averaged 24,053 chests in the ten years 1889-99, and were 25,400 chests in 1899-1900, and 20,680 chests in the year under report. The amount of Malwa opium which entered the Bombay Presidency was 21,461 chests, or 22 per cent. less than in 1899-1900, the fall being chiefly due to the fact that there was a smaller demand for opium for export to China, but also in a less degree to the famine, which restricted the consumption in the Bombay Presidency and diminished the production in Malwa.

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. The decrease occurred chiefly in the Behar agency, and is ascribed in part to the discontinuance of the system of settlements for a term of years, which had been found liable to abuse. In the Benares agency also a rise in food prices and other causes caused a fall in the area. Great damage was done to the poppy crop by unfavourable weather; in the Benares agency the crop suffered less; but in both tracts the outturn per acre was below the amount estimated by the Government of India, and as a consequence the total production of the year was 44,500 chests of "provision" opium for export, as compared with an estimate of 54,000 chests, and with an outturn of 52,400 chests in 1899-1900. The opium is received and prepared at the Government factories at Patna and Ghazipur, where also small amounts of morphia and codeia are manufactured for the London and Shanghai markets. With the opium already in stock the amount of "provision" opium available for sale in 1902 was 66,300 chests, and the number of chests to be sold each month has been fixed at 4,000, leaving a reserve of 18,300 chests; in 1899 the number sold each month was 3,400, in 1900 it was 3,700, and in 1901 it was 4,000. In 1861 the average price of opium sold by auction for the China market was as high as Rs. 1,850 per chest of 140 lbs. weight, but since that year it has fallen; in February 1895 it rose to Rs. 1,540, the highest average at any monthly sale for 23 years; it fell to Rs. 923 in May 1898, but rose to Rs. 1,450 in October 1900, since which month there has been a steady decline.

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.; during the year 1900-01 the rate was 2½ rupees over the whole of India, excepting Burma, where it was one rupee per maund; the Kohat salt mines, the produce of which pays duty at the rate of Rs. 2 per maund; and the mines in the Mandi State, where the share of the duty received by the Government of India is five annas per maund—the maund consisting in either case of 102½ lbs. 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 North-Western Provinces, Oudh, and a part of Central India; the salt mines of the Punjab, which supply that province and a varying 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. The regions supplied from each source contract or extend, according to varying circumstances of the season, or of markets, or of means of carriage; for instance, when an unusually wet season prevented salt production by solar evaporation at the Sambhar Lake in Rajputana, special supplies from the Bombay coast factories were carried inland, and partly made up for the deficiency; when a railway was opened to the Punjab mines, salt made its way thence further south and east.

SALT.

The SALT REVENUES and CHARGES in the year 1900-01 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 Sources.	Miscellaneous.	TOTAL.	Charges.	Net Salt Revenue.
	£	£	£	£	£	£	£
Northern India - -	1,369,961	—	—	10,988	1,380,949	66,615	1,314,334
Burma - - -	13,975	69,197	6,305	—	89,387	341	89,046
Bengal - - -	11,157	867,049	805,494	8,673	1,695,673	17,196	1,678,477
Madras - - -	1,233,759	273	663	7,050	1,241,745	138,318	1,103,397
Bombay - - -	1,500,507	638	1,018	57,117	1,559,280	114,433	1,444,847
TOTAL, 1900-01 -	4,132,659	937,987	813,480	86,828	5,967,034	336,933	5,630,101
TOTAL, 1899-1900 -	3,990,863	956,995	830,543	72,092	5,850,493	331,116	5,519,377

The charges above shown do not include a sum of about £200,000 paid under treaties to Native chiefs who have assigned the management of their salt sources to the British Government.

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 in the census of 1901, the following results appear:—The consumption in the maritime tracts of Bengal was 13·38 lbs. per head; in the rest of Bengal, 10·28 lbs.; in Gujarat, 9·7 lbs.; in the rest of the Bombay Presidency, 12·05 lbs.; in Sind, 7 lbs.; in Madras, 15·84 lbs.; in the Central Provinces and Behar, 11·85 lbs.; in the North-Western Provinces, 7·34 lbs.; in the Punjab, 7·15 lbs. The rate of consumption in Burma is not accurately known; the issues from bond were considerably less than in 1899-1900, and the local output also decreased, but this cannot be taken as meaning that the actual consumption was less; the average rate of consumption might perhaps be stated roughly at 16½ lbs. per head.

The consumption of salt and the duty realised during the last 30 years are shown in the table in the margin, which has been taken from a report by the Director-General of Statistics to the Government of India. It will be observed that the amount of the duty received shows a slight divergence from the figures given above, which included all receipts.

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 wants of the Punjab, the North-Western Provinces and Oudh, 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 the total quantity of salt made during the season was 4,332,200 maunds. This, though much higher than the outturn of the disastrous year 1899-1900, was not regarded as satisfactory, and fears have been entertained that the productiveness of the lake is decreasing; but it is possible that the low quantity and quality of the salt produced may be due to the temporary causes of unfavourable rainfall and seasons. Since the year 1870, when the lake was leased by the Government of India, 105 millions of maunds of salt have been taken from it, and the financial results show a total credit balance of £203,800. Sambhar salt is sold at a uniform price of 4 annas per maund; the sales in 1900-01 rose from 3,201,000 to 3,629,000 maunds. In the Mayo mine 2,123,000 maunds of salt were excavated, or 9 per cent. less than in the previous year. This salt was sold at 9 pies per

Northern India.

—	Average Annual Quantity.	Average Annual Duty.
	Maunds.	£
1868-69 to 1872-73 -	22,973,000	3,835,000
1873-74 to 1877-78 -	24,181,000	3,971,000
1878-79 to 1882-83 -	27,761,000	4,393,000
1883-84 to 1887-88 -	32,429,000	4,141,000
1888-89 to 1892-93 -	33,432,000	5,351,000
1893-94 to 1897-98 -	34,211,000	5,505,000
1898-99 - - -	35,269,000	5,719,000
1899-1900 - - -	35,058,000	5,695,000
1900-01 - - -	35,727,000	5,822,000

maund apart from the duty; the price of Didwana salt was also 9 pies; SALT. Pachbadra salt was sold at the rate of 1½ anna; Kohat salt fetched on the average about 8 pies. The total amount of salt which passed into consumption was 7,780,000 maunds, distributed as follows:—

	1899-1900.	1900-01.
	Maunds.	Maunds.
Punjab, cis-Indus, including Native States and Kashmir (chiefly rock salt).	2,595,109	2,444,809
Punjab, trans-Indus (chiefly Kohat salt) - - -	284,729	323,840
North-Western Provinces and Oudh (chiefly Sambhar salt)	3,123,201	3,309,006
Behar - - -	151,060	147,544
Central Provinces - - -	106,800	132,834
Rajputana - - -	881,740	809,961
Central India - - -	570,957	485,676
Other places, including Afghanistan - - -	110,974	136,151
TOTAL - -	7,824,570	7,789,821

The gross receipts of the Northern India Salt Department rose from £1,286,000 in 1899-1900 to £1,382,000 in the year under report.

The salt consumed in Bengal comes from abroad or from other parts of Bengal. India; but there has also been in most years a small amount manufactured in Orissa. During the season 1900 this manufacture was again stopped, but as the existing stock was sufficient for quite four years' demand, the issue was not checked; it only amounted, however, including wastage, to 101,700 maunds. In the maritime tracts of the province, other than Orissa, the manufacture of salt is prohibited. The amount of salt imported by sea during the year 1900-01 was 8,932,300 maunds, as shown in the margin; there was a decrease of 17 per cent. as compared with 1899-1900. The supply of Liverpool salt was smaller than in the previous year, partly owing to high freights and the difficulty of obtaining ships, and partly also to high prices in England. The amount of salt brought from Germany, which had been exceptionally large in the preceding year owing to special causes, relapsed to a more normal figure, the difficulty of obtaining transport no doubt

	1899-1900	1900-01.
	Maunds.	Maunds.
From United Kingdom -	6,164,000	4,593,600
Germany - - -	1,416,000	664,300
" Red Sea and Persian Gulf - - -	2,651,000	3,075,800
" Madras - - -	31,000	900
" Bombay - - -	519,000	597,700
Total - -	10,781,000	8,932,300

having some effect. The amount of Madras salt carried into Orissa by rail rose from 587,000 maunds to 693,000 maunds, or more than 18 per cent., while the imports of the same article by sea almost ceased, owing to the competition of the East Coast Railway. This salt has been improved in quality and competes successfully with Liverpool salt. The average price of salt, including duty (Rs. 2½ per maund), at the chief marts of Bengal, was Rs. 3½, having increased by one anna, or about 2 per cent., as compared with the previous year. The wholesale price of Liverpool salt, exclusive of duty, ranged from Rs. 124 to Rs. 72 per 100 maunds in 1896-97, and from Rs. 73 to Rs. 61 in 1898-99. The average wholesale price in 1899-1900 was Rs. 62½, and in 1900-01 it was Rs. 72½.

The net amount of salt consumed in the province was 10,227,500 maunds as compared with 10,194,000 maunds in 1899-1900. The consumption of salt per head of the population during the last two years is given in the marginal table. The gross salt revenue was £1,696,000, or £24,000 less than in the previous year, a result which was due to smaller payments of import duty. The number of cases in which contraband salt was confiscated was 968, as compared with 1,351 in the previous year. There were in all 898 prosecutions for salt offences; 27 persons, out of a total of 975 accused people, were acquitted.

	1899-1900 (Estimate of Population based on 1891 Census).	1900-01 (Based on 1901 Census).
	Lbs.	Lbs.
Saliferous tracts (including Orissa).	13	13·38
Rest of province - -	10·28	10·28

SALT.
Madras.

There were in Madras available for the manufacture of salt by solar evaporation 23 Government and 47 other factories; but of these, three Government and five other factories were not at work during the year 1900-01. The season was generally favourable, except in the extreme south of the Presidency, and the result was a large increase in the outturn. The amount of salt produced was 8,772,000 maunds, or nearly 20 per cent. more than in 1899-1900, and 5 per cent. above the average of the preceding ten years; of this amount, 5,552,000 maunds were manufactured in private factories. An improved method of manufacture was employed at three factories owned by the Oriental Salt Company, which continues to extend its operations. The average wholesale price of "excise" (i.e., private factories) salt works out to 3½ annas per maund, or rather less than in the preceding year. Government salt is sold at fixed prices (the usual rate being 3 annas per maund) with a view to controlling the price of "excise" salt; it is reported that the average retail price of salt, which varied in the several districts between Rs. 2½ and Rs. 3½, was very fair compared with those prevailing in the two preceding years. Excluding the salt used for fish-curing, or bought by the French Government, the total of salt available for consumption during the last three years was as follows:—

	1898-99.	1899-1900.	1900-01.
	Maunds.	Maunds.	Maunds.
Government, excise, and sea imported salt -	8,378,535	8,605,509	9,060,452
Salt imported from Bombay by railway -	599,324	610,802	623,325
	8,977,859	9,216,311	9,683,777

After deduction of salt exported from the Presidency, which amounted to 1,145,120 maunds, the average consumption per head of the population according to the 1901 census was 15·84 lbs. in the whole Presidency, including Native States except Travancore and Cochin. The corresponding figure for 1899-1900, calculated on the basis of the 1891 census, was 16·66lbs.; but it is not possible to make any useful comparison between these rates.

The stocks of Government and excise salt in hand at the end of the year on the east coast were sufficient to last for 13 months, compared with a supply of 14½ months in hand at the end of 1899-1900. The gross revenue from Madras salt was £1,242,000, as compared with £1,237,000 in the preceding year; the increase occurred in the excise duty on salt manufactured at private factories, which yielded £795,000, compared with £743,000 in 1899-1900. During the year under report there were 130 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 55,200 tons, or a little more than in the previous year. The cost of the yards to the Treasury was more than covered by the amount realised for salt. Prosecutions under the salt laws were, as usual, numerous in comparison with other provinces; 10,254 persons were charged with salt offences, of whom 1,275 were released by departmental officers with a warning, and 8,979 were sent for trial. Nearly half of the latter were contributed by nine of the "circles," or salt revenue charges, in the southern portion of the Presidency.

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. The sea-salt works numbered 342, of which one belongs to the Government; the imports of salt come chiefly from Goa. The year was on the whole favourable for the production of salt, and the stock at the Pritchard salt works has nearly reached the amount desired by the Government, namely, a reserve equal to two years' supply.

The following table shows the issues of salt from each source for the last Salt two years:—

	1899-1900.		1900-01.	
	Total Issues.	For Local Consumption.	Total Issues.	For Local Consumption.
	Maunds.	Maunds.	Maunds.	Maunds.
Baragra salt - - -	1,956,160	458,058	2,036,852	451,748
Sea salt - - - -	7,187,764	2,399,628	7,212,774	2,178,642
Imported salt - -	229,112	213,881	309,769	269,392
TOTAL - - - -	9,373,036	3,071,567	9,559,395	2,899,782

The consumption in the whole Presidency was at the rate of 11·38 lbs. per head of the population given in the 1901 census return, but in Gujarat, as usual, the average was only 9·7 lbs. per head. The corresponding figures of the previous year were 11·06 lbs. and 8·2 lbs. per head of the population as estimated on the basis of the 1891 census returns, but it is evident that the comparison is not of much value, as the 1901 census has shown a smaller population than was anticipated. The fall in the amount of salt consumed in the Presidency is doubtless connected with the effects of famine. The bulk of the Baragra salt is exported to the North-Western Provinces, the Central Provinces, and Central India; while the Madras Presidency, Hyderabad, Calcutta and the Central Provinces take large amounts of sea salt. The cost price of Baragra salt was 1¼ annas per maund, and the generally prevailing price of sea salt, exclusive of duty, was 2 annas; very much higher prices were recorded in places, but the exceptional rates recorded at the Shiroda and Sanikatta works in 1899-1900 were not repeated in the year under report, owing to the increase of stocks; the average market price per maund ranged between Rs. 3, the price in the Ahmedabad district, and Rs. 4½ in Kanara. The gross salt revenue receipts were £1,510,800, or £66,700 above the total of the previous year. Twenty-seven fish-curing yards were open at the end of the year, as in the previous year. The quantity of fish brought to be cured in bond was 147,968 maunds, and 44,491 maunds of cheap salt were issued to fish-curers; the fish-curing season was not altogether a good one, but the outturn compares most favourably with all but the exceptional year 1899-1900.

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 274,600 maunds.* The consumption per head of the population shown by the 1901 census was 7 lbs. against 8·05 in 1899-1900, calculated on the basis of the 1891 census figures. The average market price of salt was about Rs. 3½, showing a slight rise. The salt receipts were £49,600, which was slightly lower than in the previous year. One fish-curing yard was worked during the year, and used 945 maunds of salt and 5,700 maunds of fish. All the salted fish manufactured was exported.

The amount of foreign salt which paid duty in Burmese ports during 1900 was 1,083,900 maunds, or 10 per cent. less than in the previous year. This comes chiefly from England and Germany, and pays a duty of Re. 1 per maund; imports from Germany were large during the year; a considerable quantity of Madras salt was also imported. The excise duty on locally manufactured salt is raised by a composition rate on vessels used for boiling brine, the amount of which varies in different parts of the province. The estimated output of locally manufactured salt in 1900 is 567,200 maunds, against 632,600 maunds in 1899. The total amount of salt actually consumed, as distinct from the amount issued, cannot be accurately stated, but it is believed to have been not below that of the preceding year. Fresh careful

SALT.

inquiries were made during the year with a view to ascertaining how far the composition rate on local salt falls short of the rate of import duty on foreign salt, and as a result the former rates were increased 25 per cent. with effect from the 1st January 1901. Further experiments were being conducted in regard to the amount of moisture in local salt, with a view to a more accurate comparison of the rates. The imports of salted fish fell from 253,900 to 239,000 maunds. Prices of foreign salt were higher, owing to high freights; the average retail price at Rangoon rose to 28½ annas per maund; the price in inland markets varies, but was generally over Rs. 2. The price of local salt is usually less than that of the imported article; the rates showed some increase as compared with those of the previous year. The number of cases of illicit manufacture of salt detected was 28. A law was passed during the year bringing within the penal sections of the law persons who use for salt-boiling vessels of a larger capacity than those allowed in their license. The gross revenue obtained from salt in Burma during the calendar year 1900 was £91,200, as compared with £96,400 in 1899.

EXCISE.

Excise.

General.

The excise revenue of India is raised partly from the following sources:— (1) Monopolies for the sale of liquors and intoxicating drugs, over defined areas; (2) Still-head duty on all spirits manufactured at distilleries; (3) Licenses for the working of stills at specified places; (4) Licenses for the sale of various kinds of liquor.* Tobacco, which is grown in almost every village, and is consumed by nearly all men and by many women in India, is not subjected to any duty; tea and coffee, which are grown largely for Indian consumption and for exportation, are also free from all duties. The excise duty on woven cotton goods manufactured at power mills is dealt with under the heading of "Customs." Over almost the whole of Bombay and the Punjab, over the populous parts of Madras, the North-Western Provinces, Oudh and Burma, and over some parts of Bengal and the Central Provinces, a still-head duty is levied on all Indian spirit according to its alcoholic strength; but in some cases the duty is levied on the raw material from which the spirit is distilled. The still-head duty ranges as high as five rupees per gallon of London proof spirit; if the cost of licenses be added, the total duties are in some places more than seven rupees per gallon of London proof spirit. The system of excise management followed in these tracts is called the central distillery system, and assumes different forms in different provinces; in Bengal, the North-Western Provinces and elsewhere, the distillery is a Government establishment at which private individuals distil spirits; or sometimes, as in the Madras private distillery system, there is competition between the owners of private establishments manufacturing their own liquor. Efforts are continually made to adapt the systems of excise as far as possible to the conditions of each province. Over a large part of Bengal and most of the Central Provinces, the whole of Assam and about half of Berar, and in limited tracts in other provinces, revenue is levied on Indian spirits by leasing the spirit monopoly to the highest bidder, which is called the farming system; or by licensing the establishment of private stills, which is called the out-still system. The central distillery system is admittedly the best for preventing the spread and consumption of cheap liquor; and the Government of India have in past years declared their intention to restrict the farming and out-still systems as narrowly as possible. The difficulties are that in sparsely-peopled forest tracts the materials for illicit distillation are everywhere available; the tribes addicted to drinking often live in these regions; an adequate and trustworthy preventive staff cannot be kept; and illicit practices prevail, to the consequent demoralisation of the people, if weak liquor cannot be obtained in some lawful way.

* A customs duty is also levied on all imported spirits, wines and beer. The import duty is six rupees per gallon on London proof spirit; 2½ rupees per gallon on sparkling wines; one rupee per gallon on other wines; and one anna per gallon on beer.

The following table gives the excise revenue of 1900-01 for each province under the different heads, as shown in the Finance and Revenue Accounts:—

	India, General.	Bengal.	North-Western Provinces and Oudh.	Punjab.	Burma.	Central Provinces.	Assam.	Madras.	Bombay.	Total.
License and Distillery Fees, and Duties for the Sale of Spirits, Fermented Liquors and Drugs, viz.:—	£	£	£	£	£	£	£	£	£	£
Foreign liquors, &c.	14,321	80,828	38,456	19,022	85,534	1,448	1,586	22,258	16,067	279,520
Country spirits	49,634	451,261	230,944	92,255	73,698	70,628	46,480	338,571	438,573	1,901,390
Toddy	2,498	69,203	8,716	—	29,360	1,457	15	474,150	74,839	660,238
Opium and its preparations.	1,787	45,262	14,130	27,826	110,260	12,731	22,190	28,385	1,440	264,001
Other drugs	2,448	101,593	84,771	21,426	1	5,579	13,912	7,341	31,514	269,615
Duty on opium consumed in India.	718	127,411	33,774	11,856	53,753	21,541	99,153	23,864	48,370	419,440
Acreage on land cultivated with the poppy.	—	—	—	931	—	—	—	—	—	931
Duty on ganja	—	99,815	—	—	—	5,748	13,189	6,447	669	125,868
Fines, confiscations, miscellaneous.	3,890	1,194	123	66	2,719	91	57	5,005	4,064	17,203
TOTAL Revenue	75,496	976,557	460,914	173,412	355,325	119,223	195,589	906,021	675,566	3,937,202
Deduct—Charges	1,935	45,535	5,022	3,920	12,679	3,709	675	67,085	21,216	101,176
Net Revenue, 1900-01	73,561	931,022	455,892	169,492	342,646	116,114	194,913	838,936	654,350	3,776,026
Net Revenue, 1899-1900	73,094	884,589	420,292	169,278	310,374	129,202	190,411	828,296	656,207	3,698,435

A net sum of £462,547 was yielded by import duties on liquors and spirits imported into India during the year 1900-01, and thus the total drink and drugs revenue of India amounts to about 4½ annas a head on the whole population of British India as shown in the recent census. There has been a considerable increase in the excise revenue during the past 30 years; but this increase, though in part due to enhanced consumption of liquors caused by the growth of population and the general increase of earnings, is yet largely, and in some localities mainly, the result of improved excise administration, which has doubled or trebled the rates of taxation, and has, at the same time, restricted the use of illicit intoxicants. The growth of the net excise and customs revenues on liquors and drugs consumed in India during the past 24 years is shown below:—

	£		£
1874-75	1,755,000	1897-98	3,940,000
1883-84	2,840,000	1898-99	4,107,000
1894-95	3,965,000	1899-1900	4,166,000
1895-96	4,118,000	1900-01	4,239,000

For the 231 millions of people who inhabit the several provinces of British India and Berar, the total number of shops licensed for the retail

STATEMENT EXHIBITING THE MORAL AND MATERIAL

Excise.

sale of spirits, fermented liquors, opium and drugs, is as follows, province by province :—

PROVINCE.	Number of Retail Shops licensed in 1900-01 for the Sale of					Quantity of Opium sold for Local Consumption, so far as known.
	Country Spirits made in India.	European Liquors imported or made in India.	Toddy and Rice-Beer or other Indian Fermented Drinks.	Opium	Narcotic or Intoxicating Drugs, other than Opium.	
Bengal - - -	3,286	538	14,673	1,645	3,141	<i>Maunds</i> (82½ lbs. each). 2,319
North-Western Provinces and Oudh.	6,951	327	4,249	1,134	3,611	1,512
Punjab - - -	1,363	314*	38	1,519	1,320	1,432
Burma - - -	67	442	1,121	55	None	850
Central Provinces - -	5,934	89	599	901	1,004	633
Assam - - -	217	67	17	761	291	1,291
Madras - - -	9,895	785	18,324	1,117	493	802
Bombay, Sind and Aden	2,735	267	1,644	1,130	1,168	1,161
Berar - - -	1,078	25	933	433	175	272
Total - { 1900-01	30,676	2,854	41,598	8,725	11,233	10,277
{ 1899-1900	31,086	2,691	41,631	8,703	11,152	10,416

* For imported liquors only.

There are thus 95,000 licensed shops for the retail sale of intoxicants and narcotics in British India, or one shop to an average of 2,432 of the population. In the United Kingdom in 1900-01 there were more than 173,000 licenses for the retail sale of beer, wine and spirits, or one shop to about 242 of the population. In neither computation are occasional or part-year licenses reckoned; of these latter licenses, 30,600 were issued in the United Kingdom during the year, while the temporary or part-year licenses in India are under 2,000 a year, leaving out of account domestic consumption licenses issued in Bombay.

Bengal.

In Bengal the total excise revenues of 1900-01 and the two previous years were as follows :—

Receipts from	1898-99.	1899-1900.	1900-01.
Country spirits - - - - -	£ 406,520	£ 434,249	£ 451,162
Foreign liquors and rum - - - -	41,464	43,389	44,883
Fermented local liquors, toddy, and rice-beer -	98,674	102,302	105,189
Opium - - - - -	160,068	163,659	172,743
Ganja, bhang, and their compounds - -	187,395	186,008	201,344
Miscellaneous - - - - -	1,031	1,459	1,243
TOTAL EXCISE REVENUE -	895,152	931,066	976,564
Add duties levied in the Presidency on imported liquors.	133,173	135,573	140,009
TOTAL REVENUE FROM DRINK AND DRUGS - £	1,028,325	1,066,639	1,116,573

The excise revenue was nearly 5 per cent. higher than the figures for 1899-1900, which were the highest on record; the advance is said to have been due to the greater prosperity of the people, and is distributed over practically all the heads of revenue. More than half of the total was collected in the shape of license fees. The average incidence of the total excise revenue in Bengal, calculated on the basis of the 1901 census, was 3½ annas per head, of which more than three-fifths was derived from liquors. Of the country spirit revenue, that accruing under the distillery system in the year under report slightly exceeded that under the out-still system, the order of 1899-1900 being thus reversed. Under both heads, however, there was a considerable increase, which amounted to nearly 4 per cent. on the country spirit revenue taken as a whole. The out-still system is in force in the Rajshahi and Chittagong divisions, and in parts of western Bengal, containing altogether a population of 40 millions; the rest of the province, containing 34½ millions, is under the central distillery system. No change was made in this respect during the year. The number of central distilleries was 30, as in the previous year, in addition to 32 depôts; that of out-stills fell from 2,070 to 2,054. The still-head duty levied on central distillery liquor ranged from Rs. 2 to Rs. 5 per gallon of proof spirit. The consumption of country spirits in the out-still area cannot be accurately stated, but is estimated, from statements furnished by the vendors, at about 1,375,000 gallons at London proof; the amount of imported spirits consumed in the province cannot be stated; other figures as to consumption and sale in 1900-01 are as follows :—

	1898-99.	1899-1900.	1900-01.
Issues of country spirits from central distilleries in gallons, at London proof.	530,100	574,900	608,300
Issues of spirits manufactured in India by European methods.	50,000	53,200	55,000
Shops licensed for retail sale of—			
Country spirits - - - -	3,262	3,288	3,286
Rum and imported liquors - -	500	526	538
Pachwai, or rice-beer - - -	1,606	1,610	1,613
Toddy (fermented) - - -	13,262	12,935	13,060
Shops licensed for retail sale of opium -	1,656	1,645	1,645
" " " hemp drugs -	3,105	3,106	3,141
Consumption of licit opium, in maunds -	2,164	2,189	2,319
" hemp drugs (chiefly ganja), in maunds.	5,783	5,896	6,204

The revenue from toddy was £69,300, as compared with £69,600 in the previous year; in addition to the shops shown above as having been licensed to sell fermented toddy, 1,628 licenses were issued in 1900-01 for the sale of unfermented palm-tree juice. Attempts have been made to raise *tari* revenue in selected districts by imposing a tree-tax on the Madras system; but on a consideration of the results the Government decided to abolish the system in Bengal, and this was done during the year. The number of licenses for home-brewing of rice-beer for domestic consumption rose from 8,701 to 9,440. Ganja is grown under close supervision in the Rajshahi district, and its cultivation elsewhere in the province, including the Tributary States of Orissa, is forbidden. A large amount is annually exported, the chief items in 1900-01 being, to the North-Western Provinces, 366 maunds; to Assam, 689 maunds; to Nepal, 267 maunds. The year was marked by a great extension of cultivation owing to the abnormally high prices which prevailed during the preceding year; the area of land estimated to have been so employed is about 5,160 acres, but the produce was only 7,820 maunds, or very little in excess of that of 1899-1900, owing to the prevalence of insect pests and to other causes. The increase in the number of retail shops for the sale of ganja, shown in the above table, was due to a large number of druggists' permits having been issued. There was no change in the rate of duty. The greater consumption of opium shown above is ascribed partly to the increase in the population of Calcutta and partly to smuggling from that city into

Excise.

Burma. No shops are licensed for selling opium prepared for smoking after the Chinese fashion, known as *chandu*, or after the Bengali manner, known as *madak*, and it is believed that the consumption of opium in those forms has received a check. Attention has of late been directed to the use of cocaine as an intoxicant, and the Government of Bengal, having instituted inquiries, determined to bring this drug under the provisions of the excise law, and for this purpose notified it as an intoxicating drug.

North-
Western
Provinces
and Oudh.

The latest excise report for the North-Western Provinces and Oudh relates to the year ending in September 1900. For the last three years the gross excise revenues have been :—

Gross Receipts from	1897-98.	1898-99.	1899-1900.
	£	£	£
Country spirits - - - -	192,085	251,590	269,069
Foreign liquors and rum - - - -	34,533	37,152	36,462
Opium - - - - -	40,909	43,714	45,450
Other drugs - - - - -	58,175	68,438	78,824
Toddy and miscellaneous - - - -	6,872	6,909	8,781
TOTAL - - - - £	332,574	407,803	438,586

This total is higher by 7·5 per cent. than that of the previous year, which was the highest on record. It is explained partly by the favourable outlook which presented itself to contractors at the time of the auction sales.

The changes in the revenue system in connection with country spirits during the year were chiefly from the farming to the out-still system in the Jhansi district. The country spirit revenue was raised as follows :—87 per cent. under the central distillery system, which extended over 67,500 square miles, inhabited by 38 millions of people, and 13 per cent. under the out-still and farming systems, which extended over 39,600 square miles, inhabited by 9 millions of people. Twenty-eight distilleries were at work throughout the year, one having been closed in October 1899; eight bonded warehouses for spirits have been established. The general rate of still-head duty charged was increased from Rs. 2 to Rs. 2½ per gallon of London proof spirits in several divisions of the province, a proportionate enhancement being fixed for spirits 25 degrees under proof. The number of combined stills and shops under the out-still system rose from 1,185 to 1,305, while under the farming system, now confined to five districts, there were 202 shops against 291 in the previous year.

The consumption of spirits under the farming and out-still systems cannot be stated, but the following figures are of interest :—

	1896-97.	1897-98.	1898-99.	1899-1900
Issues of country spirit from distilleries, public and private, in gallons, at London proof.	661,000	885,000	1,169,000	1,087,600
Consumption of rum from the Rosa distillery -	30,500	34,900	37,500	42,100
Shops licensed to retail country spirits -	6,126	6,029	6,044	6,051
" " rum and imported spirits	300	291	311	327
" " opium - - - -	1,112	1,100	1,131	1,134
" " hemp drugs - - - -	3,587	3,621	3,652	3,611
" " toddy - - - -	4,477	4,597	4,583	4,249
Sales of licit opium, in maunds - - - -	1,356	1,416	1,518	1,512
Net import of hemp drugs (chiefly <i>bhang</i>), in maunds.	11,210	12,216	14,143	12,161

The amount of the quantitative duty on Bengal ganja was, as before, Rs. 6 to Rs. 9 per seer. The duty on charas was raised to Rs. 4 per seer, and that on ganja from places other than Bengal from Rs. 1½ to Rs. 3. The decrease shown above in the quantity of hemp drugs imported is probably due to the existence of large stocks which paid duty before the enhancement of the rates. The area under opium cultivation in the province continues to increase; it was in 1899-1900 sixteen per cent. higher than in the abnormally large figure of 1898-99, while the outturn has increased nearly 21 per cent.

In the Punjab the equalisation, dating from 1898-99, of the still-head duty on country spirits and spirits made in India by European methods had the effect during 1900-01 of stimulating the production of the latter in the licensed private distilleries, and checking the consumption of the more crude spirit made in the pot-stills in the central distilleries. The private distilleries produce, besides whisky and rum, a white molasses spirit which is, excepting for its greater purity, identical with the country spirit. The new rates for country spirit are—

	Rs.
10 per cent. under proof to London proof - - -	4
20 " " " 10 per cent. under proof - - -	3½
30 " " " 20 " " " - - -	3
45 " " " 30 " " " - - -	2½
More than 45 per cent. under proof - - -	2

Private distillery spirit pays Rs. 4 if of London proof, and if below this strength, at the exact percentage rate according to its actual strength. The result of the change is shown in the decline of the issues of country (central distillery) spirit from 237,500 gallons in 1897-98 to 67,500 gallons in 1900-01, and the increase of the issues of private distillery spirit to licensed vendors from 14,400 to 136,400 gallons in the same two years. Six private distilleries were at work, and five central distilleries, of which there had been 11 at the end of 1898-99.

The gross excise revenues in the last three years were raised as follows :—

Receipts from	1898-99.	1899-1900.	1900-01.
	£	£	£
Spirits made in India - - - - -	99,004	99,006	98,215
Imported liquors and beer - - - -	14,988	13,838	12,873
Opium - - - - -	37,329	37,393	40,611
Other drugs and miscellaneous - - -	21,890	22,721	21,707
TOTAL - - - £	173,211	172,958	173,406

There is practically no revenue from native fermented liquors (toddy), which are not consumed to any extent in the Punjab. The total of licit spirits and drugs supplied to the public, and the number of licensed shops for the past three years, are returned as follows :—

	1898-99.	1899-1900.	1900-01.
Consumption of country spirits computed at London proof, in gallons.	157,700	142,500	67,500
Consumption of rum and whisky, manufactured at private distilleries.	57,800	86,200	136,400
Consumption of imported spirits - - -	59,600	53,800	42,000
Licensed retail shops for spirits made in India	1,363	1,345	1,357
Licensed retail shops for imported liquors -	311	320	314
Consumption of licit opium, in maunds -	1,379	1,416	1,432
Licensed retail shops for opium - - -	1,550	1,550	1,549
" " for hemp drugs - - -	1,306	1,340	1,320

Excise.

The opium revenue showed an increase as compared with 1899-1900, partly owing to brisk competition at the auctions and partly to the opening of shops in the new Chenab colony. The import duty on Malwa opium was Rs. 4 per seer. On opium imported from Kashmir and the Hill States it is Rs. 2 per seer. The acreage under poppy cultivation in the province showed another great fall, the figures reading as follows:—1898-99, 6,874 acres; 1899-1900, 6,577 acres; 1900-01, 4,754 acres. This contraction occurred chiefly in the opium-growing districts in the plains, where not only was there a general tendency to grow wheat owing to the high price prevailing, but the sowing season was also most unfavourable for poppy cultivation.

Burma.

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

Receipts from	1898-99.	1899-1900.	1900-01.
	£	£	£
Liquors imported or made in Burma by European methods at distilleries.	72,485	74,031	83,523
Country spirit (i.e., spirit made at out-stills) -	7,994	8,699	9,019
Toddy - - - - -	26,190	28,091	28,771
Rice-beer - - - - -	52,634	58,941	61,985
Opium (after deducting prime cost of Government opium).	135,626	160,164	158,396
Fines - - - - -	7,556	7,151	6,012
TOTAL - - - £	302,485	337,077	347,706
Add,—Duty on imported liquors - - - -	76,574	77,628	75,092
TOTAL - - - £	379,059	414,705	422,798

The increase was small, but not unexpectedly so after the abnormal rise which took place in the opium revenue in the preceding year. Most of the spirit consumed in Burma is imported or made in distilleries worked after the English pattern, of which there were four. In certain places, however, where there is an ascertained demand for country-made spirit, out-stills are permitted, under constant supervision; there were 34 of these out-stills in Lower Burma and 12 in Upper Burma during 1900-01. The excise duty on distillery spirits is Rs. 6 per gallon, which is the same as the import duty on foreign spirits, and the large increase in the output in recent years seems to show that the rate is not too high. The right to manufacture and sell country spirit is sold by auction; but the manufacture of it is free in some of the hilly tracts of Upper Burma. The spirit is for the most part consumed in Lower Burma. It is found extremely difficult to check the illicit manufacture of country spirits; the number of illicit stills suppressed in 1900-01 is returned as 247, against 414 in the preceding year, including respectively 85 and 195 suppressed by the special excise staff. Rice-beer, which is chiefly consumed in the Pegu and Irrawaddy divisions, is increasing in popularity, and the receipts from license fees, as in the previous year, show a decided rise. The drinking of fermented toddy is said to be responsible for a large amount of the crime which occurs in the province.

No statement can be given of the amount of country spirit made at the out-stills, or of the production of toddy or rice-beer; other figures are as follows:—

	1898-99.	1899-1900.	1900-01.
Imported spirits, in gallons - - - -	195,229	195,860	198,530
Distillery spirits, in gallons, at London proof -	59,045	63,281	62,839
Shops licensed for retail sale of—			
Distillery or imported liquors - - - -	447	450	442
Country spirit - - - - -	72	68	67
Toddy - - - - -	839	838	839
Rice-beer - - - - -	255	278	282
Opium - - - - -	53	55	55
Licit opium consumed, in maunds - - - -	771	817	850

Local opinion was considered when proposals were made for issuing new licenses. An order was issued during the year forbidding the employment of barmaids at hotels. From the 1st January 1894 opium could not be legally sold to or possessed by Burmans, unless they had registered themselves as consumers. Non-Burman residents were allowed to buy and possess opium under the same restrictions as before. A maximum supply of opium is fixed for each licensed shop, calculated according to the number of legitimate consumers that are likely to frequent it. These arrangements were being reconsidered, and it was decided, among other things, to re-open the registers and to admit those who omitted to register themselves in 1894. The amount of licit opium consumed cannot be taken as representing the total consumption, as there is a great deal of smuggling; during the year 1900-01 the amount of opium confiscated was about 82 maunds, and in the previous year the seizures amounted to rather over 60 maunds, but the year was not a satisfactory one as regards the detection of excise offences—a very difficult problem in this province.

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

Receipts from	1894-95.	1897-98.	1899-1900.	1900-01.
	£	£	£	£
Country spirits - - - - -	115,649	68,716	79,994	69,637
Opium - - - - -	65,298	46,788	50,842	48,514
Ganja - - - - -	18,055	11,011	12,341	11,246
Toddy - - - - -	1,493	1,415	1,353	1,457
Miscellaneous, including foreign liquors - -	1,937	1,797	3,023	2,827
TOTAL - - - - £	202,432	129,727	147,553	133,681

The figures of this year may fairly be considered in comparison with those of 1897-98, the circumstances of the two years being very similar. So compared, it will be seen that there has been a slight increase under each head; but the figures are far below those of a normal year, which may be taken as represented by those for 1894-95. The sales of spirit in the latter part of the year were up to the normal, but the Government revenue was not thereby benefited, nor did the contractors get much advantage, owing to the high price of the raw material (*mahua* flower).

The greater part of the country is supplied with spirits from out-stills, from which nearly half of the country spirit revenue is derived; but the number of these is being steadily decreased in pursuance of the policy of substituting the central distillery system in tracts where it is considered possible to do so. The number of central distilleries was 25 as in the previous year. In two districts, Nagpur and Nimar, a modified bonded warehouse system was for a fourth year on its trial. Under the out-still system the revenue is raised by license fees, under the central distillery system by license fees and by a duty varying between one and four annas per seer on the raw material; under the new system it is raised by license fees and a duty on liquor consumed, fixed at Rs. 3 per gallon of spirit 10 degrees below London proof and Rs. 1½ per gallon 50 degrees under proof.

Excise.

Particulars of consumption and sale, so far as available, are as follows :—

-----	1897-98.	1899-1900.	1900-01.
Issues of country spirit from central distilleries, in gallons, at London proof.	150,000	159,600	156,500
Number of distilleries supplying bonded warehouses	4	4	4
" central distilleries - - - -	20	21	21
" out-stills - - - - -	1,504	1,458	1,470
Shops holding permanent licenses for retail sale of—			
Country spirits - - - - -	5,985	6,002	5,984
Imported liquors - - - - -	100	110	89
Toddy - - - - -	654	599	599
Opium - - - - -	916	903	901
Hemp drugs - - - - -	978	991	1,004
Total issues of licit opium, in maunds - -	597	664	638
" ganja - - - - -	750	823	751

The duty on the importation of Shahjehanpur rum was raised from Rs. 4 to Rs. 5, but the amount imported increased considerably in spite of the increased duty. The number of licenses for the cultivation of ganja rose from 205 to 233, and the area cultivated was 320 acres, or 66 acres more than in 1899-1900.

Assam.

The excise revenue of Assam for the year 1900-01 and previous years was distributed thus :—

Receipts from	1898-99.	1899-1900.	1900-01.
Country spirits - - - - -	£ 41,895	£ 43,079	£ 46,506
Imported liquors and rum - - - - -	1,837	1,695	1,767
Opium and its compounds - - - - -	122,532	119,697	120,292
Ganja and its compounds - - - - -	25,447	24,458	26,762
Miscellaneous, including toddy, &c. - - - -	118	313	178
TOTAL - - - - -	£ 191,829	£ 189,242	£ 195,505

The revenue, which received a check during 1899-1900, rose in the year under report to the highest recorded. The returns from country spirits continued to increase, owing, it is said, partly to the breaking up of a ring formed to keep down auction prices in Darrang. These spirits are for the most part consumed by the immigrant population, which has grown rapidly during the past few years. Owing to the sparse population of the province the central distillery system has not been introduced, and the out-still system everywhere prevails. Under this system the sites of shops are fixed; the right to have one still, and to sell spirits, at each shop, is sold annually by auction. Endeavours have been made to get planters to undertake the management of country spirit shops in their vicinity. Much of the liquor is weak, being sold at from six annas to one rupee per quart bottle, according to strength. The indigenous population consumes chiefly opium and ganja, the use of the latter being especially prevalent in the two Surma Valley districts; and there is little demand for the other hemp drugs, known as

charas and *bhang*. Taking the province as a whole, the consumption of opium per head of population is twice as large as in any other part of India, and eightfold that of Bengal or the North-Western Provinces. The figures of sale and consumption, so far as they can be given, are as follows :—

-----	1898-99.	1899-1900.	1900-01.
Estimated consumption of country spirits, in gallons, at London proof.	367,000	393,000	No estimate available.
Consumption of licit opium, in maunds -	1,342	1,301	1,291
" ganja - - - - -	618	620	645
Shops licensed for retail sale of—			
Country spirits - - - - -	218	221	217
Opium - - - - -	751	746	761
Ganja - - - - -	281	273	291

The increased number of opium and ganja shops was due to keener competition at the auctions, the number unsold being smaller, while the number sanctioned for sale was about equal. Licenses for the sale of rum and foreign spirits numbered 67. There is a very limited consumption of toddy and rice-beer, which does not require notice.

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

Receipts from	1898-99.	1899-1900.	1900-01.
Country spirits - - - - -	£ 367,680	£ 333,667	£ 337,277
Toddy - - - - -	462,916	468,093	472,186
Foreign liquors and miscellaneous - - -	29,020	23,632	27,027
Opium and other drugs - - - - -	57,802	67,228	65,762
TOTAL - - - - -	917,418	892,620	902,252
Add,—Customs duties on imported liquors -	64,449	68,847	63,365
TOTAL REVENUE FROM DRINK AND DRUGS - }	981,867	961,467	965,617

The total excise revenue showed a rise of £9,632, or about 1 per cent. as compared with the previous year.

Central distillery systems are in force over the greater part of Madras, and the number of distilleries, which in Madras are all private concerns working on European methods, was 16 during the year, compared with 15 in 1899-1900. In the greater part of the Presidency free competition between private distilleries was the rule, the revenue being raised almost entirely by still-head duty. In the Ganjam and Vizagapatam districts, and in most of the Kistna and Malabar and part of the South Canara districts, the right of manufacture and supply at a fixed price to retail vendors was sold to contractors, of whom there were six. The Godavari district was brought under the last-mentioned system during the year. In some small tracts non-distillery systems are in force, but these areas are being restricted. Under these "renting" systems the privilege of retailing spirit is sold, either with or apart from the manufacturing right, by areas or by separate shops. Still-head duty is levied on all spirits issued from contract or other distilleries; the rate varies, but generally speaking is Rs. 4½ per gallon at proof strength. Over nearly the whole of the Presidency a tree tax, ranging from one rupee to six rupees a year, is imposed on all palm trees tapped for fermented toddy, while the shops for retail sale of toddy pay a license fee, or are sold by auction to the highest bidder. The amount of toddy consumed in the

Excise.

Presidency cannot be stated; other figures of consumption and sale are as follow:—

	1898-99.	1899-1900.	1900-01.
Consumption of country spirits, in gallons, at London proof.	949,700	895,700	886,400
„ imported spirits, in gallons -	171,100	190,600	166,900
„ opium, in maunds - -	795	856	802
„ hemp drugs - - - -	669	1,022	1,045
Shops licensed for retail sale of—			
Country spirits - - - -	10,371	10,295	9,895
Toddy - - - - -	17,523	18,111	18,324
Opium - - - - -	1,059	1,098	1,117
Hemp drugs - - - - -	308	433	493

In August 1897 the possession or transport of ganja was placed under restriction and unlicensed cultivation was prohibited, and in August 1898 an excise duty was imposed as follows:—Ganja, Rs. 4 per seer; bhang, 8 annas; charas, Rs. 6. The amount of licit hemp drugs consumed in 1899-1900 increased considerably, owing to the repression of illicit cultivation and smuggling, and the increase was maintained in the year under report. No opium is cultivated in Madras, the supply being procured from Indore; the pass duty, which is credited to excise, falls at the rate of about Rs. 5 per lb.; the right to retail opium is farmed. The number of persons sent for trial for offences against the excise laws was 17,847, against 18,807 in the previous year, and among these 91 per cent. of convictions were obtained.

Bombay.

The central distillery system obtains through practically the whole of the Bombay Presidency, but it differs from the similar system of Madras. In the most prevalent form in Bombay, the monopolies of manufacture and sale of country spirit over an excise area are sold together to one contractor, and most of the revenue is obtained from still-head duties; in the Madras distillery system the monopoly of manufacture is separated from that of retail vend, and much of the revenue is obtained from the auction sale of shop licenses. In the Bombay Presidency spirits are distilled from fermented *mhovra* (or *mhova*) flower and from fermented toddy, or juice drawn from incisions in the trunk of three or four species of palms. In several of the minor Native States the British system of excise management has been adopted; in some others the chiefs have engaged to manage their excise affairs so as to avoid competition with British excise arrangements. The general fiscal results of the excise management in Bombay, Sind and Aden during the last three years were—

Gross Receipts from	1898-99.	1899-1900.	1900-01.
Locally-made liquors, including toddy - -	£ 616,720	£ 597,096	£ 597,084
Foreign and Indo-European liquors - -	11,242	11,325	12,070
Opium - - - - -	73,182	58,418	47,773
Intoxicating drugs - - - - -	28,535	32,328	31,789
Miscellaneous items - - - - -	6,276	6,203	5,767
TOTAL EXCISE REVENUE -	735,955	705,370	694,483
Add.—Customs duties on imported liquors -	189,319	188,302	186,308
TOTAL REVENUE FROM DRINK AND DRUGS } - - £	925,274	893,672	880,791

The rate of still-head duty ranges from Rs. 5½ to Rs. 1 per gallon of London proof spirit; and the average over the greater part of the Presidency is about Rs. 3 per gallon. The incidence of excise revenue, excluding opium, per head of the population shown in the 1901 census, was 8½ annas in Bombay and 5½ annas in Sind. The details of consumption and sale in the Presidency were as follows:—

	1897-98.	1898-99.	1899-1900.	1900-01.
Country spirit, in gallons, at London proof -	2,193,000	2,216,000	1,784,600	1,872,600
Shops licensed for sale of country spirit -	2,823	2,818	2,732	2,735
„ „ toddy - - - -	1,294	1,876	1,659	1,644
„ „ opium - - - -	1,148	1,153	1,151	1,130
„ „ ganja - - - -	1,195	1,188	1,183	1,168
Licit consumption of opium, in maunds -	1,469	1,392	1,351	1,161

The amount of hemp drugs sold during the year included 2,409 maunds of bhang, 1,940 maunds of ganja, and 192 maunds of other preparations. The consumption in Sind is chiefly in the form of bhang, in Bombay it is chiefly ganja.

In Berar the gross excise revenue of the last three years has been as follows:—

	1898-99.	1899-1900.	1900-01.
Country spirit and toddy - - - -	£ 62,075	£ 54,945	£ 53,506
Opium - - - - -	24,122	16,512	17,950
Ganja - - - - -	1,880	1,978	1,877
Foreign liquors and miscellaneous - - -	1,428	462	585
TOTAL - - - - £	89,505	73,897	73,918

The figures for the year are about the same as those for 1899-1900—the lowest on record. With the return of easier circumstances towards the end of the year, the consumption of liquors and opium, which had been very low during the famine, began to increase, and a return to normal conditions may be expected.

The distillery area comprised the Ellichpur, Amraoti and Akola districts, and part of the Buldana district; in these tracts the Madras contract distillery system, which replaced the Bombay system in the previous year, continued in force, the main feature being the separation of the right of retail vend from that of manufacture and wholesale supply. The rest of Berar was supplied with country spirits by out-stills, which numbered 547. Figures relating to sale and consumption are given below:—

	1898-99.	1899-1900.	1900-01.
Consumption of distillery spirit, in gallons, at London proof.	147,800	120,300	109,700
Consumption of opium, in maunds - - -	323	304	272
„ hemp drugs - - - -	119	177	105
Shops licensed for retail sale of—			
Country spirits (including out-stills) -	1,118	1,091	1,078
Toddy - - - - -	971	937	938
Opium - - - - -	450	429	433
Hemp drugs - - - - -	163	174	175

EXCISE.

With effect from the 1st April 1901, the rates of duty on opium and ganja have been raised respectively from Rs. 10 to Rs. 15 per seer and from Rs. 3 to Rs. 4 per seer. Neither of these drugs is produced in Berar, the cultivation of poppy and of hemp for this purpose being forbidden.

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 filed before civil, criminal, or revenue courts, and under Act I. of 1879 (the Stamp Act), which imposes duties on commercial transactions recorded in writing, such as conveyances, bonds, cheques, bills of exchange, receipts, and the like. The following table gives the stamp receipts, province by province, for the year 1900-01:—

	India, General.	Bengal.	North-Western Provinces and Oudh.	Punjab.	Burma.	Central Provinces.	Assam.	Madras.	Bombay.	TOTAL.
Sale of court fee stamps	£ 17,378	£ 8,737	£ 421,821	£ 181,725	£ 83,126	£ 69,718	£ 45,717	£ 363,710	£ 221,146	£ 2,284,143
Sale of commercial and other stamps.	£ 8,181	£ 338,437	£ 128,717	£ 98,523	£ 52,817	£ 26,182	£ 17,955	£ 197,660	£ 139,904	£ 997,968
Fines and miscellaneous	£ 135	£ 3,229	£ 1,281	£ 5,995	£ 2,522	£ 253	£ 239	£ 9,649	£ 28,332	£ 60,837
Gross Stamp Revenue of 1900-01	£ 25,694	£ 1,228,989	£ 551,819	£ 285,243	£ 138,565	£ 87,153	£ 63,912	£ 571,019	£ 392,482	£ 3,312,918
Revenue of 1899-1900	£ 25,259	£ 1,218,533	£ 503,792	£ 283,382	£ 129,120	£ 84,770	£ 61,859	£ 556,128	£ 393,514	£ 3,265,417

The refunds of the year were £38,163, and the charges of collection came to £102,939. The increase in revenue, as in the previous year, amounted to 2 per cent. in 1900-01.

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 and industrial machinery, food grains, raw materials such as coal, jute, or wool, and gold and unset precious stones, which are all admitted free of duty; petroleum, which pays one anna per gallon; and iron and steel, on which an import duty of 1 per cent. *ad valorem* is levied. For a time cotton goods were exempted, but in December 1894 a 5 per cent. duty was imposed on imported cotton goods and yarns, while a countervailing excise duty of 5 per cent. *ad valorem* 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, 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 either imported from abroad or manufactured at power mills in India. A duty is levied on exported rice and rice-flour at the rate of three annas per maund of unhusked rice.

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; 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 three most recent years, during the whole of which the tariff remained unchanged, the duty on woven cotton goods being 3½ per cent., and cotton yarns being on the free list:—

CUSTOMS.

	1894-95.	1895-96.	1898-99.	1899-1900.	1900-01.
Sea Customs, import duty:	£	£	£	£	£
Arms and ammunition	10,126	11,403	9,343	8,217	7,146
Liquors	406,355	440,669	462,020	467,905	462,547
Petroleum and other oils	213,118	270,782	323,492	294,884	334,334
Cotton manufactures	256,631	776,483	558,043	609,736	616,633
Silver bullion and coin	230,557	231,859	188,914	159,812	29,007
Other metals	135,077	168,641	129,851	110,900	193,904
Other articles	630,450	686,725	678,525	653,984	820,298
Countervailing duty on sugar	—	—	—	56,783	140,465
Export duty on rice	594,018	609,581	658,026	570,637	552,964
Miscellaneous	6,694	1,770	8,561	18,593	20,534
TOTAL Sea Customs	£ 2,483,026	£ 3,197,913	£ 3,016,774	£ 2,951,451	£ 3,177,832
Land Customs	15,884	13,397	13,445	12,913	9,532
Excise duty on cotton manufactures.	6,897	40,632	90,208	87,301	77,530
Miscellaneous (including warehouse and wharf rents).	10,773	18,672	18,377	18,963	21,052
TOTAL	£ 2,516,580	£ 3,270,614	£ 3,138,804	£ 3,070,628	£ 3,285,946

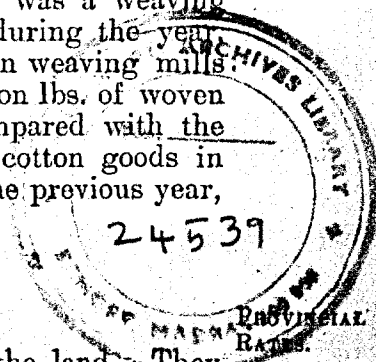
The receipts show a recovery from the low figures of 1899-1900, and are the highest on record for the whole table. The sea customs receipts are not quite so high as those of 1895-96; but it is to be observed that if the duty on silver imports is put aside there would be a considerable increase, even as compared with that year. An Act imposing a duty on imports of bounty-fed sugar equivalent to the amount of the bounty came into force on the 20th March 1899. Some account is given below, in the part of this Statement dealing with agriculture, of the effect of the measure on the sugar industry so far as it can be ascertained. The yield of the duty to the Indian Exchequer has been separately stated above. It should be explained that the receipts from the ordinary 5 per cent. *ad valorem* duty on sugar are included under the heading "Other Articles."

Regarding the working of the excise duties on cotton goods, complete report is available for the Bombay Presidency, where 57 cotton factories produced exciseable woven goods, including three hosiery factories. Three new cotton mills were opened during the year, of which one was a weaving mill. On the other hand, two weaving mills stopped work during the year and one went into liquidation. The total output of the cotton weaving mills in the British districts of Bombay for 1900-01 was 80½ million lbs. of woven goods, showing an increase of nearly 3 per cent. as compared with the output of 1899-1900. The net excise revenue realised on cotton goods in the Presidency was £65,600, as compared with £71,300 in the previous year, owing to the closing of the three mills mentioned above.

PROVINCIAL RATES.

Provincial rates or cesses are levied for the most part on the land. They are imposed to meet charges for local roads, local schools, local sanitary work, local postal arrangements, and in some provinces for village police. In the temporarily settled provinces the rates take the form of a percentage on the land revenue, and the revenue payers and tenants have to pay that percentage in addition to the land revenue. In Bengal the rates are levied by a rate upon the rental, and are payable partly by landlord and partly by tenant. Again, in the latter province about half of the rates belongs to the Provincial Government; in the North-Western Provinces nearly one-quarter is so credited; in other provinces the whole, or almost the whole, of the income from provincial rates is spent on local objects by local bodies. In temporarily settled provinces the provincial rates increase with the land

V2, 8. NOC
NO23



PROVINCIAL
RATES.

revenue. In Bengal they may be increased by votes of the district boards within the legal maximum, or by alteration in the periodical valuations of the rental. The provincial rates are, for the most part, collected punctually with the land revenue and by the same agency.

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

	India, General.	Bengal.	Assam.	North- Western Provinces and Oudh.	Punjab.	Central Provinces.	Burma.	Madras.	Bombay.	TOTAL.
REVENUE.	£	£	£	£	£	£	£	£	£	£
District Local Fund:										
Cess on land for expenditure on roads, schools, hospitals, and general purposes.	2,631	207,081	42,995	384,896	148,006	18,189	99,492	382,260	153,621	1,536,131
Provincial:										
Cess on land for expenditure on roads, schools &c.	—	209,850	—	—	—	157	—	—	—	390,957
Cess on land for famine assurance, canals, and railways.	—	—	—	87,395	38,955	10,456	—	—	—	135,906
Cess on land for district post	—	21,194	—	—	7,216	1,866	—	—	—	30,276
Cess on land for village service and patwaris.	5,115	—	—	168,192	99,173	11,551	—	182,151	29,378	436,529
Assessment on wards' estates for establishment charges.	—	9,352	—	—	1,238	—	—	—	—	10,590
Miscellaneous	1,459	—	—	52,318	208	—	—	2,289	—	56,303
TOTAL Receipts	9,205	614,457	42,995	632,751	281,896	42,212	99,492	566,699	182,999	2,562,713
Refunds and charges of collection	—	27,736	214	1,112	235	23	3,838	768	3,268	37,214
Net Receipts, 1900-01	9,205	616,721	42,781	631,639	281,661	42,189	95,654	565,931	179,731	2,625,499
Net Receipts, 1899-1900	6,612	656,849	41,691	687,392	263,415	59,081	92,478	510,972	173,439	2,495,460

INCOME TAX.

There was no change in the income tax law (Act II. of 1886) during the year, or in the rate at which the tax was levied. The principal provisions of the Act are that incomes derived from salaries, pensions, and interest on securities (classed as Parts I. and III. in the returns), if amounting to Rs. 2,000 per annum, should pay five pies in the rupee (2·6 per cent.), and if less than Rs. 2,000, four pies in the rupee (about 2 per cent.); that companies (Part II.) should pay five 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. 10 on Rs. 500 to Rs. 42 on Rs. 1,999, the tax on incomes of Rs. 2,000 and upwards being five pies in the rupee. All incomes of less than Rs. 500 a year are exempted, and the tax is not levied on profits or incomes derived from agriculture, or on military salaries of less than Rs. 500 a month.

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

	Gross Collections.	Refunds and Collection Charges.	Net Receipts.
	£	£	£
India, General	97,650	207	97,443
Bengal	357,644	14,158	343,486
North-Western Provinces and Oudh	173,292	1,380	171,912
Punjab	108,166	1,227	106,939
Burma	76,886	2,841	74,045
Central Provinces	30,443	267	30,176
Assam	20,454	220	20,234
Madras	196,755	3,000	193,755
Bombay	260,804	7,460	253,344
TOTAL, 1900-01	1,322,094	30,760	1,291,334
TOTAL, 1899-1900	1,300,295	29,723	1,270,572

In Bengal the collections in 1900-01 amounted to £342,900, compared with £339,100 in the previous year. The realisations under Part IV. amounted to £227,000, showing a slight increase. Calcutta contributed £160,500, against £168,600 in the previous year; £81,600 of this was under Part IV. The total number of objections against 101,257 assessments in this Part was 10,939, and the final demand was 4 per cent. below the original assessments. About 51 per cent. of the assesseees under Part IV. had incomes between Rs. 500 and Rs. 750 per annum, and about 14 per cent. of the receipts was contributed by this class.

For the North-Western Provinces and Oudh the latest report available relates to the financial year 1899-1900, and the figures for that year are repeated from last year's Statement. The receipts for that year were £162,800, or about 2 per cent. more than in 1898-99. Of this amount £31,000 accrued under Part I., and £121,200 under Part IV. The final number of assesseees in Part IV. was 64,537; 6,378 persons were assessed for the first time, of whom 18·7 per cent. were struck off on appeal; enhancements were made by the assessing officers in 7,671 cases, and were fully maintained in 75 per cent. of that number. The system of enlisting the aid of non-official assessors was given an extensive trial, and it has proved to be a valuable aid in assessment, especially in the direction of fair distribution, as the opinion of the assessors as to the comparative wealth of their neighbours is more to be trusted than their statement of the actual figures of the incomes. One person was assessed in every 684 of the population, and the average assessment per assessee was Rs. 30. Assesseees possessing an income of less than Rs. 750 per annum were 43 per cent. of the whole, and paid 14 per cent. of the amount levied.

The total receipts in the Punjab were £98,100, showing an increase of 6 per cent. compared with the receipts of the previous year, owing to the speculative dealings in grain, which are usual in connection with a famine. Under Part IV. a net total of £75,000 was realised, 10 per cent. having been struck off the initial assessment on objection. The latter proportion was larger than was the case in the two recent years, owing chiefly to re-assessments in Delhi and Lahore. About 15 per cent. was paid by assesseees under Part IV. having an income less than Rs. 750 per annum.

The income tax is still of very restricted application in Lower Burma, and only applies to the town of Mandalay in Upper Burma; six fresh villages in the Lower province were brought under the Act during 1900-01. The year was one of prosperity, and the collections rose from £70,000 to £74,500, the highest figure on record. Under Part IV. 11 per cent. of the original assessment was remitted on appeal, against 12 per cent. in 1899-1900; the final assessment was £35,700, payable by 15,381 assesseees, of whom 43 per cent. had incomes between Rs. 500 and Rs. 750 per annum. In Rangoon town the collections amounted to £34,300, exclusive of the tax collected on salaries of employes of the Burma Railway Company.

In Assam the yield of the tax was £19,800, which was 9 per cent. lower than in the previous year, the fall being largely due to the withdrawal of the Assam-Bengal Railway staff. There was also, however, a fall in the collections under Part IV., which constituted over 44 per cent. of the whole yield. The profits of the tea companies, on which the prosperity of the province mainly depends, are taxed in Calcutta and in London. The number of objections was 1,049 against 7,682 assessments; the total original demand was reduced, on these representations, by 2½ per cent.

The collections in Madras amounted to £180,400, showing a slight advance above the figures of 1899-1900. Of this amount, £133,800, or 74 per cent., was under Part IV. The total amount paid in the city of Madras was £36,300. Against 70,940 assessments under Part IV., 28,777 objections were preferred, of which 19 per cent. were wholly or partly successful; and the final demand was nearly 5 per cent. below the original assessment. Of the persons finally assessed under Part IV. more than 51 per cent. were in receipt of incomes of between Rs. 500 and Rs. 750 per annum.

In the city of Bombay, where more than half the income tax of the Presidency is paid, the receipts of the year were £122,700, or nearly 3 per cent. higher than in 1899-1900. But it is said that the increase was caused

INCOME
TAX.

rather by the vigilance in taxing the profits of the famine grain traffic than by an improvement in the state of the trade of Bombay. The initial demand in the city was £178,000, or 13 per cent. less than in 1899-1900, in which year, in the absence of any system of compulsory returns of income, it was considered advisable to fix the assessment high. This demand was finally reduced to £132,200. The average incidence on each taxpayer in the city fell from Rs. 69 to Rs. 66; the number of taxpayers was greater by 533, and they were 1 in 27 of the population as compared with 1 in 30. The total receipts, including arrears, throughout the Presidency, were £213,400, as compared with a total demand, current and arrear, amounting to £239,300.

Central
Provinces.

In the Central Provinces the yield in 1900-01 was £23,800, or rather less than that of the previous year, mainly owing to a decrease under Part IV. There was a slightly lower return from profits of companies, but a rise under salaries. Under Part IV. the final demand for the year was £14,800, due from 7,036 assesseees, of whom two fifths had an income less than Rs. 500 per annum.

CHAPTER IX.

FORESTS.

THE subjoined tables give the forest receipts, expenditure and net revenue for each province during the year 1900-01 :—

	India, General.	Bengal.	North Western Provinces and Outh.	Punjab.	Burma.	Central Provinces.	Assam.	Madras.	Bombay.	TOTAL.
REVENUE.	£	£	£	£	£	£	£	£	£	£
Receipts - - -	29,971	82,223	104,364	90,086	536,963	64,294	36,635	155,012	197,435	1,297,863
EXPENDITURE.										
General direction - -	5,482	—	—	—	—	—	—	—	—	5,482
Conservancy and Works -	11,060	16,802	35,611	35,957	109,809	22,573	9,922	56,482	94,866	393,061
Establishments, &c. - -	13,175	21,252	28,619	23,192	67,173	39,477	13,276	57,890	65,706	329,757
Charges in England - -	1,835	—	—	—	—	—	—	—	—	1,835
TOTAL Expenditure -	31,561	38,054	64,230	59,156	176,992	62,050	23,198	114,362	160,572	720,165
Net Revenue or Forest Surplus, 1900-01 - }	— 1,590	44,169	40,134	30,900	359,981	2,154	13,437	41,650	36,863	567,698
Net Revenue or Forest Surplus, 1899-1900 - }	— 11,036	39,580	44,824	12,631	367,641	— 14,812	14,063	43,251	19,118	505,250

Some beginning was made in the forest administration and conservancy of Southern India in 1844; 10 or 12 years later similar work was begun in Western and Northern India, and was taken up systematically all over India when the Mutiny troubles were over. Within the last 20 years forest laws have been enacted, and forest administration has been placed upon a permanent basis, in every province of India. The superior officers of the forest service have been, for the most part, selected by competition, and have been trained in forestry, either in Germany, or in France, or at Cooper's Hill College. During the year 1893-94 it was decided that 20 per cent. of the 210 superior posts in the Forest Department should eventually be filled by selected officers, chiefly Natives of India, from the subordinate or provincial branch of the Department. Some of the subordinate officials are trained at a forest school near Dehra, in the sub-Himalayan country of the North-Western Provinces, and this system of professional training at local centres will be gradually extended. The first object of the forest administration is to select, acquire, and mark off as reserves an area of State forest in every province sufficient to supply the wants of the neighbourhood and the province in respect of timber, firewood, bamboos, canes and other forest produce, and sufficient also for supplying the foreign demand for such articles as teak timber, sandal wood and rubber. The reserves are, or will be, surveyed, conserved and worked on sanctioned plans designed so as to obtain the largest possible permanent yield in the most economical way. Private rights in the reserves are bought out or compromised. Among the most important measures of conservancy are the exclusion of the yearly fires which used to devastate forests, the maintenance of adequate seed-bearing trees, and the regular reproduction of timber of the more valuable kinds. At the present time the reserves cover an area of more than 87,000 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 over 110,000 square miles of State forests, including 8,000 square miles of protected forests, some part of which will be eventually brought within the

FORESTS.

reserve area, and all of which are, with more or less completeness, managed and worked for the benefit of the people, of their cattle, and of the public revenue. The limited areas of private forest are, except where they have been leased to the Government, being gradually exhausted; and as yet few private, and no communal, 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, only persons specially licensed are allowed to extract timber or other produce on payment of fees. 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, have organised systematic forest administration, and enjoy a considerable forest revenue; the forest surplus realised in the Mysore State in 1899-1900 amounted to nearly £60,000. Hyderabad forest administration is, however, in a backward condition.

The following paragraphs treat of forest administration in each province. The figures of revenue and expenditure, being compiled from administrative returns for the year ending in June, do not agree precisely with the figures given in the table on the preceding page, which are taken from the finally corrected financial accounts for the year ending in March 1901.

Bengal.

In Bengal, at the end of the year, the areas of reserved and protected forests were 5,881 and 3,656 square miles, the latter figure again showing a slight decrease, owing to the exclusion of forests in the Sundarbans, which were to be taken into cultivation. The party of the Imperial Forest Survey continued their work in the Singhbhum forests, and accomplished 350 square miles of detail survey on the 4-inch scale. Working plans had been sanctioned by the end of the year for 4,460 square miles of forest, and were being compiled for 841 square miles in Singhbhum and Puri. The year 1900-01 was on the whole favourable for natural reproduction, and the area of plantations and nurseries rose to 7,144 acres. The planting operations include the raising from seed of a number of rubber-producing trees, among them being the *Hevea brasiliensis* or Para rubber. Attempt was made to exclude fire from 2,120 square miles, and the effort succeeded over 98 per cent. of that area. The yield of timber was about the same as in the previous year, 7,250,000 cubic feet; the outturn of fuel was rather less, but the number of bamboos taken from the forests rose from 21 to 24 millions. The area open for grazing was about the same as in the last two years, amounting to 6,172 square miles out of the 13,570 square miles of all kinds of forest in the province; the question of the regulation of grazing in protected forests has been left in abeyance. The financial results were better than in any year since 1896-97, the surplus for the financial year 1900-01 being £43,700, or 53 per cent. of the gross receipts.

North-Western Provinces and Oudh.

The reserved forests of the North-Western Provinces and Oudh rose from 3,897 to 3,898 square miles in 1900-01; there was also an area of 9,198 square miles of protected forests under the Forest Department at the end of the year. Satisfactory progress was made in the preparation of working plans for the reserved forests, and the area of all forests for which plans have yet to be provided is 405 square miles only. Protection from fire was attempted over 3,223 square miles, or more than three-quarters of the forests, and it was successful over more than 98 per cent. of that area, these operations being aided by the long and heavy winter rains. The area thrown open to cattle, for the whole or part of the year, was 1,981 square miles, and the number of cattle grazed rose from 514,000 to 550,000, besides sheep, goats and other animals; the increase occurred chiefly in the classes grazing free or at privileged rates, and is probably due in part to better enumeration. The yield of the forests was 5,847,000 cubic feet of timber and 8,676,000 cubic feet of fuel, the latter figure being rather less than, and the

FORESTS.

former being 33 per cent. in advance of the yield of 1899-1900. The forest receipts were £108,400, and the expenditure was £64,200, leaving a surplus of £44,200, compared with a surplus of £40,500 in the previous year.

At the end of 1900-01 the reserved forest area administered by the Punjab Forest Department was 2,897 square miles, besides 127 square miles under military or other control. The protected forests aggregated 5,019 square miles, or nearly double last year's figure, owing to the transfer of a large area in the Mooltan division from the "unclassified" heading. The unclassified forests decreased from 3,837 to 1,969 square miles, owing to the above-mentioned transfer. The survey of the reserved Himalayan and other forests was continued during the year by No. 18 party of the Survey of India, and 441 square miles were completed, including 350 square miles of rocky waste land. The Forest Survey Branch completed 249 square miles of detail survey in the Chamba and Jubal States and in the Hazara district. Working plans for several forests were in different stages of preparation. The year, like the last, was exceptionally favourable, as regards forest fires; the area burnt was 1 per cent. of the total area under the Forest Department, and about 6 per cent. of the area over which protection was attempted, the number of fires falling from 227 to 140. Natural reproduction was generally fair; the area of regular plantations remained at 696 acres, as in 1899-1900, but the area under cultural operations rose from 5,876 to 6,104 acres. The cultivation of Spanish chestnut is being tried with success. The total yield of the forests for the year was returned at 3,269,000 cubic feet of deodar and pine timber and 38,321,000 cubic feet of firewood, showing an increase, especially in fuel, as compared with 1899-1900; 34½ millions of cubic feet of timber and fuel were removed by free-grantees and right-holders without charge, 4½ millions were worked out by Government agency, and 2¼ millions by purchasers. The area available for grazing under the charge of the Department was increased from 9,201 to 9,754 square miles, and of this nearly 82 per cent., as compared with 80 per cent. in 1899-1900, was thrown open to cattle, while an additional 11 per cent. was open during part of the year. The total forest revenue of the year was £85,100, against an outlay of £54,700, yielding a surplus of £30,400, as compared with £13,700 in 1899-1900.

A net addition of 684 square miles was made to the reserved forest area in Burma during 1900-01, bringing it up to 17,836 square miles; but large areas of proposed reserves still awaited settlement. The inclusion of forests in the reserves, chiefly for the provision of fuel, is making good progress. A Survey of India party was at work and completed 218 square miles of survey in Pegu on the 4-inch scale, besides traverses and triangulation; and another party began work in Upper Burma. Minor and local surveys were also carried out by forest survey parties and by forest officers. Working plans were being prepared in several circles, and one such plan received sanction. This work is to be pushed on as much as possible, and in the meantime annual or preliminary plans of operations are formed for all reserved forests. Preliminary plans for teak exploitation have been drawn up for 334 square miles in the southern Shan States. In other parts of the province the monopoly of teak extraction in defined areas is granted to contractors, who pay a tonnage royalty and become the owners of the timber extracted. There are also departmental contractors who work on behalf of the Government. Fire protection operations were not so successful as was hoped in Upper Burma, but succeeded well in the Pegu circle, and exceptionally well in the Tenasserim circle of Lower Burma. Experiments with *Hevea* rubber in Mergui were continued with profit, and work was begun on the 10,000 acre plantation of this rubber in South Tenasserim. The quantity of teak extracted from the forests was about 253,000 tons, of which one-fifth was taken out by Government agency and the remainder either by purchasers or by the principal lessees under the system described above. The total of teak exports from Burma was 247,800 tons, compared with 272,300 tons in 1899-1900, and the average value per ton is stated at about £5¼, or a little less than in the preceding year. The receipts for the forest year were £513,700, and the expenditure was £176,300, leaving a surplus of £337,400, which was lower than the surplus of the preceding year, but still well above the average surplus for each of the five years before.

FORESTS.
Central
Provinces.

The area of reserved forests in the Central Provinces was 19,019 square miles, of which 14,338 square miles were at the end of the year 1900-01 classed as A. or permanent reserves, and 4,543 square miles were classed as B. reserves. The B. reserves are available either for eventual transfer to the A. class (as was done with more than 1,100 square miles during the year under report) or for possible extensions of cultivation in future years. The Forest Survey parties turned out 1,556 square miles of detailed survey, leaving a balance of 1,227 square miles still to be done. One working plan for an area of 585 square miles was sanctioned during the year, the total area supplied with such plans being 7,282 square miles at the end of the year, or 46 per cent. of the area for which they are required. Fire was excluded from over 98 per cent. of the 4,798 square miles in which special fire protection was attempted, and from 96 per cent. of that partially protected. The effect of the previous year's drought was still felt, in the poor natural reproduction and in the mortality among grown trees. No regular plantation work is attempted in the Central Provinces, but efforts are being made to induce villagers to plant groves, especially of sandal trees, and experiments are being made with a view to growing teak from seed and introducing a tussur silk industry. The number of animals of all kinds grazed in the forests was over three millions. The amount of timber and fuel removed from the forests by purchasers during the year was 9,697,000 cubic feet, as compared with 5,989,000 in 1899-1900, but the amount removed by free grantees fell from 10,183,000 cubic feet to 4,105,000 cubic feet. Of the total outturn of 15½ millions, 13 millions of cubic feet consisted of fuel, the rest of timber in various forms. The forest revenue of the year was £60,600, against an expenditure of £59,200, leaving a surplus of £1,400, compared with a deficit of £13,100 in 1899-1900.

Assam.

The State forests in Assam are divided into reserved forests and unclassed State forests, the latter including lands recently cultivated and all lands at the disposal of the State other than reserved forests. The area of reserved forests stood at 3,609 square miles at the end of the year. The area of unclassed forests is given as 17,239 square miles; but of this large area perhaps one-half consists of grass or treeless tracts. In Goalpara and the Garo Hills the more valuable of the reserved forests are worked under sanctioned working plans, but for the rest of the forests in the province yearly plans of operations are drawn up. An experiment is being made in Goalpara with a portable tramway for the conveyance of forest produce. Special fire protective measures extended over 994 square miles, and were successful in respect of 96 per cent. of that area; 196 square miles were protected on a less ambitious scale in Goalpara, but 35 per cent. of it was burnt; for the two previous years this tract had been kept quite immune from fire. A large portion of the produce of the forests consists of sal trees (*shorea robusta*); there are also plantations of rubber trees, some of which were tapped during the year with good results. The gross result of the working of the forests is given as 11½ millions of cubic feet of timber and fuel, against a total of 17½ millions in 1899-1900 and of 20½ millions in 1898-99; but the decrease is to a very large extent an unreal one, as the figures for the earlier years appear to have been based on wrong calculations. The revenue for the forest year ending in 1901 was £37,600, which was rather better than in any recent year; and the surplus rose from £13,000 to £14,700.

Berar.

Nearly a quarter of the total area of Berar is classed as State forests, which at the close of 1900-01 covered 3,953 square miles, including 1,675 square miles of timber and fuel reserves, 88 of fodder and thatching grass reserves, and 2,190 of pasture. The forests yielded 659,000 cubic feet of timber, which was nearly double the outturn of the previous year, and the yield of fuel was three times as great; but the number of bamboos shows some decrease. The special famine concessions which were granted in the preceding year were to some extent continued. The number of cattle paying grazing dues was 646,000, or about half the number of the preceding year and much less than in any other recent year; and it is stated that many of the cattle lost owing to the drought of the recent famine were of the better class cows and young stock. Permanent working plans were complete for

FORESTS.
Madras.

725 square miles, and provisional plans for 3,109 square miles. With respect to fire protection, only about 1 per cent. was burnt of the area, 950,000 acres, over which protection was attempted. The surplus receipts were £8,900, as compared with £13,200 in the preceding year, the fall being due almost entirely to diminished receipts for grazing.

There was a net decrease of 108 square miles in the reserved forests and lands in Madras during the year ending in June 1901; the increase in the preceding year was 55 square miles. The amount of land included in the reserves during the year was 202 square miles, but this was more than counterbalanced by exclusions. The total area of reserves was 19,541 square miles, of which 16,589 square miles were classed as forests, the reserves thus forming 38 per cent. of the unoccupied area of the presidency. Of the reserved forests, 731 square miles were finally included during the year under report; a further area of 1,873 square miles of the reserved lands was awaiting settlement and inclusion in the forests. Two parties of the Survey of India completed 1,335 square miles of triangulation, 770 miles of traverse survey, and 1,377 square miles of topographical survey, and minor survey operations were also in progress, while 1,968 miles of permanent demarcation were completed. As regards the management of the forests, working plans were sanctioned for 658 square miles during the year, and plans for 1,061 square miles were under preparation; but plans have still to be provided for by far the greater part of the forests. Protection from fire was undertaken over 5,218 square miles, and was successful in 97 per cent. of that area, against 94 per cent. in 1899-1900. Owing to an unfavourable reason it was again necessary to give special facilities for free grazing. Generally it is required that permits should be taken out for grazing animals, and some difficulty is found in enforcing the regulation. But the number of licences issued in 1900-01 was greater than in the preceding year. Natural reproduction was again poor. The timber plantations, covering 22,500 acres, consist chiefly of teak in Malabar, eucalyptus on the Nilgiri and Palni hills, and casuarina on the eastern coast. The yield of the forests according to the returns was 3,223,000 cubic feet of timber and 14,823,000 cubic feet of fuel, besides 30 millions of bamboos, and other minor produce; all these figures were considerably larger than those of the previous year. The value of the timber and other produce removed by purchasers was £115,300; the total receipts were £162,900, which was the highest on record; and the surplus was £47,000.

Bombay.

At the end of the forest year 1900-01 the area of the reserved forests in Bombay was 13,705 square miles, besides 1,255 square miles of protected forests. A party of the Survey of India continued its work in three forest circles of the Presidency, and completed 675 square miles of detail survey and 229 miles of traversing, besides triangulation over 380 square miles. Operations were completed in the Sholapur district. Good progress was made in the preparation of working plans, of which five were sanctioned during the year. Demarcation by cleared lines was completed over 2,209 miles. There was a sensible improvement respecting the frequency of forest fires in all circles except the Central. The concession of free grazing was continued throughout the year. Special efforts have been made to diminish friction in the administration of the grazing rules, and it is to be noted that the area of closed forests has been reduced from an average of 2,752 square miles in the five years ending in 1897 to 2,186 square miles in 1899-1900. Reproduction was rather more favourable in the northern circle and in Sind than it had been in the previous year, but elsewhere the results were not generally satisfactory. A large central nursery has been established in the Poona district, at which 200,000 plants were ready for distribution at the end of the year. The total expenditure amounted to £176,000, and left a surplus of £39,000, the Central circle only showing a deficit of £5,800 on the year's working. The forest surplus in 1899-1900 had been £17,000.

Coorg.

The area of reserved forests in Coorg was 238 square miles, as in 1899-1900, besides 801 square miles of other forests; the chief timbers are teak and sandal wood. Three-quarters of the Coorg revenue-paying reserves are now under regular working plans; the remaining area has still to be taken

in hand. The season was a favourable one as regards fires; protection was undertaken over about 205 square miles, and only one per cent. of that area was burnt. There was an increase in the quantity of timber removed from the forests, which amounted, including all the forests, to 324,500 cubic feet, compared with 221,000 cubic feet in 1899-1900. The quantity of sandal wood extracted from the forests was 10,600 cubic feet, and 161 tons were sold. The forest surplus fell from £5,600 to £4,800.

CHAPTER X.

AGRICULTURE AND MINERAL RESOURCES.

AGRICULTURE.

In every large province of India an Agricultural Department has been organised, which is charged with the duty of supervising the maintenance of the village records of land tenures, rent, produce, and land transfers, and with the work of organising and directing State undertakings for the furtherance of agriculture and for the improvement of stock. The Agricultural Departments also keep the public and the Government informed concerning the condition and the out-turn of the crops, the range of prices, and the approach of dearth or famine in any particular tract.

The following table is intended to show what are the staple crops of each province, as given in the returns for 1899-1900; in cases in which the percentage is much less than one, the column has been left blank, and in all cases fractions less than one-half have been neglected :—

PROVINCE.	Total Crop Area.	Percentage of the Crop Area of each Province under										
		Food-Grains.						Oil-seeds.	Sugar.	Cotton.	Jute.	Indigo.
		Rice.	Wheat.	Barley.	Millet and Maize.	Gram.	Other.					
Upper Burma - - -	Acres. 3,999,200	46	—	—	22	2	5	14	—	4	—	—
Lower Burma - - -	6,552,700	92	—	—	—	—	—	—	—	—	—	—
Assam - - - - -	5,117,400	73	—	—	—	—	2	5	—	—	2	—
Bengal - - - - -	63,871,700	62	2	2	5	2	8	6	1	—	3	1
North-Western Provinces	28,861,000	16	16	11	16	12	11	2	4	3	—	1
Oudh - - - - -	11,052,200	26	15	9	10	12	20	1	2	—	—	—
Punjab - - - - -	14,903,800	3	37	6	17	4	7	3	2	5	—	—
Sind - - - - -	2,996,500	30	12	—	31	2	6	11	—	3	—	—
Bombay - - - - -	19,598,500	6	4	—	60	2	10	6	—	10	—	—
Central Provinces - -	14,926,900	32	11	—	14	5	20	11	—	5	—	—
Bihar - - - - -	5,405,200	1	6	—	51	—	4	3	—	38	—	—
Madras - - - - -	25,796,400	25	—	—	23	1	22	6	—	6	—	1

Particulars of the area under each of the staple crops, and of their distribution among the various provinces, are given below under the heading "Agricultural Produce." Of other crops, not mentioned in the above statement, occupying a small area, but of great value, Bengal had a large area of opium, tea, tobacco, and garden produce; Assam of tea; the North-Western Provinces and Oudh of opium; Madras of tobacco, condiments, and garden produce; and the fodder crop of the Punjab covered 10 per cent. of the greatly reduced crop area.

The following provincial details refer, unless it is otherwise stated, to the year 1900-01, and therefore differ frequently from the particulars given in the Land Revenue part of this statement, where the year under discussion is in several cases an earlier one.

The season 1900-01 in Bengal was generally unfavourable, both in the case of the autumn and of the spring crops. Exceptionally heavy rain fell in September, and an abrupt cessation of the rains in October affected crops throughout the province. The area under autumn crops was 15½ millions of acres, or rather more than in the preceding year; the winter rice crop covered 29 millions of acres, against 31½ in 1899-1900; and 15½ millions were returned as having been sown with spring crops, or about the same as the final estimate for the previous year. The total area of all crops was 60 millions of acres, compared with a normal area of 64 millions. The final estimate of the out-turn of autumn crops was 89 per cent. of the normal; the winter rice crop was estimated to be 88 per cent. and the spring crops 81 per cent. of an average crop.

At the Botanical Gardens at Calcutta an abnormal rainfall, amounting to 40½ inches in one week in September, caused a flood, from which, however,

AGRI-CULTURE.

Bengal.

AGRI-
CULTURE.

little permanent damage resulted. Special attention was, as usual, given to plants of economic importance, and 39,300 plants of various kinds were distributed. The demand for rhea plants noted last year has fallen off, as those interested in the cultivation of the plant had been provided with a sufficient stock.

At the experimental farms on the Burdwan and Dumraon estates experiments were continued with different kinds of manure, with selected and imported seed, and with different methods of cultivation. At the Burdwan farm a paddy crop treated with bone manure and saltpetre gave a very satisfactory yield, and a profit of Rs. 80 to Rs. 100 per acre. Jute also, with a combination of manures, gave a profit of Rs. 60 per acre. On the other hand, at the Dumraon farm, paddy treated with bone manure gave a poor yield. The wheat experiments, which are of primary importance at Dumraon, were vitiated by unseasonable weather and by the prevalence of rust. There are other experimental farms, at Siripur in Saran, at Gaya, and at Chittagong; and experiments are also carried on in many Government, wards', and private estates. Eighteen Hindu students completed a course of agricultural instruction at the Sibpur College. The Sibpur farm is used for demonstrations to the students.

The Silk Committee, formed in 1898-99 for the promotion of Pasteur's method of silkworm rearing, continued its operations in the Malda, Birbhum, and Murshidabad silk-rearing districts, and extended them to Bogra during the year. The total number of rearers to whom the system was taught was 136, against 106 in the previous year, and it is reported that, in the Murshidabad and Malda districts, almost all the rearers who have learnt the new processes are actually practising them. Model rearing houses are being constructed, and the committee's officers are in close touch with the rearers.

There is no land record staff in Bengal, but in the tracts which have been cadastrally surveyed a considerable amount of statistical information is available as to cultivation, stocks and crops, and attempt is being made to introduce a record of the mutations of tenures. Reference has already been made, in the Registration chapter of this Statement, to the working of the Bengal Land Records Maintenance Act of 1895.

North-
Western
Provinces
and Oudh.

The monsoon of 1899 in the North-Western Provinces and Oudh was marked by excessive rain up to June and by deficient and irregular falls afterwards. The result is shown in the Land Revenue chapter of this Statement. The monsoon of 1900 was much delayed, and up to the end of August was below the average; but the rainfall of September was exceptionally heavy. The sowings for the autumn crops of 1900 were on a more extended scale than those of 1899. Of the autumn crops of 1900 it may be stated that rice was not a success, especially in the eastern districts, that large millets and mustard were almost full crops, and that taken as a whole the crops were normal. The latest full report available is that for the year ending on the 30th September, 1900. During that year the total area under crops in the united provinces was just under 40 millions of acres, of which 6½ millions were under wheat, 7½ millions under rice, 4½ millions under barley, and 9 millions under pulses. The early rice crop escaped destruction, but the late rice was practically a failure, and the average yield was 70 per cent. of a normal crop. Spiked millet and mustard gave better returns, but for the rest the autumn crops yielded only about 50 or 60 per cent. of the normal. The provincial average of wheat is 85 per cent., and of other spring crops the pulses gave 80 per cent., barley 70 per cent., and sugar cane only 62 per cent. of a normal crop. Prices were high throughout the year.

There were over 29,000 village accountants or assistants under the Land Records Department during the year, of whom 88 per cent. had passed through school courses; their work is reported to show wonderful accuracy, considering the class of men employed.

At the Cawnpore experimental farm the season 1900-01 was not, on the whole, unfavourable; but the rainfall was not well distributed, and in the winter months wheat and potatoes suffered. It appears to have been established that oats are particularly suited to wet winters. Experiments were continued with manures and varieties of cotton, wheat, potatoes, Canadian oats, and sugar-cane. American rust-proof wheat was again tried, but did

AGRI-
CULTURE.

not escape the attacks of rust. The Meerut farm is used as a centre for the distribution of improved seed, and also for manure experiments and for the maintenance of a small stud comprising an Arab stallion, three bulls, and other animals for breeding purposes. Experiments for the improvement of fruit trees, notably the date palm, and the cultivation of flowers and vegetables, were continued at the Saharanpur and Lucknow gardens. Agricultural shows were held at seven places, and were attended by officials of the Agricultural Department. It is noted that the exhibits of agricultural produce were good at some of the fairs; the superiority of some improved patterns of plough was demonstrated at each fair, but no general adoption of those ploughs has followed.

The year 1900-01 was on the whole exceptionally favourable to agriculture Punjab. in the Punjab, in spite of a break in the monsoon in July. Floods in August and September caused some damage, but the area of crops harvested was 28½ millions of acres, against 15 millions in the previous year, and an average for the preceding 10 years of 22½ millions. The autumn crop area of 1900 was over 11½ millions of acres, and the following spring crop covered nearly 17 millions. Wheat occupied 8½ millions of acres, the largest area on record in the province. The yield of the food crops as a whole is stated to have been seven-eighths of the normal. Cotton was grown on a million acres, but was rather below a normal crop. The cultivated area is returned as 27½ millions of acres, of which nearly 46 per cent. is cultivated by the owners, and 53 per cent. by rent-paying tenants, four-fifths of whom are tenants-at-will. Prices fell generally as compared with 1899-1900.

The total irrigated area during the year ending in September 1900 was about 9½ millions of acres. Colonisation on the Chenab Canal, the extension of the Western Jumna and Sirhind Canals, and construction of new canals elsewhere, have resulted in the following increase of the area irrigated by Government canals during recent years:—

	Acres.		Acres.		Acres.
1893-94	- 2,523,378	1896-97	- 3,733,267	1898-99	- 3,981,899
1895-96	- 3,161,008	1897-98	- 4,395,453	1899-1900	- 4,243,524

On the Chenab Canal the area allotted to cultivators in 1899-1900, mainly on the Gugera branch, amounted to 219,287 acres, and the area of matured crops for the year was 1,096,555 acres, against 823,874 acres in 1898-99, an increase of 33 per cent., following an increase of 36 per cent. in 1898-99.

The number of village accountants (*patwaris*) employed under the Land Records Department was 8,482, of whom 95 per cent. have passed the prescribed examination, besides 607 higher officials (*kanungos*). As to the working of this staff there is nothing to add to what was said last year; some men were dismissed for corrupt practices or inefficiency, but the work on the whole is fairly done. A large number of the staff were employed on famine duties. Their ordinary work consists chiefly in the maintenance of a record of rights and the observation of changes in cultivation, rent, &c.

Experiments with sugar-beet were in progress in the Government Agri-Horticultural Gardens; but no very favourable result appears probable. Rust-resisting varieties of Australian wheat were also tried. On the whole, the experiments were disappointing. It is proposed to open an experimental farm at Lyallpur.

The monsoon of 1900 was fairly favourable for autumn crops in the Central Central Provinces, though for some time it gave rise to anxiety, being deficient up to the middle of July. The out-turn of rice was generally up to the average. Millets gave a fair yield everywhere, and the year was most favourable for cotton. The spring crops were unequal; the yield of the wheat crop was about three-fourths of the normal; gram yielded only about half a normal crop, and the linseed crop was poor. The total area cropped in the agricultural year 1900-01 was 16½ millions of acres, against 15 millions in the preceding year. The wheat area, normally 4 millions of acres, shrank to 1½ millions in 1899-1900, and only increased to 2 millions in the year under report. The irrigated area in 1896-97 was 790,400 acres; in 1899-1900,

AGRI-
CULTURE.

owing to the scarcity of water, only 255,300 acres could be irrigated; in 1900-01 the area was 402,500 acres. Prices were below the high level of the preceding year, but still much above the normal.

Agricultural experiments were carried out on the Nagpur experimental farm, but they were somewhat marred by the unsatisfactory results of the spring crops on the farm. The subjects to which attention was directed were manures, rotation and mixture of crops, tillage, new varieties of crops, ensilage, and wheat rust. It is reported that the experiments in some cases had some result on agriculture in the province, but that difficulty is found in keeping in touch with the agricultural community.

The revision of the Land Records arrangements in the Central Provinces was by the end of September 1898 fairly complete; the circles allotted to the accountant surveyors (*patwaris*) had been arranged; each village officer of this rank has to reside and hold an office in his circle; the inspectors (*kanungos*) have also been organised and have been made to reside within their charges. Good progress was made during the year ending in September 1900 in the revision of the papers of the village accountants in the districts in which settlement operations have recently been completed. The *patwaris* and inspectors were employed on famine work during the year; and this to some extent affected the preparation of village records. The delay in filing the village papers was not, however, very great, and the results are regarded as generally satisfactory, having regard to the circumstances of the year. The checking and testing of these papers, a most important function, was efficiently performed in most districts by the higher officials, or *tahsildars*. Most of the district reports speak well of the work done by the *patwaris* and the higher Land Record staff.

Burma.

In Lower Burma, except in the Arakan division, the monsoon rain was generally timely, abundant, and well distributed. The area under cultivation again showed a considerable increase, from $6\frac{3}{4}$ to $7\frac{1}{4}$ millions of acres. The increase in the rice crop, which covered more than $6\frac{1}{2}$ millions of acres, was most notable. The area under cultivation is still capable of wide expansion. Prices of rice fluctuated greatly. The total exports of rice from Lower Burma were 2,060,000 tons in 1900, and 1,849,800 tons in the first 10 months of 1901, both these figures being higher than those recorded for any other year. In Upper Burma the crop area was about $4\frac{3}{4}$ millions of acres, of which 824,400 acres were irrigated; rather less than half the total was under rice, while more than a million acres were under millet. The rainfall was less local than usual in character. The harvests were generally up to the average, and the food supply was amply sufficient. The year was on the whole healthy for cattle in the upper and in the lower portion of the province.

The Land Records Department in Lower Burma has recently been re-organised and increased, and it has been decided to apply the system to Upper Burma, which necessitates a further increase of the staff. For admission to the lower grade of the department a certificate is required, to be obtained at one of the survey schools, of which there are 21 in the province, and a practical surveying course is also necessary.

Beyond experimental gardens and the distribution of seed, no scientific or local inquiries were conducted, and there is no establishment in Burma for the purpose. Potatoes did well in parts of the Chin Hills, and there were satisfactory experiments with English vegetable seeds, ground-nuts, tobacco, and other crops.

Assam.

In Assam the year 1900-01 was one of deficient rainfall, badly distributed; and floods in the Brahmaputra Valley caused loss of cattle and crops in the Kamrup and Goalpara districts. The area under crops was $4\frac{3}{4}$ millions of acres, of which $3\frac{1}{4}$ millions were under rice and $\frac{1}{4}$ million under tea. The out-turn of early rice was not good and late rice yielded a distinctly poor crop. The out-turn of tea in Cachar and Sylhet was abnormally large; other crops yielded returns somewhat below the average. Owing to the partial failure of the crops, the price of rice was generally higher than in the preceding year.

At the newly started Shillong experimental farm, experiments were conducted with a view to discover new crops that may be grown profitably in the Khasi Hills. The crops of potatoes, some fodder crops, and ground-nut

AGRI-
CULTURE.

crops were more or less successful. Oats failed again, and linseed also was tried without success; silage was again successfully made from wild hill grasses. A Bengali tea planter, who was supplied with tobacco seeds for experimental cultivation, succeeded fairly well with four sorts, though the quality of the finished product was not known. An experimental dairy has been started, which will be transferred to private management as soon as its success is assured. Sisal hemp was cultivated on a plantation in South Sylhet with good results. Another private individual has profitably cultivated sugar in Golaghat during recent years; some loss has been caused by a disease which attacked the plants, and experiments are being made with hardy varieties. Among other results of experiments with rice and sugar-cane may be noted the fact that the average out-turn of molasses per acre in a large number of experiments carried on during 18 years is 1,661 lbs.

The number of village officials under the Lands Records Department was 1,135; and of these all but 80 have obtained a certificate in surveying. There are three survey schools in the province, at which 141 certificates were granted during the year. Fifty-seven supervisors are employed in checking the work of the above-mentioned officials, but they were also employed on census work during the year. Cadastral maps and land records are maintained in spite of the shifting of cultivation so prevalent in the province. Satisfactory progress is being made in the introduction of a system of inquiry into and tabulation of agricultural conditions. Books for this purpose have been instituted in 4,900 villages, covering an area of 4,850 square miles and including all the districts of Assam, with the exception of Nowgong. In addition to this, prices were registered and crop operations conducted, while detailed notes on the economic condition of 170 villages were prepared.

The season of 1900-01 was on the whole unfavourable for agriculture in the Madras Presidency, and in some parts both monsoons were deficient, causing extensive crop failure. The crop area, excluding permanently settled estates and those held on exceptional tenures, rose from $24\frac{1}{2}$ to $26\frac{1}{2}$ millions of acres, of which $6\frac{1}{2}$ millions were irrigated, against 6 millions in 1899-1900. Prices were very high in the case of most food grains, and ranged between 50 and 100 per cent. in excess of the average rates. Rice stood about 60 per cent. higher than the usual price.

The Land Records Department have further developed the system under which survey schools are maintained for the education and testing of village officers in each sub-division; and it has been decided to require more thorough training of the inspectors. Fresh arrangements of the salaries and of the numbers of the village accountants are being gradually introduced. Village statistical register books for the revenue year 1899-1900 were prepared and checked in ten districts, and were brought nearly up to date in Madura, and steps were taken to have them completed in other districts. The Land Records staff was engaged in this year also on work in connection with famine. Two experimental farms were to be started, one at Bellary and one in the Tinnevely district, as a beginning in connection with the proposals made in 1899 to establish eight experimental farms in the Presidency, and for the general extension of agricultural enquiry. The farm at the Saidapet Agricultural College is maintained for educational and not for experimental purposes. Sugar-cane disease was investigated, and a large quantity of fresh ground-nut seed imported, as it was thought that the indigenous seed had deteriorated; experiments were made with sisal hemp and *durian* plants. At the Saidapet College there were 47 students, and the course consisted of lectures in agricultural science, field work, and veterinary instruction. The veterinary hospital continued to increase in popularity; and the number of cases rose to 856. The extension of agricultural education by means of the primary and lower secondary schools was under consideration.

In Bombay a prolonged break in the rains in August and the early cessation of the monsoon reduced the out-turn of autumn and spring crops considerably. In Gujarat some damage was also done by insects. In Sind the inundation was delayed, and in parts the crops were injured by locusts or disease; but on the whole the season was a fair one in Sind. The total area of crops sown and matured in the whole Presidency was $25\frac{1}{2}$ millions of acres, of which 4 millions were in Sind. As regards cultivation in Gujarat, the area sown

AGRI-
CULTURE.

rose from $1\frac{1}{4}$ to $2\frac{1}{2}$ millions of acres, but was still 600,000 acres below the normal acreage. The irrigated area in the Presidency, $3\frac{1}{2}$ millions of acres, was rather larger than in the preceding year; it consists chiefly of lands in Sind irrigated by Government canals, but 479,000 acres were irrigated from wells in the Presidency proper. Irrigated crops turned out well, but the early and late crops were more or less a failure. The out-turn of crops was below the normal almost everywhere, save in the Konkan districts.

At the Poona demonstration farm the year was not a favourable one. Experiments were conducted with various fodder crops, with rhea, Egyptian and Brazilian varieties of cotton, and with food crops. The failure of the cotton experiments may be held to show once again the impracticability of introducing exotic varieties of cotton. The rhea crop turned out well. At the Surat farm experiments were continued, but, owing to the unfavourable season, no useful results were obtained. A small herd of first-class cattle was started at this farm on the dispersal of the Gujarat famine camps, with a view to supplying the future demand for bulls.

A Land Records staff was introduced into the Broach, Panch Mahals, and Thana districts, and is now at work throughout the Presidency, but famine and census work interfered very considerably with the ordinary work of the department. Very little boundary inspection was done, and inspection of crops and waste lands, and enumeration of agricultural stock, also suffered. Good progress was made generally with measurement and classification.

Berar.

The season 1900-01 in Berar was very favourable for the autumn crops, which included 90 per cent. of the crop area, but was unfavourable for the spring crops, the area of which has been reduced owing to a series of unfavourable seasons. The crop area amounted to nearly 7 millions of acres, of which nearly 3 millions were under large millets and $2\frac{1}{2}$ millions under cotton. These, with the sesamum crop, constituted the bulk of the autumn crops. The spring crops included about one quarter of a million acres under wheat. No reliable data of the out-turn of various crops are available, but it is known that the cotton and millet crops were good. The food stocks in the province at the end of the previous year were estimated to have sunk to $1\frac{1}{2}$ millions of maunds; but in the year under report they were largely increased, the stock of millet amounting to 7 million maunds.

A scheme for an agricultural staff of district and circle inspectors had been tentatively sanctioned, and the rules for their guidance approved; but the famine and census work again prevented the scheme from being put into operation during 1900-01. Of the 62 officials who are to be circle inspectors, 52 have been trained in survey work, and the remainder will be replaced by trained officials when possible. When the new staff gets to work the system of maintaining village note-books will be started. The village headmen worked very well throughout the famine, the whole of the village relief arrangements having depended on them; but necessarily the collection of village records suffered in the pressure of other work.

HORSE-BREEDING AND VETERINARY COLLEGES.

HORSE-
BREEDING.

The improvement of the breeds of horses, ponies, mules, and cattle, the prevention of horse and cattle disease, and veterinary instruction, are in charge of the Civil Veterinary Department, aided by a considerable number of veterinary assistants who are being organised into subordinate veterinary establishments. Operations are carried on throughout India, but chiefly in Northern India, which is most favourable for horse-breeding; their objects are the provision of remounts and mules for military purposes, and the preservation and improvement of native breeds of horses and cattle. For the first of these objects the Government of India imports and maintains horse and donkey stallions, and registers are kept of mares suitable for producing useful remounts. For the second object stallions are kept by provincial governments, local authorities, and private individuals; investigations into cattle and equine diseases are carried on, both locally and at the Imperial Bacteriological Laboratory at Muktesar; and numerous veterinary dispensaries

HORSE-
BREEDING.

are maintained by the provincial governments. The following paragraphs give particulars for the year under various heads:—

Horse-
breeding.

During the year 1900-01 operations were again hampered by the great scarcity of fodder and the high prices ruling for grain. The number of Government horse stallions was 357, of which 291 stood at stud during the year; but besides these there were at stud 49 horse stallions and 128 pony stallions, chiefly Arabs, belonging to provincial governments or others. The Government of India imported eight stallions from England and eight from Australia; five Australians and 26 Arabs were bought by the Government in India. At the end of the year the Government had 150 Arab stallions, 32 Norfolk trotters, 23 hackneys, and 85 English and 57 Australian thoroughbreds. In addition to these there were 17 Government pony stallions, chiefly Arabs.

The number of stock got by Government stallions during the year, so far as is known, was 3,714 horse and pony foals, but the result of a large proportion of coverings is not known, especially as large numbers of mares were removed to other provinces after being covered, owing to the fodder famine. The Army Remount Department and cavalry regiments purchased 1,183 horses, or 737 less than in 1899-1900; and 114 were bought for the police. Of the horse and pony stallions belonging to local governments, district boards, &c., 176 were at stud during the year, chiefly in the North-Western Provinces and the Punjab. The number of mares served by the district board horses was 9,464.

Mule-
breeding.

The number of donkey sires bought by the Government of India during the year was 61, including 12 imported from Spain and 34 from Cyprus, whence a good yearly supply is obtainable. The number in the possession of the Government at the end of the year was 460, of which 378 were at stud during the year, besides 11 owned by provincial governments and others. Of the Government donkey stallions, 150 were Italian, 148 Cyprian, 52 Spanish, and 19 Persian; attempts are being made to improve the native breeds of donkeys for mule-breeding purposes. A scheme has been sanctioned for the Punjab, under which 50 donkey stallions will be distributed among the districts, to be kept at the cost of the district boards. The number of pony mares covered by the donkey stallions was 20,092, against 19,444 in 1899-1900; the number of donkey mares was 1,665 compared with 1,489. The reported number of mule foals rose from 3,766 to 3,878. Of mules, 180 were purchased by the Department for ordnance or baggage purposes, and 4,809 for transport.

In addition to the above, Native States keep a considerable number of horse and donkey stallions.

Cattle-
breeding.

With a view to improve native breeds of cattle, bulls are kept by local authorities in many provinces, and the demand for suitable bulls is on the increase. But some difficulty is found in procuring them, and a sum was set aside for the ensuing year to be awarded as prizes to cattle breeders in centres which are known to produce distinct types of cattle. The Hissar Cattle Farm was taken over by the Department, for a period of seven years, at the beginning of 1898-99. During 1900-01 48 bulls were sent out to Bengal, the Punjab, the Kapurthala State, Allahabad, and elsewhere. The class of stock is not yet as good as could be desired, but by careful breeding it is hoped that this will in a short time be remedied. The primary object of the farm, however, will be to produce suitable siege train bullocks, and local authorities will rely principally on well bred bulls locally purchased. The system recommended is, that indigenous bull calves should be bought by the district boards, and after being well fed up, turned out in absolute freedom among the herds at $3\frac{1}{2}$ years old. As to the working of the farm, it is reported that the supply of forage was enough to keep the stock throughout this and the preceding years of short harvests, without serious loss, either of stock or of revenues.

Owing to the scarcity of fodder the number of horse shows held was again very low; the number of animals present at the shows was less than half that of the previous year, but on the other hand those competing for prizes were more numerous, which perhaps implies a higher quality. The number of remounts purchased at the fairs, excluding Bengal, as to which particulars are not known, for the army and the police was 1,132, and 2,952

Horse and
cattle fairs.

HORSE-BREEDING.

mules were purchased by Government. Many cattle fairs were attended by veterinary officers, who paid attention to the state of the animals with regard to contagious diseases. There was a considerable falling off not only in the number but in the condition of the cattle at the shows.

Horse and cattle disease.

Reported cases of glanders and farcy were numerous during the year, owing in some degree perhaps to the larger powers of inspection given in the Amended Act of 1899, which is now in force in Bombay, the North-Western Provinces and Oudh, the Punjab, Sind and Baluchistan, and was being introduced into Bengal.

The amount of cattle disease was naturally large in consequence of the low condition of most of the cattle. Rinderpest was reported in Bombay and Bengal, Burma and Madras, and preventive inoculation was carried out successfully in each province. This practice is being introduced whenever possible, and it is generally found that villagers have no objection to it when its advantages are explained to them. Veterinary dispensaries have been established in most provinces, and a total of 52,846 cattle was treated during the year. In Burma there is already a subordinate Veterinary Establishment, and a similar service is being started in the Punjab; veterinary assistants are employed also in most provinces. At the Imperial Bacteriological Laboratory at Muktesar, as elsewhere throughout India, experiments on the rinderpest disease were in progress, and a large quantity of serum for inoculations was prepared. Investigations were continued respecting a fungus alleged to be fatal to locust swarms; the results of experiments with this fungus were not, however, very successful.

Veterinary instruction.

At the Bengal Veterinary College all the 13 final year's students who presented themselves for examination were successful. At the Bombay College 10 students came up for the final examination, and six passed. The Lahore school showed more satisfactory results, 52 having passed out of 55; at the Rajputana school 17 out of 25 passed. These institutions supply not only the needs of India, but also, in recent years, those of the Uganda Railway Committee.

AGRICULTURAL PRODUCE.

AGRI-CULTURAL PRODUCE.
Agricultural statistics.

The following figures are extracted from the annual returns of agricultural statistics of British India, and relate to the year 1899-1900; they include figures for Bengal which must for the most part be regarded as estimates; the figures of irrigated area and of number of stock included in respect of that province are mere approximations.

	Acres.	Acres.
Total area according to Survey - - - - -		732,300,000
Deduct feudatory and tributary States - - - - -	127,000,000	
Deduct area for which no returns exist - - - - -	60,300,000	
		187,300,000
Net area - - - - -		545,000,000
Forest area - - - - -	65,800,000	
Area not available for cultivation - - - - -	135,500,000	
Culturable waste other than fallow - - - - -	106,400,000	
Current fallows - - - - -	57,100,000	
		364,800,000
Net area yielding crops during year 1898-99. - - - - -		180,200,000
of which bore two or more crops during the year - - - - -		28,700,000
		203,900,000
Total crop area - - - - -		
Total irrigated area (including 6,000,000 acres estimated for Bengal) - - - - -		37,500,000
Area of rice crop - - - - -	72,800,000	
Area of millet crops, including maize - - - - -	38,400,000	
Area of wheat crop - - - - -	16,100,000	
Area of gram crops - - - - -	7,800,000	
Area of barley - - - - -	6,600,000	
Area of other food grains, including pulses - - - - -	23,300,000	
Area of orchard, garden, and miscellaneous food crops - - - - -	6,300,000	
Total of the above food crops - - - - -		171,300,000

AGRI-CULTURAL PRODUCE.

	Acres.	Acres.
Area of sugar - - - - -		2,800,000
Area of tea and coffee - - - - -		600,000
Area of oil-seeds - - - - -	10,300,000	
Area of cotton - - - - -	8,400,000	
Area of jute and other fibres - - - - -	2,500,000	
Area of indigo - - - - -	1,000,000	
Area of poppy (opium) - - - - -	600,000	
Area of tobacco - - - - -	900,000	
Area of fodder crops - - - - -	2,900,000	
Area of other non-food crops - - - - -	2,600,000	
Total of non-food crops - - - - -		29,200,000
Number of cattle (including 25 millions estimated for Bengal) - - - - -		112,000,000
Number of sheep and goats (including 6 millions estimated for Bengal) - - - - -		43,000,000
Number of horses, ponies, mules and donkeys (including 300,000 estimated for Bengal) - - - - -		2,900,000

The crop areas given above include the total areas actually sown, whether the crop came to maturity or not, except in cases where fields, owing to the failure of the first sowings, were devoted to other crops. In cases where two or more crops were sown together, an estimate of the area covered by each is included. The total area of crops sown, including re-sowings and the areas cropped more than once, are returned for the last five years thus:—

	Millions of Acres.				
	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.
Total area of crops sown - - - - -	214	209	230	232	214
Including area cropped more than once - - - - -	25	23	27	27	24

Regarding some of the more important staples of Indian agriculture, some account is given below. Particulars of the crops of 1900-01 are given, as this appears to be more suitable to the requirements of this Statement than the course adopted in some previous issues of commenting on the latest figures available.

The ascertained and estimated area under wheat is given thus:—

WHEAT.

	Average Wheat Area for preceding Five Years.	Areas Cultivated with Wheat in	
		1899-1900.	1900-01.
	Acres.	Acres.	Acres.
Punjab - - - - -	7,433,700	6,366,500	8,766,400
North-Western Provinces and Oudh - - - - -	4,330,600	4,794,500	5,294,900
Bengal - - - - -	1,466,800	1,550,300	1,604,100
Central Provinces - - - - -	2,550,400	1,633,100	2,018,300
Bombay - - - - -	2,176,000	1,157,100	1,212,600
Sind - - - - -	471,400	364,500	473,200
Berar - - - - -	572,300	17,900	243,600
Rajputana - - - - -	1,310,700	360,700	713,300
Central India - - - - -	1,047,900	515,600	864,800
Hyderabad and Mysore - - - - -	1,250,300	422,400	750,600
TOTAL - - - - -	22,610,100.	17,182,600	21,941,800

Throughout Northern India, including the Central Provinces, the conditions were at first favourable, and a bumper yield was anticipated. The result was not, however, so good as was expected, though the area and yield exceed the average in the Punjab, Bengal, and the North-Western Provinces and Oudh.

AGRI-
CULTURAL
PRODUCE.

In the Punjab especially, the most important wheat-growing province, the yield is 45 per cent. above the average of the last ten years; 57 per cent. of the Punjab wheat area was unirrigated. In the North-Western Provinces the yield was 28 per cent. above the decennial average. In the Central Provinces, Central India, and Rajputana, the area was smaller than usual, owing to the necessity of growing crops which are consumed by the people. Elsewhere, the conditions of the year resulted in greater or less failure of the crop. The

estimated out-turn of the year in the chief wheat-growing provinces is given in the margin, in comparison with the yield of 1899-1900. The total estimate for India was 6,582,600 tons, against 4,869,700 tons in the preceding year, and a quinquennial average of 5,722,300 tons. Wheat exports are subject to great fluctuations. In 1900-01, following the disastrously bad crop of 1900 and the swift rise of prices, the exportation practically ceased. The figures are as follows:—

1,053,000 tons in	-	-	1885-86	95,000 tons in	-	-	1896-97
689,000	"	-	1889-90	976,000	"	-	1898-99
1,515,000	"	-	1891-92	485,000	"	-	1899-1900
500,000	"	-	1895-96	2,500	"	-	1900-01

OIL SEEDS.

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

Area in acres		Average for preceding Five Years.	1899-1900.	1900-01.
-	Linseed, rapeseed, and mustard.	6,375,800	4,342,700	6,319,400
	Sesamum oil-seeds	2,503,600	2,746,000	3,541,500
TOTAL		8,879,400	7,088,700	9,860,900
Yield in tons estimated for all seeds		992,300	785,300	1,182,300

The above figures do not include some areas where a considerable amount of the seeds is grown, and the area on which they are sown in conjunction with other crops has not been taken into account. Further, the reporting agency was taken off this work by census operations in the North-Western Provinces, the figures for which are specially uncertain. The failure of the rains affected the oil-seed crops as it did grain crops, and it is only in the Punjab and Sind that the conditions were entirely favourable to the linseed, rape and mustard crops. The sesamum crop was exceptionally good in Bombay, yielding 39 per cent. more than the average. The quantities and value of the above-mentioned oilseeds exported from India during the three years is as given in the margin.

The cultivation of ground-nuts is practically confined to the Bombay and Madras presidencies. The Bombay crop of 1900-01 was not good, though it greatly exceeded the miserable crop of the preceding year. In Madras the crop was grown on an exceptionally large area, and the yield was estimated at 88 per cent. of the normal. Taking the two presidencies together, the area sown was 261,400 acres, against 173,900 acres in 1899-1900 and an average of 267,600 acres in each of the last five years. The exports of ground-nuts in recent years are shown in the margin.

Exports.	Tons.	Value.
1898-99	837,300	6,860,000
1889-1900	660,700	5,716,000
1900-01	433,300	4,853,000

Exports.	Tons.
1894-95	113,400
1895-96	55,900
1896-97	24,300
1897-98	2,200
1898-99	4,400
1899-1900	7,800
1900-01	11,600

AGRI-
CULTURAL
PRODUCE.
RICE.

The rice crop of the season 1900-01 was rather below the normal in Madras and considerably below it in Bengal, but exceptionally good in Burma. The figures returned for the last two years are as follows:—

	Area in Acres.			Yield in Tons of Cleaned Rice.		
	Average of preceding Five Years.	1899-1900.	1900-01.	Average of preceding Five Years.	1899-1900.	1900-01.
Bengal	38,802,000	39,490,000	37,115,000	17,321,000	17,898,000	16,646,000
Madras	6,730,000	6,423,000	6,503,000	2,180,000	1,972,000	2,123,000
Burma	5,590,000	6,050,000	6,397,000	2,159,000	2,708,000	2,812,000

Other provinces, notably Assam, the North-Western Provinces and Oudh, Sind, and the Central Provinces, produce a large quantity of rice, a considerable proportion of their cultivable area being thus employed, as may be seen from the table at the beginning of this chapter. The quantity of rice and rice-flour exported from India and Burma beyond the sea in 1900-01 was 1,560,000 tons, or about 3 per cent. below the total of the preceding year. More than one-half of the exports went from Burma, which also exported 1,082,000 tons of rice to India. The exports of rice and rice-flour from India to foreign countries in the first ten months of 1901-02 amounted to 1,150,000 tons. It is estimated that Burma has this year (1902) an exportable surplus of 2,260,000 tons of cleaned rice.

The Indian export duty of three annas per maund on rice yielded to the Indian Treasury a net sum of £553,000 in 1900-01, against £570,600 in the previous year. Siam and Saigon, which with Japan constitute the only other considerable rice-exporting countries of the world, levy the same or a slightly higher rate of duty on rice exports.

The area under cotton in India is returned and estimated as follows:—

COTTON.

	Average Cotton Area for preceding Five Years.	1899-1900.	1900-01.
	Acres.	Acres.	Acres.
Madras	1,474,000	1,383,000	1,403,000
Bombay, Sind, and Bombay Native States (estimated)	6,206,000	3,187,000	3,881,000
North-Western Provinces and Oudh	1,303,000	1,213,000	1,265,000
Punjab	1,076,000	988,000	1,216,000
Central Provinces	642,000	713,000	1,008,000
Berar	2,220,000	1,984,000	2,522,000
Nizam's Dominions (estimated)	1,574,000	1,292,000	1,699,000
Burma	No estimate available.	149,000	143,000
Central India (estimated)	454,000	479,000	526,000
Rajputana (estimated)	500,000	325,000	*126,000
Bengal	180,000	161,000	154,000
TOTAL	15,629,000	11,874,000	13,943,000

* Incomplete.

The acreage would be considerably higher than the average if it were not for the great decrease in Bombay, ascribed chiefly to the extensive sowing of food grains after the famine. The total yield is estimated at 2,032,000 bales against an average for five years of 2,201,000 bales, and against 760,000 bales only in 1899-1900.

The exports of raw cotton from India were—

1894-95	-	-	3,387,000 cwts., valued at £5,806,000
1895-96	-	-	5,248,000 " " 9,406,000
1896-97	-	-	5,216,000 " " 8,647,000
1897-98	-	-	3,723,000 " " 5,914,000
1898-99	-	-	5,411,000 " " 7,459,000
1899-1900	-	-	4,373,000 " " 6,617,000
1900-01	-	-	3,576,000 " " 6,752,000

STATEMENT EXHIBITING THE MORAL AND MATERIAL

AGRI-
CULTURAL
PRODUCE.

TEA.

The following is an estimate of the cultivation and the production of tea in India during recent years :—

	Area under Tea, in Acres (Mature and Immature Plants).			Production of Tea in Lbs.		
	1898.	1899.	1900.	1898.	1899.	1900.
Bengal - - -	130,241	132,923	134,572	40,726,000	44,910,000	46,533,000
Assam - - -	325,823	330,038	337,327	109,287,000	128,372,000	141,119,000
Madras - - -	6,512	10,161	6,107	352,000	646,000	852,000
North-Western Provinces -	7,924	7,853	8,055	1,897,000	2,197,000	2,298,000
Punjab - - -	10,259	10,170	9,745	2,179,000	2,152,000	2,135,000
Native States - - -	19,701	23,115	25,202	2,810,000	3,253,000	4,253,000
Burma - - -	1,220	1,390	1,479	224,000	263,000	271,000
TOTAL - - -	501,680	515,658	522,487	157,475,000	181,798,000	197,461,000

The addition to the acreage under tea made in 1900 was, therefore, 6,829 acres, compared with an addition of 13,978 acres in the preceding year. During the past 16 years the acreage has increased by 84 per cent. The production has increased during that period by 176 per cent., the increase in 1899 (24,323,000 lbs.) being far the largest in any one year, while that of 1900 (15,663,000 lbs.) is surpassed only by that of the preceding year. In Assam the season 1900 was favourable in most districts, and the out-turn was 13 million lbs. greater than in 1899, the rate of out-turn having been 468 lbs. per acre, against 452 lbs. in 1899. The tea gardens of India are reported to have given employment during 1900 to 621,287 persons permanently and 98,446 temporarily. The production of tea in India and Ceylon has increased so much more rapidly than the consumption in the United Kingdom, which is the principal market for these teas, that there has been a heavy fall of price, and the tea industry is in a position of great embarrassment. Efforts are being made to find relief by the introduction of economies and the opening up of fresh markets. The exports of Indian tea by sea during the three years 1898-1901 are returned as follows :—

	1898-99.	1899-1900.	1900-01.
	Lbs.	Lbs.	Lbs.
To United Kingdom - - -	139,245,995	154,161,492	166,171,556
„ Australia - - -	6,306,135	8,362,797	10,438,984
„ United States - - -	1,413,624	2,744,854	1,765,529
„ Canada - - -	1,044,256	1,932,943	1,724,922
„ Turkey in Asia - - -	2,598,281	2,149,414	3,240,334
„ Persia - - -	3,456,791	1,953,900	2,429,140
„ China - - -	883,307	1,248,857	1,143,194
„ Russia - - -	500,889	467,451	772,495
„ other Countries - - -	2,021,394	2,016,419	2,619,336
TOTAL - - -	157,470,672	175,038,127	190,305,490

The total exports of Indian tea in 1886-87 were 78½ million lbs. only. During the year under report 1,968,000 lbs. of tea were also exported from India by land into neighbouring countries, chiefly on the North Western

Frontier. The value of India's sea exports of tea in 1900-01 was £6,367,000, or £306,000 more than in 1899-1900. The price of good quality tea in Calcutta has been low during the last few years, and though there was a slight recovery in 1900 as compared with 1899, yet the figure given for 1900 is only two-thirds of that for 1899; and in January 1901 the price was much lower than it had ever been. The exports of Indian tea, as may be seen above, were not equal to the production, a quantity of nearly seven million lbs. being left in India. It is stated that natives in some of the larger towns are adopting the tea drinking habit, and a movement has been started for supplying tea at railway stations. During the first ten months of 1901-02 the exports of tea from India amounted to 167½ million lbs., as compared with 178½ million lbs. in the corresponding period of 1900-01.

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 :—

In the Year	From China.	From India.	From Ceylon.
1865 - - -	93 per cent.	2 per cent.	0 per cent.
1875 - - -	86 „	13 „	0 „
1885 - - -	66 „	30 „	2 „
1895 - - -	16 „	46 „	32 „
1898 - - -	10 „	52 „	36 „
1899 - - -	12 „	50 „	35 „
1900 - - -	7 „	52 „	38 „
1901 - - -	7 „	54 „	31 „

The year 1901 was a gloomy one for the tea trade as a whole. The quality of the Indian tea crop was better than in 1900, and the average price obtained showed an improvement in the latter half of the year, being 8d., against 7·6d. in 1900. Ceylon tea fetched an average of 6·9d., against 7·2d. in 1900. The price of Chinese tea in the London market was very much depressed.

The area under coffee was all, with the exception of about 400 acres, in Southern India; cultivation of coffee is, in fact, restricted for the most part to a limited zone in Mysore, Coorg, and the Madras districts of Malabar and the Nilgiris. The area reported as under coffee at the end of 1900, with corresponding figures for the two preceding years, is given below; but the figures are not of much value, as information is in some cases withheld by planters, especially in Madras :—

	1898.	1899.	1900.
	Acres.	Acres.	Acres.
Coorg - - -	82,575	72,296	68,396
Madras - - -	63,983	66,473	40,931
Mysore - - -	128,079	128,010	128,087
Travancore and Cochin -	6,384	7,069	7,404
Burma, Assam, &c. - -	548	450	387
TOTAL - - -	281,569	274,298	245,405

London prices of coffee have fallen from 101s. per cwt. in 1895 to 65s. in 1899 and 47s. in 1900. The exports of Indian coffee in 1900-01 and the two

AGRI-
CULTURAL
PRODUCE.

AGRI-
CULTURAL
PRODUCE.

previous years are shown below. They show that the great fall in price has caused a corresponding falling off in exports.

	1898-99.	1899-1900.	1900-01.
	Cwts.	Cwts.	Cwts.
To United Kingdom - -	155,290	157,500	139,989
To France - - -	83,543	96,853	75,268
To other Countries - -	31,223	27,000	31,174
TOTAL - - -	270,056	281,353	246,431

The normal yield of coffee per acre may be taken at $2\frac{1}{2}$ cwts. for the best European plantations, and 1 cwt. for Native plantations. It is reported that 22,128 persons were permanently and 91,685 temporarily employed on the coffee estates.

CINCHONA.

The area under cinchona, according to the not very trustworthy figures which are obtainable, is given as 5,006 acres in 1899-1900, compared with 6,192 acres in 1898-99; no figures are available for the year 1900-01. The Government plantations consisted in 1900 of 1,461 acres in Darjeeling, and 874 acres in the Nilgiris, the former figure being larger by 161 acres than that of 1899. For several years cinchona cultivation has been declining in Bengal and Madras, while in Coorg it has been almost entirely abandoned. A large amount of the yield of private plantations is taken to the Government factories, but there is also a considerable export of the bark from Madras, averaging about 1,900,000 lbs. during the last 14 years, and amounting to $2\frac{3}{4}$ million lbs. in 1900-01.

On the Government cinchona plantations of the Darjeeling district in Bengal 211 acres were planted during 1900-01. The season was not unfavourable, but the damage done by the wet weather of the preceding year was still observable. The number of trees uprooted for bark was 280,000, and 456,000 young trees were planted out; the total of the plants at the end of the year was 2,384,000. The quantity of dry bark harvested on the plantations was 198,000 lbs., and the purchases of bark from private plantations amounted to 132,500 lbs. The factory, which supplies Bengal, the Punjab, and Assam, used 72,400 lbs. of mixed *succirubra* and hybrid barks, yielding 2,488 lbs. of cinchona febrifuge, and 257,000 lbs. of quinine-yielding bark, from which 7,347 lbs. of sulphate of quinine were extracted. This decreased output was unsatisfactory, but is largely due to working difficulties, owing to which the factory was stopped for a month early in the year. The issue of quinine rose from 7,725 lbs. to 11,007 lbs., and that of cinchona febrifuge from 2,756 lbs. to 3,806 lbs., owing chiefly to the increased demand from Government medical depôts; but there was also a larger demand for the febrifuge on the part of the general public. The quinine supplied to the public is sold at post offices in five-grain packets; the febrifuge is sold at the factory; but a large part of the issues are made to Government officers for dispensaries and medical depôts. There was a small profit on the operations of the year.

The season in the Madras Cinchona Gardens was on the whole a good one. The year's crop amounted to 194,400 lbs. of bark, much of which was the result of pruning, besides 167,200 lbs. purchased from private plantations. Advantage was taken of the existence of a stock in the factory equal to two years' supply to make a radical change in working, and to obtain an entirely new and up-to-date manufacturing plant. The amount of bark worked up in the factory was less, therefore, than in 1899-1900, amounting to 316,000 lbs., which produced 7,648 lbs. of sulphate of quinine and 2,972 lbs. of cinchona febrifuge. From this factory are to be supplied the requirements of Madras, Bombay, the North Western Provinces and Oudh, the Central Provinces, Ajmere, Burma, Coorg, Berar, and Mysore; the issues during the year were 10,284 lbs. of quinine and 3,588 lbs. of the febrifuge. The sale of quinine at post offices increased in the year under report owing to

AGRI-
CULTURAL
PRODUCE.

the fact that the price was lowered from 3 pies to 2 pies per five grain powder. This "pice packet" system was extended during the year to the Imperial post offices of the Hyderabad, Cochin, and Travancore States, and to post offices belonging to the Nizam's State. The price of issue to the public, regulated on the basis of the market price, was Rs. 14 per lb. for quinine, and Rs. 12 per lb. for the febrifuge.

In Bengal, where nearly the whole of the jute crop is grown, the season JUTE. was favourable, in spite of a break in the rains in August, and 92 per cent. of a normal out-turn is estimated to have been secured in 1900-01. The area under jute in the province was 2,043,000 acres, or nearly 4 per cent. more than in 1899, but less than the normal area, which is stated as 2,164,000 acres. The total yield, in bales of 400 lbs., is estimated at six million bales in 1900, against five millions in 1899. 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.	£	£	£
1883-84 - - - -	7,018,000	3,062,000	890,000	3,952,000
1891-92 - - - -	8,532,000	4,566,000	1,675,000	6,241,000
1897-98 - - - -	15,023,000	6,754,000	3,954,000	10,708,000
1898-99 - - - -	9,865,000	4,628,000	3,866,000	8,494,000
1900-01 - - - -	12,415,000	7,245,000	5,243,000	12,488,000
1901-02 (ten months) - -	12,193,000	6,577,000	4,822,000	11,399,000

Of the raw jute exports in 1900-01, 45 per cent. went to the United Kingdom, nearly 20 per cent. to Germany, nearly 11 per cent. to the United States, and 10 per cent. to France; of the manufactured jute, 18 per cent. went to the United Kingdom, 24 per cent. to the United States, and 16 per cent. to Australia.

The area under indigo in the four indigo growing provinces, as reported, is INDIGO.

	Average of preceding Five Years.	1900.	1901.
	Acres.	Acres.	Acres.
Bengal - - - -	520,500	360,600	318,200
N.W. Provinces and Oudh - -	325,900	262,200	160,900
Punjab - - - -	98,800	115,700	71,600
Madras - - - -	350,500	251,900	253,000
TOTAL - - - -	1,295,700	990,400	803,700

indigo and the consequent low price of the natural dye. The yield is estimated to be not very large, even allowing for the reduced area, as the season, except in Madras, was not favourable for the crop. The figure for the four provinces together is given as 121,500 per cwt., compared with 148,000 cwt. in 1900 and an average of 177,600 for each of the preceding five years. The total exports of recent years have been:—

	Cwts.	£
1888-89 - - - -	142,000	valued at 2,633,000
1890-91 - - - -	118,000	" 2,049,000
1894-95 - - - -	166,000	" 3,164,000
1895-96 - - - -	187,000	" 3,570,000
1896-97 - - - -	170,000	" 2,914,000
1897-98 - - - -	134,000	" 2,038,000
1898-99 - - - -	135,000	" 1,980,000
1899-1900 - - - -	111,000	" 1,795,000
1900-01 - - - -	102,000	" 1,424,000
1901-02 (ten months) - -	48,000	" 649,000

Exports by sea, besides a small quantity annually exported across the land frontiers of India.

AGRI-
CULTURAL
PRODUCE.
SUGAR.

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

	Area in Acres.			Outturn in Tons.	
	Average of Five Preceding Years.	1899-1900.	1900-01.	1899-1900.	1900-01.
Bengal - - - -	901,000	884,000	868,000	817,200	897,400
North - Western Provinces and Oudh.	1,243,000	1,259,000	1,206,000	839,000	1,193,200
Punjab - - - -	—	366,000	356,000	196,700	447,000
Madras - - - -	53	54,000	55,000	83 per cent. of normal.	82 per cent. of normal.

Besides these amounts, however, there is a certain amount of sugar cultivation in most of the other provinces, and the total area under sugar in 1899-1900 is given as over 2½ millions of acres. It is estimated that the annual yield from this area amounts to three millions of tons, or possibly more. The imports of sugar, including confectionery, during recent years are given as follows :—

	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.
	Tons.	Tons.	Tons.	Tons.	Tons.
From Austria-Hungary - -	5,775	47,287	53,187	38,891	66,065
„ Germany - - - -	37,940	60,165	20,698	3,026	20,100
„ Mauritius - - - -	74,442	70,302	105,205	92,099	124,476
„ China - - - -	6,965	14,558	9,284	15,849	24,372
„ other Countries - - -	8,998	19,444	14,901	18,178	28,827
TOTAL - - - -	134,120	211,756	203,875	168,043	263,840

Shortly before the close of the financial year 1898-99, a law was passed empowering the Government of India to impose countervailing import duties on articles which receive direct or indirect bounties from their country of origin, and such duties were at once levied on bounty-fed sugar. The chief result of this in the year 1899-1900 was a very considerable fall, almost a cessation, of the imports of German sugar, and a considerable reduction in imports of Austro-Hungarian sugar, while sugar imports from China and the East increased. In the year 1900-01 there was a great recovery in the sugar imports, which amounted to 263,840 tons, and the imports during the first 10 months of 1901-02 amounted to 235,000 tons, compared with 215,000 tons in the corresponding period of 1900-01. This increase was confined to the European sources, the great growth being in the imports from Austria-Hungary; the imports from Mauritius were 15 per cent. less than in the first 10 months of 1899-1900.

A committee reported favourably on the proposed promotion of sugar cultivation on indigo estates in Behar. Since the close of the year under report an International Convention has been concluded, abolishing the sugar bounties hitherto given by continental countries, with effect from September 1903. Russia is not a party to this Convention, but no Russian sugar is exported at present to India.

MINES AND MINERAL RESOURCES.

MINERAL
RESOURCES.
COAL.

The output of coal in India for the last three years is contrasted below with the amount produced 10 years ago :—

	Coal produced in			
	1890.	1898.	1899.	1900.
	Tons.	Tons.	Tons.	Tons.
Bengal - - - -	1,626,000	3,622,000	4,035,000	4,979,000
Central Provinces - - -	137,000	150,000	157,000	173,000
Assam - - - -	146,000	200,000	226,000	217,000
Punjab - - - -	41,000	86,000	82,000	74,000
Baluchistan - - - -	15,500	13,000	16,000	23,000
Burma - - - -	Nil	7,000	8,000	10,000
Rewah State - - - -	78,000	134,500	164,000	164,000
Nizam's Dominions - -	125,500	395,000	401,000	469,000
Rajputana (Bikanir) - -	Nil	500	4,000	9,000
Total - - - -	2,169,000	4,608,000	5,093,000	6,118,000

At the end of 1900 there were 286 coal mines in operation, of which 271 were in Bengal. These include some very small mines. There are some important mines in Assam, and two, including the Government mine at Warora, in the Central Provinces; the largest of all the mines are the East India Railway Company's mines near Giridhi, which produced 528,000 tons, and the Singareni mine in Hyderabad, which produced 469,000 tons of coal during the year. The number of persons employed in the coal-mining industry in 1900 was 89,000, of whom 25,000 were women and 3,800 children. A great expansion of the coal-mining industry has taken place within the last six or seven years, and the high price of coal in Europe gave a great stimulus to it during 1900. The amount of coal, coke, and patent fuel imported fell in 1900-01 from 422,000 tons to 127,000, while the exports, chiefly to Ceylon, were 541,000 tons, against 305,000 tons in 1899-1900. The Indian railways used 1,868,000 tons of Indian coal in 1900, against 1,548,000 in 1899; and only 3 per cent. of the coal used by them came from other countries. Bengal sent 864,000 tons of coal by sea to Bombay, this being nearly double the average amount, owing to the high price of European coal. The consumption of coal in Bombay was below the average, on account of the depression in the mill industry.

The iron ore produced in India in 1900 is stated to have amounted to 63,000 tons, a larger figure than that of any previous year, but insignificant in comparison with the future possibilities of this industry. Almost the whole of the output comes from Raniganj in Bengal, near the coalfields. The question of the utilisation of the coal and iron supply of India in the establishment of a steel industry has received much attention of late. At present the only ironworks in India are those at Barrakur, in Bengal, at which the total production of pig-iron was 22,583 tons in the year 1900, and considerably larger in 1901. The demand for pig-iron was in excess of the amount produced, and a second blast furnace has been started. The Company usually raise a large quantity of coal; but the output was restricted by the flooding of a large section of the colliery. The foundry turned out 9,177 tons of castings during the year 1900, but this figure was considerably exceeded in 1901. It is claimed that these castings are equal to the best British manufacture. It has been decided by the Company to lay down a steel-manufacturing plant. There is a prospect that the Indian iron industry will receive further development at the hands of another Company. There is also a small local iron industry in other parts of Bengal and in the Central Provinces, but as now produced the iron is unable to compete for cheapness with imported metal, although it is of good quality.

MINERAL
RESOURCES.
MINERAL
OIL.

The production of crude petroleum from the principal oilfields has been returned thus:—

Produced in	Average of Three Years 1894-96.	1897.	1898.	1899.	1900.
Burma	Gallons. 13,003,000	Gallons. 18,876,000	Gallons. 18,424,000	Gallons. 32,310,000	Gallons. 36,974,000
Assam	146,000	222,000	548,000	623,000	753,000
Punjab	2,000	2,000	2,000	1,000	2,000
Total	13,151,000	19,100,000	18,974,000	32,934,000	37,729,000

In Upper Burma a yield of 9,700,000 gallons, as compared with 10 millions in the preceding year, was obtained in 1900 from the Yenangyat field by three oil companies, no new wells of any size being found. The other section of the Upper Burma oilfield, known as the Yenangyaung field, gave an output of 27 millions of gallons in 1900, against 22 millions in the preceding year, owing to the extension of the Burma Oil Company's works and to deeper borings. The Assam Oil Syndicate again increased their yield of oil during the year. In Baluchistan the attempt to work the oil sources was not renewed. Up to the present the petroleum produced in India supplies Indian requirements to but a small extent, and the amount of oil imported, chiefly from Russia, though it was not so large as in 1897-98, showed an increase in the year under report as compared with the two preceding years. Particulars of recent years are as follows:—

IMPORTATIONS OF MINERAL OILS INTO INDIA.

	1883-84.	1893-94.	1895-96.	1897-98.	1899-1900.	1900-01.
Kerosene:	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.
From United States	12,715,000	49,226,000	22,494,000	23,985,000	12,732,000	5,102,000
„ Russia	—	34,015,000	39,876,000	50,634,000	57,688,000	67,126,000
„ elsewhere	392,000	341,000	943,000	8,177,000	50,000	149,000
Other sorts	777,000	2,997,000	3,335,000	4,530,000	4,519,000	8,187,000
Total	13,884,000	86,709,000	63,648,000	87,326,000	74,989,000	80,564,000

The import duty on petroleum was doubled in March 1894, and is now one anna (about one penny) per gallon, but the increased duty does not appear to have permanently or seriously affected consumption. The value of the oil imported during 1900-01 was £2,305,500, and that of the locally-produced oil is estimated at about £148,800 for the year 1900.

GOLD.

The out-turn of the Indian gold mines in 1901 was higher than in previous years, as shown in the margin. Eight companies produced gold during the year, but of these only five show figures of any importance, including the Balaghat mine. The principal mines are—

The Champion Reef, which produced 163,463 oz. in 1900 and 158,999 oz. in 1901.

„ Mysore	163,133 oz.	164,581 oz.
„ Nundydroog	48,765 oz.	56,993 oz.
„ Ooregum	84,374 oz.	86,909 oz.
„ Balaghat	15,509 oz.	20,716 oz.

A report on the Kolar Goldfield in Mysore, which includes the above mines and others, has been prepared by Dr. F. H. Hatch, a specialist engaged for this purpose by the Government of India, and it was published in 1901 among the memoirs of the Geological Survey of India.

The Burma ruby mines were worked by the Ruby Mines Company and by native licensed miners under the company; the value of the rubies found was £97,300, or £6,500 more than in the preceding year. The company paid a good dividend as a result of the year's work. It leases from the Government the right to mine for rubies in the ruby mines district of Burma, and to levy royalties from persons working by native methods. These royalties amounted to £17,200 during the year.

MINERAL
RESOURCES.
RUBIES.

CHAPTER XI.

PUBLIC WORKS.

PUBLIC
WORKS.
General.

DURING the year under review the Public Works Department was represented in the Council of the Governor-General by Sir A. C. Trevor, K.C.S.I. The post of Public Works Secretary was held throughout the year by Mr. F. R. Upcott, C.S.I.

The engineer establishment of the Department, including Bombay and Madras, but excluding the now separate Military Works Department, was maintained at a strength below that of the preceding year.

The following statement shows the composition of the superior engineer establishment, as it stood on the 30th June in 1900 and 1899:—

	Government of India List.	Government of Madras List.	Government of Bombay List.	TOTAL.
Royal Engineer officers - - -	60	5	3	68
Other military officers - - -	4	—	—	4
<i>Civil Engineers:</i>				
Appointed from Europe - - -	295	56	48	399
Europeans appointed in India - -	153	3	7	163
Natives appointed in India - - -	68	19	25	112
TOTAL for 1900 - - -	580	83	83	746
TOTAL for 1899 - - -	581	83	86	750

The upper subordinate engineering staff is largely composed of natives. The numbers of this establishment in the three Presidencies were as follows:—

	India.	Madras.	Bombay.	TOTAL.
Europeans - - - - -	192	54	21	267
Natives - - - - -	332	118	170	620
TOTAL - - - - -	524	172	191	887

The engineering branch of the Department is divided into two services, Imperial and Provincial, the former of which is recruited in England and the latter in India. The pay, and leave and pension rules, of the two services are different, but in other respects there is no distinction between the members of the two divisions, and the highest posts in the Department are open to both. The civilian element of the Imperial service is recruited from the Royal Indian Engineering College at Cooper's Hill; the Provincial service draws its recruits from students of the Indian colleges who are natives of India, and from upper subordinates of the Public Works Department.

PUBLIC
WORKS.

The operations of the Department deal with three kinds of works, viz., Railways, Irrigation, and Buildings and Roads. The Railway Department is an Imperial service under the direct control of the Government of India; 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 1900-01 is compiled from the Finance and Revenue Accounts of the year:—

RECEIPTS.

	£
Railways - - - - -	18,293,629
Irrigation - - - - -	2,555,919
Buildings and Roads - - - - -	458,470
TOTAL - - - - -	£21,308,018

EXPENDITURE (exclusive of £6,864 charged under Special Defence Works).

	Charged to Revenue.	Not Charged to Revenue.
<i>Railways:</i>	£	£
Construction - - - - -	—822	1,434,865
On Revenue Account - - - - -	17,968,505	—
<i>Irrigation:</i>		
Construction - - - - -	64,270	590,483
Ditto - from Famine Relief Grant - - -	31,114	—
On Revenue Account - - - - -	2,256,057	—
<i>Buildings and Roads:</i>		
Military Works - - - - -	782,942	—
Civil Works - - - - -	3,286,601	—
TOTAL - - - - -	£24,388,667	2,025,348

PUBLIC
WORKS.

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

	£
Railways - - - - -	4,014,772
Irrigation - - - - -	921,328

On the 31st of March 1901 £111,851,162 of permanent public debt had been incurred on account of railways, and £23,476,332 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 £2,357,101, of which £634,265 is in respect of the Great Indian Peninsula Railway, purchased in 1900.

RAILWAYS.

A full account of the results of railway operations in India is given in the Railway Administration Report annually presented to Parliament, and the aim of the following section is merely to give a short summary of the chief facts. As the accounts of the several railways had not been finally closed when the following statistics for the year 1901 were prepared, the figures must be accepted as only approximately correct.

The railways of India may be broadly divided into the Guaranteed, the State, and the Assisted. In the early days of railway enterprise the agency of private companies guaranteed by the State was exclusively employed and nearly all the great trunk lines were made under this system. The chief terms of the contract between the old guaranteed companies and the State were as follows: the Government gave the land required free of charge; it also guaranteed interest, generally at the rate of 5 per cent., on the share capital raised with its consent, and a lower rate upon debenture capital. A general control and supervision over the proceedings of the company was also retained, and Government stores and troops were to be carried on favourable terms. If the net profits in any half-year fell below the amount of guaranteed interest, the Government made up the deficiency. If they exceeded this amount, the surplus was equally divided between the Government and the company. Moreover, the Government had the right of buying the undertaking at specified dates, on payment of the value of the stock calculated at its market price on the average of the three preceding years. In this way the East Indian Railway was acquired in 1880, the Eastern Bengal Railway in 1884, the Scinde, Punjab, and Delhi Company's lines in 1885-86, the Oude and Rohilkund Railway at the end of 1888, the South Indian Railway in 1890, and the Great Indian Peninsula Railway in 1900. In 1870 a new policy of railway development by the direct agency of the State was inaugurated; and in 1880-81 the system of encouraging private enterprise by State assistance was again resorted to. Both agencies are now employed side by side. The experience gained of the working of the old guarantee system has, however, suggested various modifications in the relations between the State and the companies which have more recently been formed for the construction and working of railways, and the nature of the assistance granted now varies considerably. In some instances, of which the Bengal and North Western Railway is the most important, lines have been constructed without any direct pecuniary assistance; in others a subsidy or limited guarantee has been granted. Special terms have been offered by the Government to attract private enterprise to the construction of branches and feeder lines to the larger systems. Those terms include the concession by the parent line of favourable working rates, and sometimes a rebate on traffic interchanged between the two lines or a guarantee. The agency of private companies has also been employed by the Government both in the construction and working of State lines. In all cases the Government has the power of taking over the railway at specified periods on stated terms.

Financial Result to the State.—The year under review shows a surplus of revenue over expenditure amounting to £325,124, and this result has been coincident with an addition of 1,818 miles to the whole system during the

past two years. The table below is taken from the Finance and Revenue Accounts of 1900-1901 and is for the year ended 31st March 1901 :—

	Imperial.	Provincial and Local.	England.	TOTAL.
REVENUE.				
(Railways.)	£	£	£	£
State Railways—(Gross traffic receipts).	16,931,360	22,207	230	16,953,797
Guaranteed Companies—(Net traffic receipts).	1,316,899	—	—	1,316,899
Subsidized Companies—(Repayment of advances of interest).	21,342	—	1,591	22,933
Total - - -	18,269,601	22,207	1,821	18,293,629
EXPENDITURE.				
(Railway Revenue Account.)				
State Railways :				
Working expenses - - -	8,449,034	16,678	—	8,465,712
Interest on debt - - -	2,960,941	—	1,053,830	4,014,771
Annuities in purchase of railways -	—	—	2,357,101	2,357,101
Interest chargeable against companies on advances.	143,043	—	218,884	361,927
Interest on capital deposited by companies.	8,180	—	926,656	934,836
Guaranteed Companies :				
Surplus profits, land, and supervision.	171,032	—	—	171,032
Interest - - - - -	8,177	—	1,589,417	1,597,594
Subsidized Companies :				
Land, &c. - - - - -	17,291	124	—	17,415
Miscellaneous Railway Expenditure -	46,937	1,180	—	48,117
Total - - -	11,804,635	17,982	6,145,888	17,968,505
NET GAIN - - -				325,124

In the figures for expenditure are included all charges falling on the Government for management and working expenses of railways, for interest on their 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 agency of the "Discount" Sinking Fund; the figures also include charges for land required by the companies, for control, and for miscellaneous items, such as headquarters establishment and surveys.

Statistical Results of Working.—The statistical results of the working of the various classes of railways during 1901 are given in the following table. The aggregate net earnings of all Indian railways (a) amounted to 5·31 per cent. on the total capital outlay on open lines, including premia, steamboat

RAILWAYS. service and suspense items, but excluding other indirect charges, against 5·14 per cent. in the previous year—

CLASS.	Length of Line open on the 31st December 1901.	Total Capital Outlay on open Lines to the 31st December, including Premium, Steamboat Service and Suspense.	Total Number of Passengers carried.	Total Weight of Goods carried.	Gross Earnings, including Steamboat Service.	Working Expense, including Steamboat Service.	Net Earnings, including Steamboat Service.	Percentage of net Earnings on Capital Outlay on open Line.
	Miles.	£	No.	Tons.	£	£	£	
5' 6" Gauge.								
State lines worked by companies	6,529·78	88,161,286	55,190,590	17,596,949	9,326,308	3,987,294	5,339,014	
State lines worked by the State -	4,430·58	50,738,169	34,589,529	9,775,023	4,314,343	2,158,759	2,155,584	
Lines worked by guaranteed companies.	1,334·07	16,326,000	25,181,830	3,035,182	1,825,333	872,200	953,133	
Assisted companies -	874·65	4,506,329	4,978,633	790,063	387,039	182,109	204,930	
Lines owned by native states and worked by companies.	722·99	4,614,979	2,933,458	1,586,014	348,768	110,020	238,748	
Lines owned by native states and worked by state railway agency.	202·59	799,595	1,475,424	234,619	66,733	36,733	30,000	
Total for 1901 -	14,094·66	165,446,358	124,319,464	33,017,910	16,268,524	7,347,115	8,921,409	5·39
Total for 1900 (b) -	13,900·35	162,449,454	115,017,684	30,766,481	15,305,968	7,118,800	8,187,168	5·04
3' 3½" Gauge.								
State lines worked by companies	7,595·58	41,979,572	55,350,592	8,106,508	4,631,363	2,461,214	2,170,149	
State lines worked by the State -	667·09	3,653,773	4,289,019	818,448	445,751	237,179	208,572	
Assisted companies -	459·75	2,023,885	2,521,477	619,372	185,240	88,480	96,760	
Lines owned by native states and worked by companies.	611·98	2,323,376	2,687,784	717,187	184,159	100,576	83,583	
Lines owned and worked by native states.	1,134·77	2,602,699	3,029,795	523,579	260,659	146,015	114,644	
Total for 1901 -	10,469·17	52,583,305	67,878,607	10,785,094	5,707,172	3,033,464	2,673,708	5·08
Total for 1900 (b) -	10,083·58	50,315,755	56,084,365	10,437,689	5,568,317	2,811,232	2,757,085	5·48
Special (2' 6" and 2' 0") Gauges.								
State line worked by company -	56·24	91,378	85,952	28,242	4,667	3,441	1,226	
State line worked by the State -	30·00	60,320	74,077	11,653	5,388	5,933	-- 545	
Assisted companies -	194·37	590,873	1,996,463	121,415	101,062	62,662	38,400	
Lines owned by native states and worked by companies.	242·31	434,517	614,122	80,599	24,379	19,565	4,814	
Line owned by native states and worked by state railway agency.	33·78	92,735	116,810	113,861	8,593	3,517	5,076	
Lines owned and worked by native states.	94·36	183,933	305,000	28,100	24,000	15,833	8,167	
Total for 1901 -	651·06	1,453,756	3,192,424	383,870	168,089	110,951	57,138	3·93
Total for 1900 (b) -	649·19	1,447,245	2,974,780	274,372	160,906	102,576	58,330	4·08
Total of all railways for 1901 -	25,214·89	219,483,419	195,420,555	44,186,874	22,143,785	10,491,530	11,652,255	5·31
Total of all railways for 1900 (b) -	24,633·12	214,212,454	174,076,829	41,478,542	21,035,191	10,032,608	11,002,583	5·14

(a) Excluding the West of India, Portuguese, Pondicherry, Karaikkal-Peralam and Parlakimedi railways.

(b) As corrected from later information.

In the second column of the foregoing table, the figure showing the total capital outlay represents the expenditure on all the railways, in rupees converted into sterling at 15 to the pound; and the total for 1900 therefore differs from the sum given in the last issue of this Statement, in which, while the premium paid in sterling on the purchase of certain lines was included, the whole cost of the purchase was converted at 10 rupees to the pound.

It will be observed that, with an increase of 581·77 (a) miles or 2·36 per cent. in the open mileage, as compared with 1900, the gross earnings and working expenses show increases of £1,108,594 or 5·27 per cent., and of £458,910 or 4·57 per cent., respectively, resulting in an increase of £649,684 or 5·90 per cent. in the net earnings.

The total number of passengers carried shows an increase of 21,343,726, and the quantity of goods handled of 2,708,332 tons as compared with the previous year.

Mileage opened.—The total railway mileage on each gauge opened during the year and the sections opened were as follows:—

	Miles.	Miles.	Miles.
5' 6" gauge.			
Bengal Central—			
Dum Dum Cantonment to Pattipooker - - -	-	-	2·68
Bengal Nagpur—			
Santragachi to Shalimar - - -	-	3·00	
Right bank of the Cossye river to Midnapore - -	-	2·25	
			5·25
North Western State—			
Peshawar to Jamrud - - -	-	11·04	
Hyderabad (Sind) to Rahoki - - -	-	6·04	
			17·08
Ludhiāna-Dhuri-Jakhal—			
Ludhiāna vi : Dhuri to Jakhal - - -	-	-	79·62
Petlād-Cambay—			
Petlād to Tarapur - - -	-	8·33	
Tarapur to Cambay - - -	-	10·92	
			19·25
Madras—			
Calicut to Badagara - - -	-	-	28·75
			152·63
3' 3½" gauge.			
Eastern Bengal State—			
Teesta to Kaunia - - -	-	-	4·99
Bengal Dooars—			
Mal to Chalsa - - -	-	5·20	
Dam Dim to Oodlabari - - -	-	3·30	
			8·50
Ledo-Tikak-Margherita Colliery—			
Margherita to Namdang - - -	-	-	3·00
Assam-Bengal—			
Lumding to Nazira - - -	-	142·20	
Nazira to Lakwa - - -	-	10·75	
			152·95
Bengal and North Western—			
Thana Bihpur to Kursela - - -	-	21·25	
Kursela to Katihār - - -	-	23·75	
Thana Bihpur to Barari Ghat - - -	-	11·36	
			56·36
Jodhpur-Bikaner—			
Bikaner section—			
Dulmera to Suratgarh - - -	-	-	71·85
South Indian—			
New Beach line - - -	-	-	0·59
Burma—			
Nawngkhio to Heipaw - - -	-	-	53·70
			351·94
Special (2' 6") gauge.			
Eastern Bengal State—			
Santrabari extension (British section)—			
Raja Bhat Khawa to Jainti - - -	-	-	9·18
North Western State—			
Nowshera to Durgai - - -	-	-	40·25
Parlakimedi—			
Naupada to Parlakimedi - - -	-	-	25·00
			74·43
TOTAL - - -			579·00

(a) The difference between this figure and the total length shown as opened during 1901 in the next paragraph but one is due to corrections of mileage.

RAILWAYS. *Mileage sanctioned.*—The additional lengths sanctioned for construction were :—

	Miles.	Miles.	Miles.
5' 6" gauge.			
East Indian—			
Katrasgarh to Khanoodih -	7.80		
Jheriah to Dhanbaid -	3.75		
Tasra siding -	1.75		
Northern half of the Mulkeera-Katrasgarh cross connection -	0.71		
		14.01	
Bengal-Nágpur—			
Ramkanalit to Nodecha, in the Chowrasie coal-fields -	9.48		
Bujudih to Hariharpur -	27.90		
Bujudih to Parthadihi -	1.45		
Bujudih to Mhola, including the Bhaga connection -	21.36		
Bhowra siding -	1.50		
Southern half of the Mulkeera-Katrasgarh cross connection -	0.71		
		62.40	
Oudh and Rohilkhand State—			
Allahabad to Fyzabad -	—	94.67*	
North Western State—			
Jeeh-Doab line—			
Malakwal to the Karana hills -	—	51.40	
			222.48
3' 3½" gauge.			
Sabarmati-Dholka (Bombay)—			
Sabarmati to Dholka -	—	33.46	
Noakhali (Bengal)—			
Laksam <i>via</i> Noakhali to Ichakhali -	—	39.00	
Bengal and North Western—			
Company's section—			
Ballia to Ghazipur -	—	31.16	
Rohilkund and Kumaon—			
Lucknow-Bareilly section—			
Dudhwa to the Mohan River (Chandan Chowki) -	—	5.96	
			109.58
Special (2' 6") gauge.			
Bengal-Nágpur—			
Jubbulpore to Gondia -	143.43		
Neinpur to Mandla -	21.75		
Neinpur to Chindwara -	87.49		
		252.67	
Barsi Light (Hyderabad)—			
Barsi Town to Tadwala -	—	28.00	
			280.67
Special (2' 0") gauge.			
Gwalior Light—			
Gwalior to Sabulgarh -	—	55.88	
			55.88
TOTAL			668.61

Mileage under construction.—The total mileage under construction or sanctioned for commencement at the close of the year, *i.e.*, on the 31st December 1901, was as follows :—

	Miles.	Miles.
5' 6" gauge.		
State lines worked by companies -	465.00	
State lines worked by the State -	151.26	
Lines worked by guaranteed companies -	31.09	
		647.35
3' 3½" gauge		
State lines worked by companies -	632.11	
State lines worked by the State -	42.20	
Assisted companies -	114.52	
Lines owned by native states and worked by companies -	163.49	
Lines owned and worked by native states -	161.00	
		1,113.32

* Excludes 2.44 miles of the Oudh and Rohilkhand State railway, between Sultanpur Road and Partabgarh stations.

	Miles.	Miles.	RAILWAYS.
Special (2' 6") gauge.			
State lines worked by companies -	252.67		
State lines worked by the State -	88.12		
Assisted companies -	121.16		
Special (2' 0") gauge.			
Lines owned by native states and worked by companies -	55.88		
		517.83	
TOTAL		2,278.50	

The following gives a brief abstract of the important works completed and in progress during 1901 :—

Assam-Bengal Railway.—The progress of work on Section II. is well advanced, and it is expected that this portion of the railway will be opened for traffic on the 1st June 1902.

On Section III. the line from Lanka to Lumding was opened for passenger traffic on the 1st April 1901; from Lumding to Nazira for goods and passenger traffic on the 1st January and 1st April 1901, respectively; and from Nazira to Lakwa for goods traffic on the 15th November 1901. It is expected that this section will be completed by the 31st December 1902.

Bengal and North-Western Railway.—The temporary bridge over the Gogra at Turtipur, which was again reconstructed and opened for traffic on the 26th December 1900, was closed on the 12th June 1901, during the rains, when a ferry was worked in connection with the train service. The bridge has been again erected, and will be opened for traffic shortly. Work on the permanent bridge over the river at this place (18 spans of 200 feet) is in progress. Of the Hajipur-Katihar extension, the portion from Thana Bihpur to Kursela, 21½ miles, was opened for traffic on the 1st February, and the length from Kursela to Katihar, 23¾ miles, on the 7th March 1901. The Thana Bihpur-Barari Ghat branch was opened on the 16th December 1901, from which date a ferry service was established over the Ganges river connecting the railway system with Bhágalpur.

The Hajipur-Katihar extension and the Monghyr branch were worked throughout the year, with the exception of a few days in September, when the line was closed between Sahebpur Kamal and Mahesh-Khunt, owing to heavy floods.

A pile bridge across the Kosi river, near Katihar, was maintained for traffic and construction purposes up to the 9th May 1901, when it was lifted for the rainy season, and a ferry service started in connection with the through train service to and from the Eastern Bengal State Railway. The bridge is again being erected. Work on the permanent bridge (15 spans of 200 feet) is in progress.

Work on the Azamgarh-Shahganj extension, which was sanctioned for construction in 1897, was put in hand during the year.

Bengal Central Railway.—The Pattipooker branch, Dum Dum Cantonment to Pattipooker, 2¾ miles, was opened for goods traffic from the 15th May 1901.

Bengal Dooars Railway.—Of the Southern extension, the section from Baura to Lalmonirhat, 38 miles, was opened for passenger traffic on the 1st February 1901. Of the Eastern extension, a portion from Mal Junction to Chalsa was opened for goods traffic on the 1st April 1901; and the length, Dam Dim to Oodlabari, 3¼ miles, of the Western extension, was opened for goods traffic on the 4th May and for passenger traffic on the 15th September 1901.

Bengal-Nágpur Railway.—The Raipur-Dhamtari Feeder Railway, including the branch from Abhanpur to Rajim, was opened for passenger traffic on the 29th January 1901; and the Shalimar branch for goods traffic on the 15th March 1901. Of the Khargpur-Midnapore extension, the length from the right bank of the Cossye river into Midnapore, including the bridge, was opened for traffic on the 8th June 1901. The construction of the Midnapore-Bujudih extension is in progress, and will probably be completed by January 1904.

RAILWAYS.

The construction of the Jubbulpore-Gondia extension, and branches of this railway, in all 252½ miles, were sanctioned during the year, and work is in progress.

Bombay, Baroda and Central India Railway.—The doubling of the line up to Baroda has been completed with the exception of the portion between Bulsar and Sachin (a distance of 33 miles), which is likely to be opened in February 1902. The protective works of the Nerbudda bridge are still in progress. The extensions of the Parel Workshops were in hand during the year.

Burma Railways.—Work on the Letpadan-Henzada-Bassein extension is in progress. It is expected that the Letpadan-Tharrawa section will be opened in the spring of 1902 and the remaining length probably in October 1902.

On the Mandalay-Kunlon extension, the section from Nawngkhio to Hsipaw, 53½ miles, inclusive of the Gokteik viaduct (10 spans of 120 feet, 5 spans of 60 feet, and 2 spans of 55 feet) was opened through for traffic on the 1st June 1901. The section from Hsipaw to Lashio will probably be opened by June 1902.

Eastern Bengal State Railway.—Of the British section of the Santrabari extension, the line from Raja Bhat Khawa to Jainti, 9½ miles, was opened for traffic on the 1st February 1901.

On the Northern section, the Teesta bridge and approaches (Teesta to Kaunia), 5 miles, were completed and opened for traffic on the 1st April 1901. The conversion of the line from Teesta to Mogalhat, 12½ miles, from 2' 6" to 3' 3½" gauge was also opened on the same date. Work on the Mogalhat-Dhubri extension is still in progress, and the line will probably be opened by December 1902.

East Indian Railway.—The Pandra branch line was opened for traffic on the 26th November 1900. Work on the Barun-Daltonganj line is in progress, and it is expected to be completed and opened for traffic shortly. The Sitampur-Domohani extension will probably be opened in February 1902.

Great Indian Peninsular Railway.—The Amalner-Jalgaon extension, exclusive of the Girna river bridge, was worked for passenger traffic from the 18th March 1901. The bridge was opened on the 16th May 1901.

Jaipur Railway.—The construction of this railway is delayed, as funds cannot at present be made available by the Jaipur Durbar. It is uncertain when the line will be opened for traffic.

Jodhpur-Bikaner Railway.—Of the Bikaner-Bhatinda section, the remaining length from Suratgarh to Bhatinda is under construction and will probably be opened for traffic by March 1902.

Kalka-Simla Railway.—Works on this railway are in progress, and will probably be completed by December 1903.

Ludhiana-Dhuri-Jakhal Railway.—This line, 79½ miles, was opened for traffic on the 10th April 1901, and is being worked by the North-Western State Railway.

Madras Railway.—Of the Calicut-Azhikal extension, the length from Calicut to Badagara, 28½ miles, was opened for traffic on the 1st October 1901. Work on the remaining portion is in progress, and will probably be completed by June 1902.

Mayavaram-Mutpet Railway (Madras).—The construction of the Mutpet-Arantangi extension of this railway is in progress, and it is expected that the first 17 miles will be opened in April, and the remaining length (13 miles) in October 1902.

North-Western State Railway.—The Hyderabad (Sind)-Rahoki section was opened for traffic on the 28th March 1901. The construction of the Khusalgarh-Kohat-Thal Railway is in progress, and it is expected that the first section, Khusalgarh to Kohat, 30 miles, will be opened for traffic in May 1902.

RAILWAYS.

Oudh and Rohilkhand State Railway.—The permanent bridge over the Ganges at Garhmuktesar and approaches were opened for traffic on the 11th April 1901.

Parlakimedi Light Railway (Madras).—This line from Naupada to Parlakimedi, a length of 25 miles, which was originally treated as a steam tramway, was opened for public traffic on the 22nd April 1901.

Pettalad-Cambay Railway.—The extension of the line from Pettalad to Cambay, 19½ miles, was opened for traffic on the 20th June 1901.

Shoranur-Cochin Railway (Madras).—The construction of this railway has been completed with the exception of about three months' work on the major bridges and Shoranur Station.

South Indian Railway.—Work on the Pamban branch and Tinnevely-Quilon (Travancore) branch (British section) is in progress. The Pamban branch will probably be completed in April 1902, and the length, 21 miles, from Tinnevely to Ambasamudram, of the Travancore branch, by the same date.

Vijapur-Kalol-Kadi Railway (Bombay).—The construction of this railway is in progress, and will probably be completed by June 1902.

The following were the principal events in 1901:—

On the 1st January 1901, the working of the northern section of the East Coast Railway, from the north distant signal of Waltair Station to Barang, near Cuttack, a length of 316.46 miles, was taken over by the Bengal-Nagpur Railway, the southern section being made over to the Madras Railway to work.

On the 18th January 1901, an indenture was executed for the construction of the Calicut-Azhikal extension of the Madras Railway.

By an indenture of the 1st February 1901, the arrangements for working the Rajputana-Malwa and other connected railways by the Bombay, Baroda, and Central India Railway Company were revised, the contract being extended up to the 31st December 1905.

By an indenture of the 5th February 1901, the arrangements for the working of the Lucknow-Bareilly State Railway by the Rohilkund and Kumaon Railway Company were revised, the contract being extended up to the 31st December 1907.

On the 27th March 1901, indentures were executed for the construction and working (by the Assam-Bengal Railway Company) of a railway from Laksam via Noakhali to Ichakhali (Bengal).

On the 2nd July 1901 and the two succeeding days, the Government of India convened a meeting of the mercantile and railway bodies interested in certain questions connected with (i.) the entrance of the Bengal-Nagpur Railway into Jheriah; (ii.) the relief of congestion of traffic on the lower section of the East Indian Railway; and (iii.) the provision of an independent access to Calcutta from the North-West Provinces, so as to give to the Committee appointed to investigate and advise the Government of India an opportunity of hearing the views of those concerned.

The Committee's conclusions were concurred in by the Government of India.

The Cherra-Companyganj State Railway (Assam) was finally closed on the 15th October 1900, as since the earthquake it had ceased to earn working expenses, and the volume of the traffic offering was insufficient to justify the line being kept open.

Mr. T. Robertson, C.V.O., who had been appointed by His Majesty's Secretary of State to investigate the difficulties which exist in the management of Indian Railways, financially or otherwise, and to report on the best means of overcoming these difficulties, arrived in India on the 19th October 1901, and is engaged in making an extensive tour through India.

On the 1st November 1901, a contract was executed for the construction and working of a branch railway from Walajah Road to Ranipet by the Madras Railway Company.

On the 26th November 1901, the Government of India issued orders convening a conference at Delhi, between the officers who will have charge of the arrangements for the Proclamation Ceremony of His Majesty King Edward VII. and those controlling the railways working into Delhi, to provide facilities for dealing with the traffic.

RAILWAYS.

Owing to the difficulty experienced by the India Office in obtaining reasonably early delivery of locomotives ordered in England for Indian railways, the Secretary of State requested that a General Conference of Locomotive Superintendents of both State and Companies' lines should be summoned for the purpose of considering the question of and making recommendations for the standardization of locomotives of all gauges of Indian railways. Mr. F. Wolley-Dod, of the retired list, Public Works Department, was appointed President of the Conference.

The Conference was held at Calcutta on the 9th December 1901 and the four succeeding days, and recommended that:—

- (i.) Under Indian conditions a fixed scale of standard dimensions and standard weights and of loads and working stresses is essential, and should be prescribed by Government for each gauge of railway;
- (ii.) A higher standard of loads than is at present allowed should, as soon as possible, be settled and accepted by Government for adoption as a maximum;
- (iii.) Until this new standard is decided on, Government should be asked to permit present standards to be exceeded, each case being decided on its merits;
- (iv.) With regard to the standardization of locomotives, the English makers, who have represented their difficulties under the system now in force and suggested a standardization for current use, be invited to prepare, in collaboration, a series of standard designs which they consider calculated to meet their views, and ensure a more rapid rate of delivery and a decreased cost—the series to comprise engines of certain mentioned types, the designs being prepared so that, as far as may be possible, corresponding parts of the various classes may be interchangeable; and
- (v.) In order to maintain the standards eventually arrived at, the existing Committee of Locomotive and Carriage Superintendents for India should be recognised by Government and the railway companies as the tribunal for maintaining or relaxing the standards from time to time.

During 1901, a direct service of steamers was established between Chittagong and London in connection with the Assam-Bengal Railway. The first steamer left the port on the 4th August 1901, and the experiment promises to prove successful.

Of the twelve projects for the construction of branch lines mentioned in last year's report, a company has been floated for the construction of the Sabaramati-Dholka Railway (Bombay), 33 miles in length, on the 3' 3½" gauge, and construction operations have commenced on the Noakhali (Bengal) Railway, 39 miles in length, also on the 3' 3½" gauge, while the negotiations in regard to the following branch lines have been practically concluded:—

	Miles.
Kurnool Road-Dhone-Kurnool (Madras) - - -	32
Raichur-Wondalli (Hyderabad) - - -	43
Bezwada-Masulipatam (Madras) - - -	50

The floating of the Amritsar-Tarn Taran-Patti railway (Punjab) project, about 26 miles in length, had to be deferred as the money market was unfavourable. Meanwhile the construction of the Bari Doab canal (Punjab) has reopened the question, and it is possible that it may be found necessary to construct the line at the expense of the State if the Promoters who hold the concession are unable to float the company.

The concessions which were granted for the following lines have since lapsed:—

	Miles.
Chandipur-Taki (Bengal) - - -	38
Bhagalpur-Bausi-Baidyanath (Bengal) - - -	69

and the negotiations for the Nadiad-Kapadvanj branch (Bombay), 28 miles in length, have fallen through.

IRRIGATION.

Negotiations in regard to the following have been in progress:—

	Miles.
Tilagaon-Sylhet (Assam) - - -	39
Akhaura-Bhairab Bazar (Bengal) - - -	19
Fatehpur-Markundi (North-Western Provinces) - -	61
Kangra Valley (Punjab) - - -	87
Jullundur-Hoshiarpur (Punjab) - - -	24
Vizianagram-Raipur with Sointilla branch (Madras and Central Provinces) - - -	359
Baran-Ajmer-Marwar (Rajputana) - - -	213

Guaranteed Railway Transactions.—The transactions of the original guaranteed lines are illustrated by the following table. In this table the rupee is converted into sterling at contract rates:—

	Half-year ended the 30th June 1901.					
	Total Capital Outlay.	Net Revenue.	Guaranteed Interest.	Interest in excess of Revenue.	Net Revenue in excess of Interest.	Surplus Profits.
	£	£	£	£	£	£
Bombay, Baroda, and Central India.	(a) 10,526,070	(b) 386,451	231,039	—	155,412	155,412
Madras - - -	11,695,200	279,467	264,671	—	4,796	—
Total -	22,221,270	665,918	505,710	—	160,208	155,412
	Half year ended the 31st December 1901.					
	(a)	(b)				
Bombay, Baroda, and Central India.	10,598,888	186,206	233,727	47,521	—	—
Madras - - -	11,820,815	241,383	278,333	36,950	—	—
Total -	22,419,703	427,589	512,060	84,471	—	—
Total for the year 1901 -	22,419,703	1,093,507	1,017,770	—	75,737	155,412
Total for the year 1900 -	21,826,978	1,042,265	999,857	—	42,408	93,086

(a) Excluding the State Outlay on the Patri branch, 53,894l.

(b) Converted at the "prescribed" rate of exchange.

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.

IRRIGATION.

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 North-Western Provinces, the Punjab, and the deltas of the large rivers in the Madras Presidency. Irrigation canals are of two descriptions, 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 £2,009,573, comprises 459 miles of main canal and 4,476 miles of distributaries, and in the year under review supplied water to 774,104 acres. The Sirhind Canal in the Punjab, which was completed in 1887, has cost £1,631,367, and consists of 319 miles of main channels and 2,725 miles of distributaries. In Madras the great deltaic irrigation systems of the Godaveri, Kistna, and Cauvery have respective lengths of main channel of 503, 372, and 844 miles, and together irrigate upwards of 2,400,000 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, in most cases, take off 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. 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.

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 1900-01, and the two previous years:—

	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 . . .	24,520,387	2,430,703	764,684	1,666,019	6.79	10,922,530
Minor Works . . .	3,725,339	352,790	167,467	185,323	4.97	2,025,456
TOTAL for 1900-01 .	28,245,726	2,783,493	932,151	1,851,342	6.55	13,547,986
TOTAL for 1899-1900 .	27,541,021	2,617,576	940,273	1,677,303	6.09	13,430,841
TOTAL for 1898-99 .	26,830,247	2,550,767	866,545	1,684,222	6.28	12,026,185

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 North-West Provinces, 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 North-Western Provinces 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 following table gives the mileage of the irrigation canals in operation in each province, with the area irrigated during the year:—

	Bengal.	North- West Provinces and Oudh.	Punjab.	Madras.	Bombay, including Sind.	Balu- chistan.	Rajputana.	TOTAL.
MAJOR WORKS.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Main Canals . . .	1,719	1,554	1,667	2,104	1,338	Nil.	Nil.	7,382
Distributaries . . .	2,654	10,615	8,493	5,889	686	Nil.	Nil.	28,337
Area irrigated . . .	Acres. 716,271	Acres. 1,888,091	Acres. 4,356,992	Acres. 2,915,271	Acres. 1,045,905	Acres. Nil.	Acres. Nil.	Acres. 10,922,530
MINOR WORKS.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.		Miles.
Main Canals . . .	24	—	1,061	1,370	2,061	4	Tank irrigation.	4,520
Distributaries . . .	—	621	401	1,182	233	41		2,478
Area irrigated . . .	Acres. —	Acres. 113,793	Acres. 602,189	Acres. 511,603	Acres. 922,878	Acres. 5,232	Acres. 34,767	Acres. 2,190,462

IRRIGATION. Besides the works to which the preceding paragraphs apply, there is a large class of works, especially in Sind and Madras, for which capital accounts are not kept.

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.

In the last month of the year under review, a Resolution was issued by the Government of India foreshadowing an inquiry into the question of the better protection of the country by irrigation outside the great canal systems of the "productive class." The resolution ordered the preparation of information in connection with this inquiry, but the agency by which the inquiry was to be made and the exact nature of its work had not been announced by the close of the year.

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.

Bengal.

The progress of irrigation on the three large irrigating works in Bengal, the Orissa, Midnapore, and Sone Canals, fluctuates from year to year. In 1900-01, 716,271 acres were irrigated, as against 727,000 acres irrigated in 1899-1900.

The general results for 1900-01 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.
	£	£	£	£		£
1895-96 -	5,040,389	136,850	116,496	20,354	0·4	579,933
1896-97 -	5,074,920	168,434	121,912	46,522	0·9	809,467
1897-98 -	5,103,735	185,376	121,695	63,681	1·89	703,190
1898-99 -	5,112,735	163,335	129,362	33,973	0·66	712,221
1899-1900 -	5,112,400	164,864	127,453	37,411	0·73	727,026
1900-01 -	*5,137,165	151,767	107,014	44,753	0·87	716,271

* Includes £40,404 and £10,358 expended on two abandoned projects, viz., Tirhut and Damodar projects.

At the beginning of the year under review, there were, in Bengal, four canal systems classed as Major Works. Three of these combine irrigation with navigation, and the fourth (Hijili Tidal Canal) is purely a navigation work. In the course of the year 1900-01, two new Major Works were sanctioned as Protective Irrigation, viz., the Tribeni and the Dhaka Canal. The former will be about 60 miles long, passing through the Bettiah Sub-division of the Champaran District. The latter will be a small canal 3½ miles long, with two branches each 7½ miles long, also in the Champaran District. At the end of the year under review, sums of £8,330 and £2,066 had been spent on these two canals 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.
MAJOR WORKS.	£	£		Acres.
Orissa Canals - - -	1,763,108	2,920	—	203,540
Midnapore - - -	564,895	4,065	·72	80,318
Hijili Tidal Canal - - -	174,349	1,018	·58	—
Sone Canals - - -	1,784,163	32,411	1·82	432,413
Total Major Works -	4,286,515	34,574	·81	716,271
MINOR WORKS.				
Calcutta and Eastern Canals -	443,762	10,698	2·41	—
Orissa Coast Canal - - -	298,625	—444	—	—
Sarun Project - - -	47,104	—76	—	—
Total Minor Works -	†789,491	10,178	2·41	—

† Excludes the sums spent on the Tirhut and Damodar projects.

The Calcutta and Eastern Canals, which are 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 rivers system, the Gaighatta and Buxi Khals, and the Eden and Madhuban Canals. The first-named, which comprises about 470 miles of channel, is used for navigation purposes only. There was a considerable increase in the loss on working the Nadia rivers during the year under review.

In the following statement the traffic on the canals in Bengal in 1900-01 is shown in comparison with the traffic results of the previous year. The Nadia rivers are included in this statement :—

YEAR.	Length of Canal open for Navigation.	Receipts.	Maintenance Charges.	Net Receipts.	Estimated Value of Cargoes.	Number of Passengers.
	Miles.	£	£	£	£	
1899-1900 -	1,834	65,362	41,623	23,739	7,321,194	303,650
1900-01 -	1,832	55,360	38,834	16,526	6,970,201	360,162

The capital expenditure for the year amounted to £3,501 on major works. On minor works there was a capital expenditure of £11,184.

IRRIGATION.
North-west
Provinces.

In the North-West Provinces, taking the revenue actually realised, the general results of the irrigation operations during 1900-01 are compared with those of the five previous years in the following statement :—

YEAR.	Capital Outlay to End of Year.	Net Revenue.	Percentage of Net Revenue to Capital.	Area Irrigated during the Year
	£	£		Acres.
1895-96 - - - -	5,661,010	178,658	3.16	2,010,021
1896-97 - - - -	5,770,535	415,852	7.21	3,023,884
1897-98 - - - -	5,862,864	507,726	8.66	2,511,173
1898-99 - - - -	5,806,936	391,626	6.59	2,253,802
1899-1900 - - - -	6,026,379	431,137	7.15	2,829,794
1900-01 - - - -	6,047,532	434,976	7.19	2,001,884

The small number of acres irrigated in the year under review was due to well-distributed rainfall in the autumn season and to the winter rainfall having been sufficient to mature most crops without canal water. The receipts from minor works were, however, greater than in the previous year.

Excluding the Betwa Canal, which is a protective work, the major works earned a profit of 7.70 per cent. on their capital outlay. The individual returns from the four works were as under :—

CANAL.	Percentage of Net Revenue (actually realised) on Capital.
Upper Ganges - - - -	11.49
Lower Ganges - - - -	3.50
Agra - - - - -	7.5
Eastern Jumna - - - -	25.86

The receipts from the Betwa Canal, the only "protective" work in these provinces, fell short of the working charges of the year by £1,913, this deficit being due to the early failure of the river supply. By the end of the year additional storage was arranged for.

The minor works comprise the Dun, Rohilkhand, and Bijnor Canals, and the Bundelkhand Lakes. The net revenue from these works amounted to £10,057, which gave a percentage of 5.08 on the capital outlay.

The area irrigated by all the canals (except the Tarai and Bhábar Canals, which are under the Commissioner of Kumaon) was approximately 2,001,884 acres, or 827,910 less than in the preceding year. The decrease was due to good rainfall during the year.

Of the total area irrigated, some 692,380 acres were under wheat, 207,231 under indigo, 225,535 under sugar cane, 167,739 under rice, and 149,389 under cotton. The area under cotton was the largest ever irrigated from the canals.

The capital expenditure of the year amounted to £35,153; and of this sum approximately equal parts were spent on the Ganges Canal, the Lower Ganges Canal, the Eastern Jumna Canal, and the Fatehpur Branch of the Lower Ganges Canal, the expenditure on the Agra Canal being one-half as much. The Fatehpur Branch was nearing completion at the end of the year.

The navigation operations on the irrigation canals are not profitable. The figures for the last six years are given in the following statement :—

YEAR.	Excess of Working Expenses over Receipts.
	£
1895-96 - - - -	84
1896-97 - - - -	471
1897-98 - - - -	525
1898-99 - - - -	612
1899-1900 - - - -	724
1900-1901 - - - -	1,943

In addition to the area irrigated by the canals under the direct control of the Irrigation Department, there were 123,143 acres irrigated during the year by the Tarai and Bhábar Canals under the Commissioner of Kumaon.

In the Punjab, in the year under review, the gross direct income amounted to £984,137, which with the indirect revenue of £130,164 credited to the canals on account of enhanced land, brings the total gross revenue of the canals to £1,114,301.

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.	£
1895-96 - - - -	5,469,040	3,458,544	737,250
1896-97 - - - -	5,745,234	4,164,920	905,978
1897-98 - - - -	5,956,888	4,803,203	1,004,566
1898-99 - - - -	6,134,972	4,430,018	983,796
1899-1900 - - - -	6,311,559	4,743,329	920,322
1900-1901 - - - -	6,619,394	5,702,296	Figures not available.

* Includes Muzaffargarh Canals.

The above figures are exclusive of the Native States portion of the Sirhind Canal and Sirsa Branch.

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.			
Major Works :	Miles.	Miles.	£	£	
Perennial Canals :					
Swat River - - - -	22	185	275,925	28,704	10.41
Western Jumna (including Sirsa Branch). - - - -	360	2,003	1,142,335	104,035	9.10
Bari Doab - - - - -	369	1,331	1,229,878	158,204	12.86
Sirhind (British portion) - - - -	319	2,725	1,631,367	148,703	9.11
Chenab - - - - -	420	2,059	1,725,676	241,812	14.01
Sidbhai - - - - -	68	131	84,279	4,901	5.81
Jhelum - - - - -	—	—	466,416	—	—
Inundation Canals :					
Lower Sohag and Para - - - -	99	58	48,937	1,272	2.60
Minor Works :					
Upper Sutlej - - - - -	225	289	55,870	1,091	1.95
Indus - - - - -	713	—	47,175	11,112	23.55
Shahpur (Imperial) - - - -	79	94	14,360	4,131	28.76
Ghaggar - - - - -	44	18	20,090	—1,447	—
Kabul River Canal - - - -	—	—	32,219	6,913	21.46
Lower Bari Doab Survey - - - -	—	—	4,905	—	—
TOTAL - - - - -	2,728	8,894	6,779,432	709,431	10.46

IRRIGATION. The Swat River Canal cleared its interest debt, and for the first time showed accumulated profits of £9,528 against an interest balance of £8,544. There was a decrease of £30,472 in the net income of the Western Jumna Canal, attributed to short collections in certain districts. The return of 9·11, yielded by the British portion of the Sirhind Canal, was the highest on record.

On the Native States branches of the Sirhind Canal the area irrigated was 240,076 acres against 441,558 acres in the preceding year.

The capital outlay for the year on works for which full accounts are kept amounted to £301,842, of which £46,365 was expended upon the Chenab Canal which gave a return in the year under review of 14·01 on capital outlay.

On the Jhelum Canal, which was started in 1896-97 as a famine relief work, £228,603 was expended during the year, in practically completing its head-works and pushing on excavation and masonry work.

The navigation operations on the Western Jumna Canal resulted in a profit of £2,358. The Sirhind Canal was worked at a loss of £392.

The following figures show the rapid development of irrigation since the Chenab Canal was first opened in 1892-93, when 157,197 acres were irrigated:—

YEAR.	Capital Outlay to End of Year.	Area Irrigated during the Year.	Net Revenue during the Year.	Return on Capital Outlay.
	£	Acres.	£	Per Cent.
1892-93	721,233	157,197	— 4,084	— 0·57
1893-94	878,034	270,405	3,552	0·40
1894-95	995,032	269,357	9,511	0·96
1895-96	1,174,781	369,935	51,632	4·40
1896-97	1,362,075	520,279	92,629	6·75
1897-98	1,512,916	810,000	111,041	7·34
1898-99	1,616,076	957,705	131,566	8·14
1899-1900	1,677,982	1,353,223	155,302	9·26
1900-01	1,725,676	1,830,525	241,812	14·01

This rapid development of irrigation has occurred in a tract the greater part of which was absolutely unpopulated in 1892, but this has all been changed by the highly successful operations by which colonies of settlers have been established in these crown wastes *pari passu* with the construction of the canal.

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 channels.

In Upper Burma there are only two major irrigation works, namely, the Mandalay Canal and the Shwebo Canal. The first was sanctioned in 1896, and provides for a canal to take off from the Madaya River, 39 miles long, with 86 miles of distributaries; it is expected to irrigate 80,000 acres of land. The total capital outlay on the Mandalay Canal amounted at the end of 1900-01 to £246,857, of which £57,377 was expended during the year. The canal is expected to cost £316,026.

The Shwebo Canal was sanctioned during September of the year under review, and is estimated to cost £320,273. Up to the end of the year £8,894 had been expended upon it. The canal is designed to irrigate an area of 150,000 acres annually in portions of the Shwebo and Sagaing districts of Upper Burma, where the rainfall is so uncertain that rice cultivation is very precarious. The main and two branch canals will together be 77 miles long, and the total length of the distributaries 193 miles. Water will be drawn from the River Mu.

Much was done in improving and maintaining existing minor irrigation works in the Pegu, Yamethin, Kyaukse, and other districts.

The irrigation in Ajmere-Merwara is from tanks, none of which are classed as major works.

In the year under review the gross receipts, direct and indirect, from all sources, amounted to £6,084, the working expenses to £6,301. There was thus a loss incurred of £217. The number of acres irrigated was 34,767. The capital outlay during the year amounted to £7,832.

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.

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.

In the year under review the season was unfavourable.

There are at present 9 "major" works and 29 "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 29 minor works for which full accounts are kept, 25 are irrigation systems, and four are tidal canals intended for purely navigation purposes.

Of the works for which full accounts are kept the length of completed main canal was 3,789 miles, and of distributary channels 7,048 miles. The area irrigated during the year by these works was 3,426,874 acres, the crops grown being valued at £8,159,330.

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.	£	
1896-97	5,815,502	3,129,859	356,901	6·1
1897-98	5,919,671	3,241,728	421,602	7·1
1898-99	5,988,198	3,339,379	445,812	7·44
1899-1900	6,057,431	2,928,463	398,531	6·58
1900-01	6,136,629	3,426,874	444,521	7·24

The net revenue recorded in the foregoing statement is that which has resulted from the outlay of Government capital. If the net revenue due to old irrigation be added, the total amount will be £748,961. The decrease of revenue during the year was due chiefly to larger remissions made on account of the unfavourable character of the season.

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	825,519	880,889	155,428	17·64
Kistna Delta	600,002	917,049	145,652	15·88
Pennér Anicut	157,736	397,316	21,621	5·44
Kurnool-Cuddapah Canal	62,159	1,448,866	4,511	·31
Barur Tank	5,128	28,456	376	1·33
Cauvery Delta	993,539	183,985	56,688	30·81
Srivaikuntham Anicut	45,715	99,405	7,012	7·05
Periyar Project	142,869	589,111	20,183	7·05
Rushikulya (Protective Work)	82,554	319,143	730	3·43
TOTAL	2,915,271	4,864,220	412,201	8·47

IRRIGATION. The minor works for which full accounts are kept irrigated an area of 511,603 acres, and earned a net revenue of £32,320, equivalent to a percentage of 2.54 on the capital expended on them. The purely navigation works, with the exception of the Gaiyam Gopalpur Canal, were in each case worked at a loss.

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 1900-01 was £535,677, the net revenue being some £333,000, and the area irrigated by them was 3,173,250 acres. A plan for the systematic repair of some of these works has now been in progress for some years, under the title of the "Tank Restoration Scheme," and is about one-third completed. Up to the end of the year an expenditure of £439,261 had been incurred under this scheme, approximately 45,459 square miles had been investigated, and estimates for 6,297 works had been prepared.

The capital expenditure for the year on the major works amounted to £58,572. This expenditure was incurred chiefly on the Kistna, Penner, and Cauvery works.

Bombay,
excluding
Sind.

In the Bombay Presidency, excluding Sind, there are 40 irrigation works in operation for which full accounts are kept. Of these 13 are classed as Major Works. The canals in this Presidency are generally small, and the water being, in most cases, drawn from small rivers and local streams, more or less dependent on rainfall, a constant supply cannot be maintained without the aid of storage reservoirs. In fact, the reservoir projects, of which there are a large number, include the more important works, such as the Bhátghar Reservoir, the Lake Fife Works, and the Mhasvad and Ekruk tanks.

The total area irrigated in 1900-01 by works for which full accounts are kept was 124,394 acres, against 104,624 acres in 1899-1900, or an increase of 19,770 acres.

A comparative statement of the results from those works, for which full accounts are kept for 1900-01 and the preceding five years, is given in the following table:—

YEAR.	Capital Expenditure to End of Year.	Area Irrigated.	Revenue Realised.	Working Expenses.	Net Revenue.
	£	Acres.	£	£	£
1895-96	1,750,749	74,923	39,922	19,619	20,303
1896-97	1,757,324	118,004	37,226	23,996	13,230
1897-98	1,772,069	126,516	42,386	26,926	15,460
1898-99	1,780,253	103,849	46,451	22,453	23,998
1899-1900	1,798,204	104,624	48,371	23,643	24,728
1900-1901	1,821,283	124,394	34,967	27,834	7,123

The net revenue realised for the year represents a return of .39 per cent. on the capital expenditure, a percentage which compares very unfavourably with the corresponding percentage of the previous year, viz. 1.37 per cent. The decrease was chiefly due to the deficient water supply.

The major works in operation produced a net revenue equivalent to 1.14 per cent. on the capital of £1,324,826 expended on them. The most important of these major works, judged by the amount of capital expenditure, is the Mutha Canals System with the Lake Fife Reservoir, which in 1900-01 irrigated an area of 8,204 acres, but, whereas in 1899-1900 the system yielded a net revenue of £15,549 or 3.50 per cent. on capital outlay, in 1900-01 it yielded only £9,254, or 2.09 per cent., owing to short supply of water.

The revenue realised by the minor works during the year under review failed to cover the working expenses by a sum of £8,033.

The capital outlay during the year on the major works amounted to £17,079, and on the minor to £17,110, the principal works in progress

being the Mutha, Nira, and Gokak canals. On the former the expenditure was chiefly on the work of providing a set of automatic gates for the waste weir of Lake Fife, with a view to increasing the storage.

The minor class of works, for which only revenue accounts are kept, yielded a gross revenue of £37,855, and a net revenue of £23,870; the class for which neither revenue nor capital account are kept were worked at a loss of £8,481.

In Sind the success of the irrigation operations is dependent on the regular rise of the river Indus. In the year under review the inundation was one of the most favourable on record, and was thus in marked contrast with that of 1899, which was exceedingly poor. There was no extreme floods to try the embankments, and the supply to canals was generally satisfactory.

The results of the working in 1900-01 of those works for which full accounts are kept are given in the following table:—

WORKS.	Capital Expenditure to End of Year.	Area Irrigated.	Revenue Realised.	Working Expenses.	Net Revenue.
	£	Acres.	£	£	£
Major	1,333,188	961,433	119,614	23,088	91,526
Minor	265,574	882,956	94,707	25,172	69,535
TOTAL	1,598,762	1,844,389	214,321	53,260	161,061

The foregoing results represent a return of slightly over 10 per cent. on capital expenditure. In Sind the existence of cultivation depends upon irrigation, and there is a constant demand for water from the canals. This fact, and the comparatively inexpensive nature of inundation canals, account for the favourable results obtained from the working of irrigation canals in Sind.

In the course of the year the large Jamrao Canal was nearly completed and came into operation, and a new project, named the Mahiwah, was sanctioned in September and commenced during the year. Work was also carried on in connection with the Desert Canal in the Begari Canals district, and the Dad and Nasrat Canals in the Northern Hyderabad Canals district.

The amount of capital expenditure during the year on works for which full accounts are kept was £144,803. The area irrigated by all classes of works in Sind was 3,043,857 acres against 2,568,501 in the previous year. An important event of the year was the constitution of the River Indus Commission as an Advisory Board in all matters relating to the river Indus.

There are no "major" works in Baluchistan. The class of "minor" works is represented by two schemes now in operation, viz., the Shebo Canal, and the Khushdil Khan Reservoir, the former of which has cost £45,148, and the latter £62,370.

In the year under review the net revenue from the Shebo Canal was £674, or 1.49 per cent. on the capital outlay. The net revenue from the Khushdil Khan Reservoir was £218, or 0.34 per cent.

The area irrigated by these two works was 5,232 acres, as compared with 3,091 acres in the preceding year. The value of the crops raised was £7,235.

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

BUILDINGS
AND ROADS
(CIVIL).

BUILDINGS
AND ROADS
(CIVIL).

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 two divisions, viz., Military and Civil Works. The military works are executed entirely from Imperial funds. The expenditure on Civil Works is chiefly met from provincial and local resources. The classification of the expenditure for 1900-01 under the heads referred to is shown in the following table:—

	Imperial.	Provincial.	Local.	Total in India.	Expenditure in England.	Exchange.	GRAND TOTAL.
Military Works	£ 741,885	—	—	£ 741,885	£ 41,037	—	£ 782,942
Civil Works	260,510	1,846,511	1,087,293	3,194,314	92,286	—	3,286,600
TOTAL, 1900-01	1,002,395	1,846,511	1,087,293	3,936,199	133,343	—	4,069,542
TOTAL, 1899-1900	1,036,107	1,874,884	1,100,144	4,011,135	123,517	—	4,134,652
TOTAL, 1898-99	1,027,764	1,662,794	1,070,199	3,760,757	101,948	50,728	3,912,533

This statement does not include the outlay from Imperial revenues recorded under the head of Special Defence Works, which amounted to £975 in 1898-99, £874 in 1899-1900, and £6,864 in 1900-01.

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.

Bengal.

In Bengal the expenditure for the year on Civil Works was as follows:—

	£
Imperial -	66,761
Provincial -	265,401
Local -	311,615
TOTAL -	643,777

Among the Imperial works taken in hand the most important was the building of a new Military Secretariat at Calcutta. Negotiations were nearly completed for the purchase of the property at Alipore known as "Hastings' House" as a residence for Native Chiefs invited to Calcutta as the guests of the Government of India. Premises were also purchased for the use of the Paper Currency Department.

With regard to Provincial works, mention may be made of the continued construction of the Presidency General Hospital, and the approaching completion of a Leper Asylum at Gobra, estimated to cost £8,940. Good progress was made in restoring roads, bridges, and drains in the Darjeeling district, to repair the damage caused by the storm of September 1899 and the rains of 1900. The outlay was £8,722.

In the North-Western Provinces the outlay under the different heads of service was as follows:—

	£
Imperial -	19,935
Provincial -	247,540
Local -	162,600
Total -	430,075

BUILDINGS
AND ROADS
(CIVIL).
North-
Western
Provinces
and Oudh.

During the year the New Training College at Allahabad was completed at a cost of £7,260, and the extensions to the Muir College were pushed on. At Lucknow, the new Court of the Judicial Commissioner progressed very fast. The bridge over the Gunti was also under construction. Buildings at Ballia were nearly completed for Government officers, and new offices at Naini Tal were finished. At Agra the new Circuit House was completed, and the work of converting into a public park the barren ravines between the Fort and Taj was proceeded with. In Garhwal, the large bridge over the Koh was completed. An important programme for improving communications in the districts of Bundelkhand, at an annual cost of £6,666 for the next three years, was drawn up and work was started. Work also commenced on a similar scheme for the Trans-Jumna tahsils of Allahabad.

The total mileage of roads maintained by the Public Works Department and by local authorities during the year was 6,502 miles of metalled and 24,648 of unmetalled road. Ninety-nine miles of new metalled and 219 of new unmetalled roads were constructed.

In the Punjab the expenditure for the year on Civil Works was as follows:—

	£
Imperial -	62,899
Provincial -	172,284
Local -	55,661
Total -	290,844

During the year under review the installation of the electric light at the Viceregal Lodge, Simla, was completed, and a new General Post Office was begun at Lahore. New Imperial Civil Secretariat Offices were taken in hand, and an important addition to the Foreign Office was finished. On the frontier, the new scheme of substituting local militia for regular troops on the Waziristan border severely taxed the resources of the local Public Works Department, buildings being required to accommodate militia regiments at Wana and elsewhere.

Under the head of Provincial Civil Works, it may be mentioned that the construction of the new offices for the Punjab Government was well in hand, the expenditure to the end of March 1901 being £10,754. An estimate of £6,735 was sanctioned for improving the Kangra Valley cart road, and various repairs of roads and bridges were carried out. The difficult work of training the River Indus at Dera Ghazi Khan, as a protection against floods, was proceeded with on an American plan. Boat bridges were maintained as usual on important trade and military routes, and steam ferry services continued to be worked over the River Indus at Dera Ghazi Khan and Dera Ismail Khan under the management of the North Western Railway.

The comparative expenditure on civil buildings and communications was as follows:—

	Original Works.	Repairs.	TOTAL.
	£	£	£
Civil Buildings	55,743	22,564	77,307
Communications	17,124	57,146	74,270

BUILDINGS
AND ROADS
(CIVIL).

Including station roads, the total road mileage at the end of the year was 26,761 miles, viz., 2,364 miles metalled and 24,397 unmetalled. Famine relief works, of which the cost is excluded from the statement of expenditure on Civil Works given above, were carried out on an extensive scale in certain districts of the Delhi Civil Division.

Burma.

In Burma the total expenditure on civil works for the year was :—

	£
Provincial - - - - -	582,635
Local - - - - -	84,518
Total - - - - -	<u>667,153</u>

A new Telegraph Office was completed at Mandalay; a site was acquired for the Chief Court at Rangoon, and other works of the usual description were carried out. The first section of the Chinese Frontier Road was completed.

At the end of the year there were 1,587 miles of metalled roads and 7,412 miles of unmetalled roads in the Province.

Central
Provinces.

The amount of the expenditure for the year was :—

	£
Imperial - - - - -	1,181
Provincial - - - - -	101,809
Local - - - - -	12,194
Total - - - - -	<u>115,184</u>

Among Imperial works, a new post office was completed at Sambalpur during the year under review, and additions and alterations to post office buildings at Raipur were commenced. Among Provincial works may be mentioned the completion of the additions to the Secretariat Buildings at Nagpur and work on various roads.

The total output from the Warora Mines was 138,520 tons, against 131,584 tons in the previous year, showing an increase of 6,936 tons. The net profit from the working of the colliery was £14,292, or 12·83 per cent. on the total capital outlay. This is the highest return ever earned by the colliery. The working of the Umaria Colliery was transferred to the Rewah Durbar in 1899-1900.

Assam.

The total expenditure in Assam for the year was as follows :—

	£
Imperial - - - - -	6,779
Provincial - - - - -	125,379
Local - - - - -	52,150
Total - - - - -	<u>184,308</u>

Of the Imperial expenditure a large portion was expended on the Nichu-guard Manipur Road. Of the Provincial, £2,460 was expended during the year on the construction of a new Government House at Shillong, a large sum on the Aijal Water Supply Scheme, and sums of varying amount on the Assam Trunk Road and other roads. The length of provincial communications maintained is 3,258 miles.

Madras.

In Madras the expenditure for the year on civil works was as follows :—

	£
Imperial - - - - -	4,239
Provincial - - - - -	169,505
Local - - - - -	287,067
Total - - - - -	<u>460,811</u>

BUILDINGS
AND ROADS
(CIVIL).

In the classes of buildings and roads 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.

In the districts, the buildings under construction were of the usual type of taluk offices and cutcherries, court houses, and other buildings required by the different branches of the Administration.

Under the head of Communications a few important roads are in the hands of the Provincial Public Works Department, and good progress was made with the construction of the cart roads to the Anamalai and Shevaroy planting districts. The greater portion of the road system in 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. In the year under review 23,047 miles of road were maintained by public authorities, apart from roads and streets within municipal limits.

An important feature in the Public Works of the Madras Presidency, owing to the length of its coast line, is the maintenance of its harbours and lighthouses. Several lighthouses were completed during the year.

In connection with famine relief during 1900-01 several irrigation works and seven road works were carried out satisfactorily.

The expenditure on civil works in the Buildings and Roads Branch in the Bombay Presidency for 1900-1901 was as follows :—

	£
Imperial - - - - -	15,962
Provincial - - - - -	181,957
Local - - - - -	118,957
Total - - - - -	<u>316,876</u>

The more important buildings to which the provincial allotment was devoted were six Mamlatdar's offices; two high school buildings; court-houses at Ahmedabad; police lines in the Satara, Ahmednagar, and Karachi Districts; the lunatic asylum at Navpada; the maternity hospital at Poona.

The Provincial lines of communication on which expenditure was incurred during the year included a number of new metalled and unmetalled roads in all divisions, but the total cost of these original works was only £6,000 as compared with an outlay on repairs of £49,866.

The total mileage of roads, not within municipal boundaries, maintained by the Public Works and local authorities amounted to 3,669 miles of metalled and 12,836 miles of unmetalled road.

The Local Fund works consisted of roads, school-buildings, and miscellaneous water supply works carried out through the agency of the Public Works Department.

The expenditure on civil works in the Hyderabad Assigned Districts was as follows :—

	£
Imperial - - - - -	972
Provincial - - - - -	450,182
Local - - - - -	11,036
TOTAL - - - - -	<u>462,190</u>

The greater part of the year's outlay was upon the extension and repair of the road system. Considerable expenditure was incurred on tree planting at the sides of roads in the East Berar and West Berar divisions. The work of constructing a bridge at Paloti proceeded.

The expenditure on civil works in Coorg was as follows :—

	£
Imperial - - - - -	23,131
Local - - - - -	1,480
TOTAL - - - - -	<u>24,611</u>

Coorg.

BUILDINGS
AND ROADS
(CIVIL).

Of the Imperial expenditure a large portion was for building civil offices and a ward for the Bowring Hospital at Bangalore.

The length of road maintained by the Public Works Department was 205 miles from imperial funds and 132 miles from local funds.

NATIVE
STATES.

NATIVE STATES.

A full account of the public works in the districts under Native administration in India cannot be given, owing to the want of information in the case of some of the States. In the minor States the works are for the most part insignificant, but in the larger States there are works of importance, and some of considerable size, in many cases carried out by European engineers lent by the British Government.

Central
India.

The total expenditure on Imperial Works by the Public Works Department of the Central India Agency in 1900-01 amounted to £17,218, the greater part of which was upon the extension and maintenance of roads. The total length of road communication maintained by the Department was 858 miles.

The operations of the Public Works Department in the Agency have been much reduced since the transfer to the chief Native States of the care of the metalled roads in their territories, which has been noticed in previous years' Reports. The duties of the Public Works Department lie not only in maintaining important lines of communication, such as the Agra and Bombay, Nimach and Mhow, and Nowgong and Sutna roads, and in designing and executing projects within territories which are too intermixed or too impoverished to be treated on the footing of the larger States, but also in advising the States that are capable of executing their own projects as to the direction in which their efforts may be most usefully exerted, and in inspecting the work done by the larger States on behalf of the Imperial Government.

Rajputana.

The total outlay in 1900-01 on civil works in Rajputana was £13,294, of which £858 was from local funds. Figures are not available for further particulars as to expenditure on public works in Rajputana.

Madras.

In the Native States under the control of the Madras Government there was no event of importance to notice during the year in connection with public works.

In Travancore the total expenditure by the Public Works Department was £126,135, of which £37,266 were spent upon communications, £22,200 upon buildings, and £18,133 on irrigation. The total length of cart roads was increased to 2,182 miles.

In Cochin the expenditure was £27,121, of which about one-half was on buildings and one-fifth on communications.

In Pudukkottai £7,300 was spent. The expenditure on roads was larger than in the previous year.

Bombay.

The Government of Bombay exercises political control over 363 Native States, presenting numerous gradations of size, wealth, and civilisation.

Leaving out of account the railways, the amounts expended by the Native States under the control of the Government on public works during the year were generally small. The most important group of Native States lies in North Gujarat, and covers an area of about 44,000 square miles. Of the chief States included in this area, Cutch expended £11,505, including £1,800 on roads and £1,200 on wells; Palanpur, £3,490; and Cambay, £3,632. In the Kathiawar States the outlay on public works, exclusive of famine works, amounted to £168,100. In the South Gujarat States, £5,386 was expended; £5,980 was expended in Janjira, £3,565 in Savantvadi, £15,909 in the Satara Jaghurs, and £15,965 in Kolhapur.

CHAPTER XII.

POST OFFICE AND TELEGRAPHS.

POST OFFICE.

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:—

POST
OFFICE.

YEAR.	Receipts.	Expenditure.	Net Revenue.
	£	£	£
1898-99 - - - -	1,275,972	1,149,937	126,035
1899-1900 - - - -	1,308,335	1,181,921	126,414
1900-01 - - - -	1,357,124	1,222,161	134,962

The above figures include the charge on account of district post establishments, which is entirely met by grants from district post funds (only a very small portion of which is credited to the Post Office in the Finance and Revenue Accounts), and they exclude certain indirect charges in respect of the rent of Government buildings, cost of pensions, &c. If the figures for the year were recast on this basis, the surplus for 1900-01 would be £149,426.

The extent of the sphere of operations of the Post Office, and its development during the last three years, are shown in the tables in the margin. These figures are exclusive of the district post, of which the post offices increased from 1,574 in 1899-1900 to 1,664 in 1900-01, the letter boxes from 4,184 to 4,225, while the staff of village postmen was reduced from 3,100 to 3,060.

YEAR.	Post Offices.	Letter Boxes.	Village Postmen.	Length of Postal Lines.
	No.	No.	No.	Miles.
1898-99 - - - -	10,595	18,617	4,722	90,395
1899-1900 - - - -	19,823	19,822	4,688	91,534
1900-01 - - - -	11,306	21,284	4,876	94,719
Increase in 1900-01 over 1899-1900 - - - -	483	1,462	188	3,185

YEAR.	Letters (including Postcards).	Newspapers.	Book and Pattern Packets.	Parcels.	TOTAL.
	No.	No.	No.	No.	No.
1898-99 - - - -	419,134,693	32,122,502	23,929,424	2,515,392	476,511,111
1899-1900 - - - -	448,803,998	30,753,149	26,773,921	2,604,408	509,006,476
1900-01 - - - -	469,292,182	32,091,409	28,362,751	2,679,109	532,282,742
Increase in 1900-01 over 1899-1900 - - - -	20,340,484	2,861,081	74,791	23,276,266	

lines over which mails were conveyed was 131,621 miles at the close of 1900-01, as compared with 127,934 miles at the close of the previous year. There was an increase under all heads including steamer lines, but the increase was greatest under the head of "runners and boats." This was chiefly due to the opening of new lines in Madras, in order to bring newly established lines into communication with the previously existing posts.

The general correspondence returns, of which a summary is given above, show an increase of over 31 millions of articles (excluding money orders) carried by post in 1900-01, as compared with 1899-1900. Of this increase nearly 12 millions were due to postcards, the total number of which exceeded that of paid letters.

The total number of articles received for delivery, including money orders, was over 545 millions, of which 97.77 per cent. were delivered, against

Post
Office.

97·59 in the preceding year. The net receipts of postal articles (other than money orders) at the dead letter offices for disposal were 4,579,071; of this number 933,643 articles were disposed of by being re-directed, and then delivered to the persons to whom they were addressed, while 2,399,251 were returned to the senders, and 1,585,664 could not be disposed of. This last figure is under 0·3 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. In the Bengal Office, where statistics were kept, some nine thousand of unaddressed articles had to be dealt with during 1900-01.

A large amount of valuable property was, as usual, found in letters and other articles posted without addresses, or with addresses so incorrect and incomplete that the covers had to be opened in order that the senders might be traced. In articles opened in the five more important dead letter offices were found cheques, hundis, bills of exchange, currency notes, coins, and other property, amounting in value to Rs. 326,064. 13. 6., and £1,161 13s. 10d., the whole of which was successfully delivered to the owners, with the exception of money and other articles of the total value of Rs. 31,954. 3. 0., and £136 7s. 8d.

The letters and postcards despatched from India to the United Kingdom in 1900-01 are estimated at 3,636,207, against 3,529,248 in 1899-1900, or an increase of 3·03 per cent. Those received in India from the United Kingdom are estimated at 4,271,745, against 4,233,644 in the previous year, or an increase of 0·89 per cent.

The newspapers, book packets, and samples despatched home from India showed an increase of 8·3 per cent., and the number of such articles received in India from the United Kingdom showed an increase of 5·73 per cent.

The statistics of correspondence exchanged between India and foreign countries and colonial administrations used to be taken once in three years, alternately in May and November, and were last recorded in May 1896. The total number of letters and postcards exchanged with such countries was over 4½ millions, and that of newspapers and book-packets nearly 3 millions. Under the terms of the Principal Convention of Washington, no further statistics are to be taken during the currency of that Convention.

The parcels exchanged with the United Kingdom formed over 62 per cent. of the whole foreign parcel traffic. The parcels received from, and despatched to, the United Kingdom through the British Post Office, *via* Gibraltar, and *via* Brindisi, taken together, increased from 179,200 to 187,656. The number of parcels, both sent and received, through the Peninsular and Oriental Steam Navigation Company, without the agency of the British Post Office, has practically ceased to be of any importance.

The number of parcels sent to Continental Europe shows no tendency to increase, but in the exchanges with other countries there was again a satisfactory development of the traffic in both directions, an addition of 11·6 per cent. having been made to the number of parcels. The increase in the number of parcels sent to non-European countries is again to be attributed, in great measure, to the steady growth of the parcel post with Ceylon, but there was, at the same time, a distinct development of the traffic with the British Protectorates of East Africa and Zanzibar, the number of parcels sent to Mombasa from India being 7,452.

The receipts from the insurance of letters and parcels were £16,990, as compared with £17,482 in the preceding year. The year's business was rather less in all respects than the insurance business of the preceding year, and shows a falling off to the extent of 1·28 per cent. in the number of articles insured, 2·80 per cent. in their value, and 2·81 per cent. in the amount of the insurance fees. The decrease was mainly due to a falling off in the number of letters and parcels insured in Bombay, Madras, and Rajputana. In Bombay for several years past the insurance business has been of a fluctuating character, and the same may be said of Madras, but the figures for Rajputana have been larger during the last two years than at any previous period.

The average value for which each article was insured was, in the case of letters, Rs. 248, as compared with Rs. 259 in the previous year, and in that of parcels, Rs. 326, against Rs. 328 in 1899-1900.

Post
Office.

The number of claims for compensation preferred in respect of insured articles was 24, as compared with 13 in the preceding year. Twenty-two claims were admitted, which involved the payment of £518, or 3·05 per cent. of the total amount realised from insurance fees, against a per-centage of ·88 in the preceding year; of the claims admitted, the loss was due in 16 cases to fraud or negligence on the part of the servants of the Post Office, while the remaining six cases arose out of losses by highway robbery of mails in British territory. Of the two claims not admitted, one was actually rejected, and one was pending at the close of the year. In the former case, in which compensation was refused, the insured letter had been delivered in good condition, under a clear receipt, and there was independent evidence to justify the conclusion that the currency notes, said to have been the contents of these letters, were not really inside them when they were posted. On being opened the envelope was found to contain pieces of blank paper.

The business of the value-payable post continued to show steady progress. The number of articles sent was 2,608,888, and the amount declared for recovery by the Post Office from the addressees was over £2,250,000, the commission on which was £39,174. There was an increase of 5·57 per cent. in the number of articles, of 13·33 per cent. in the value specified for recovery, and 9·23 per cent. in the commission realised. There was no change in the conditions under which Calcutta is responsible, year by year, for nearly two-fifths of the entire business. The number of value-payable articles posted at the Calcutta General Post Office and its town sub-offices was nearly 900,000; and this department realised on the delivery of these articles a sum in excess of one crore of rupees, being more than 6 lakhs in excess of the sum similarly paid in the preceding year.

The value-payable system has not been introduced between India and any country other than Ceylon. During the year under review 37,365 value-payable articles were despatched from India to Ceylon, as compared with 32,931 articles in the preceding year.

The average value of each article, taking all classes of articles together, was Rs. 13. 1. 0, as compared with Rs. 12. 6. 6 in 1899-1900.

The number and value of inland money orders issued in India, including telegraphic money orders, but excluding transactions with Native States, increased respectively from 12,505,059 and £17,083,355 in 1899-1900 to 12,922,465 and £17,514,665 in 1900-01; and the commission realised, from £215,919 to £222,466. The average value of an inland money order was Rs. 20. 5., against Rs. 20. 7. in the previous year. The number of money orders issued and paid in the Lower Provinces of Bengal was more than one-third of the total transactions for all India.

In the Punjab the number of revenue money orders increased from 13,140 to 14,570, and in the Lower Provinces from 203,445 to 217,922.

In the Central Provinces, owing to the prevalence of famine, the number of such orders decreased from 16,914 to 14,377. In the North-Western Provinces and Oudh, from the same cause, the number and value of these orders decreased from 208,240 to 206,993.

The system of remitting miscellaneous other Government dues by money is in force in the Lower Provinces, the North-Western Provinces and Oudh, the Punjab, Madras, and Burma. In all these provinces there was an increase in these special transactions. The number of these money orders rose from 98,921 in 1899-1900 to 107,177 in the case of the Lower Provinces, from 32,247 to 35,212 in the case of the North-Western Provinces and Oudh, from 5,040 to 5,299 in the case of the Punjab, from 4,214 to 4,307 in the case of Madras, and from 92 to 187 in the case of Burma, where the system is only partially in force.

In the Lower Provinces of Bengal the total number of rent money orders advanced from 52,054 in 1899-1900 to 55,111. In the North-Western Provinces and Oudh the number of these orders increased from 70,815 to 79,093. In the Central Provinces, owing to the prevalence of famine, the remittances of rent by money orders decreased in number, viz., from 1,286 to 773.

In the money order transactions with Native States the number and value of the issues in those States were respectively 86,569 and £176,903, against

Post
Office.

91,131 and £190,411 in the previous year; and the number and value of payments in the States were 61,904 and £111,137, as compared with 61,783 and £110,039 in 1899-1900. 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 1900-01 was 183,246 for £1,443,170, as compared with 175,298 orders for £1,471,181 in the preceding year. The average value of a telegraphic money order was Rs. 118. 2. 0., against Rs. 125. 14. 2. in 1899-1900. The postal commission amounted to £15,160, in addition to £12,216 charged for the telegrams and credited to the Telegraph Department. For the preceding year the figures were £15,506 and £11,687 respectively.

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, payments being made by the remitters and to the payees in India at the rates of exchange fixed by the Post Office from time to time for this purpose. The number of such orders issued by India rose from 70,749 in 1899-1900 to 75,882 in 1900-01, and the value increased from £231,302 to £247,511, while the orders paid in India increased in number from 44,037 to 59,456, and in amount from £247,826 to £321,322. In 1899-1900, of the total sterling money order transactions, viz., £479,149, no less an amount than £419,972 was with the United Kingdom and British colonies, and in 1900-01 the proportion was £480,601, out of £568,833. There was an increase of nearly 4,000 in the number of remittances sent by money orders to the United Kingdom.

The average value of a sterling money order issued by India was £3 5s. 2d., as compared with £3 5s. 4d. in 1899-1900, and that of such a money order paid in India was £5 8s. 1d., as compared with £5 12s. 7d., the average in the preceding year.

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 £52,125 in 1899-1900 to £55,362 in 1900-01, and the orders paid by India, from £451,184 to £541,106. The heaviest drawings were from Ceylon, the Straits Settlements, and British East Africa.

The average value of a foreign rupee money order issued by India in 1900-01 was Rs. 38. 15. 0., as compared with Rs. 37. 13. 0. in 1899-1900, and that of an order paid in India was Rs. 42. 0. 0., as compared with Rs. 42. 9. 0. in the preceding year.

Including inland and foreign money orders, both ordinary and telegraphic, and converting the foreign sterling orders into Indian currency at the rates of exchange in force when the transactions took place, the total of the money orders issued by the India Post Office in 1900-01 amounted to £17,929,181, against £17,476,827 in 1899-1900, and the total of payments to £18,550,317, against £17,944,416 in the preceding year.

At the close of the year there were 6,636 offices performing savings bank business, against 6,479 in the preceding year, thus showing an increase of 157 banks during the year. The number of accounts in the Post Office savings banks rose from 785,729 in 1899-1900 to 816,651 in 1900-01; the deposits, exclusive of transfers from one post office to another, from £2,318,018 to £2,410,980, while the withdrawals fell from £2,360,857 to £2,339,804; and the interest rose from £188,467 to £193,365. The balance at the credit of depositors at the close of 1900-01 stood at £6,695,504 against £6,430,965 at the close of 1899-1900. The average balance at the credit of each depositor was Rs. 122. 98, as compared with Rs. 122. 77 in the previous year. Of the 816,651 accounts, 336,964 were held by persons of no occupation, or whose incomes were derived from others, or from their own property; 276,373 by persons of the professional class, 137,936 by persons of the domestic class, 29,934 by persons of the commercial class, 24,730 by persons of the industrial class, and 10,714 by persons of the agricultural class. The highest percentage of increase was in the number of accounts held by this

Post
Office.

last class, which was nearly 9 per cent. in excess of the number held by agriculturists at the end of the preceding year.

During 1900-01 the total amount invested in Government securities by savings bank depositors through the agency of the Post Office was £26,493, against £22,667 in the preceding year; and the balance of securities in the hands of the Comptroller-General at the close of the year was £68,293, compared with £60,900 on the 31st March 1900.

The arrangements for the sale of quinine through the agency of the Post Office are now in force throughout India, and in the aggregate the sales show an increase of over 407 lbs.

The total number of Native army pensioners whose pensions were paid through the Post Office during the year was 27,509, and the amount paid to them was £133,188, as compared with 27,279 and £130,655 in 1899-1900.

During the year under review 867 new policies of the aggregate value of £99,026 were granted by the Postal Insurance Fund, and of these 689 were Endowment Assurance Policies, of the total value of £80,183. Sixty-seven claims, amounting in all to £7,436, were paid on the death of insured persons. Since the fund was started, on the 1st of February 1884, 6,221 lives have been insured; and at the close of 1900-01, there were 5,403 active policies in existence (2,247 held by Post Office servants and 3,156 by servants of other Departments), and the aggregate sum insured was £575,496.

During the year under review there were 57 cases in which the mails were plundered by highway robbers, of which 42 were in British territories, and 15 in Native States. The figures for the preceding year were 48 and 8 respectively.

The number of cases in which the servants of the Post Office were found guilty of offences punishable by the law were 348, of which 164 were departmentally punished, while legal convictions were obtained in the remaining 184 cases. The defalcations and losses amounted to £2,122, as compared with £2,487 in 1899-1900 and £2,491 in 1898-99. A sum of £1,126 was recovered from the offenders or their sureties; £207 was charged against the Post Office Guarantee Fund; £2 10s. was written off as finally lost; and £786 remained unadjusted at the close of the year. The subscriptions to the Guarantee Fund realised from Post Office and District Post Officials during the year amounted to £1,864, and the balance at the credit of the Fund at the close of the year was £53,362.

The number of complaints made by the public was 24,035, against 22,393 in the previous year. In 33.17 per cent. of the whole number the complaints were ascertained to be well founded; 39.79 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 continuous delivery scheme in Bombay was still further extended, and was successfully introduced at Simla, and the delivery arrangements at Lahore, Rangoon, and all other places were thoroughly revised, a material increase to the staff of postmen being made in each case in order to provide larger facilities for the public.

In June and July 1900, 168 postal officers were despatched to China to establish field-post offices for the British contingent of the China field force.

The Postal arrangements of the Native states of Jhallawar and Kotah in Rajputana were amalgamated with the Imperial Post in the course of the year.

The parcel and money order exchanges with the Orange River Colony, which had been temporarily closed in consequence of the war in South Africa, and the parcel exchange with Greece, which had been suspended on account of quarantine restrictions, were resumed during the year.

New Zealand, the Orange River Colony, and the Transvaal were added to the list of Colonies which have adopted the Imperial Penny Postage scheme.

A direct exchange of parcels between India and Siam, in supersession of the previously existing exchange through the intermediate agency of the Post Office of Netherlands-India, was introduced in the course of the year under report.

The shortest time occupied in transit by the mail from London to Bombay was 13 days 8 hours and 10 minutes, while the average time for the year was 14 days 5 hours and 56 minutes. The quickest transit from Bombay to London was 13 days 1 hour and 29 minutes, while the average time for the year was 14 days 6 hours and 6 minutes.

TELEGRAPHS.

TELE-
GRAPHS.

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 55,055 miles of line, 181,883 miles of wire, and 296 miles of cable.

It is interesting to note, that in this, the Jubilee year of the telegraph in India, the earnings of the Department have exceeded those of any previous year by about £38,000, and that, with the single exception of 1897-98, when, owing to the disturbances on the North-West Frontier, the revenue from State telegrams was exceptionally high, the percentage of net revenue on capital outlay has been the highest on record. It will also be observed that the following items have increased 100 per cent. in the period noted against each :—

	Years.		Years.
Miles of line	- 15	Total number of paid messages	11
" " wire	- 13	" value " "	14
Number of offices	- 9	" receipts - -	14
" " private messages	10	Working expenses - -	16
Value of " "	13		

During the year, besides £4,827 in respect of military lines and equipments taken over by the Department, £212,462 were added to the capital expenditure, of which the greater portion was for new lines, the net additions to the system during the year comprising 2,146 miles of line, 11,117 miles of wire, and 13 miles of cable. The total capital outlay at the close of the year stood at £4,728,228.

The number of telegraph offices open to the public at the end of the year, including railway and canal offices, was 5,178, of which 3,942 were maintained by the Department. The net addition to the number of offices during the year was 230.

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 opened for Paid Traffic.		
					Departmental, Ordinary and Postal combined.	Railway and Canal.	Total.
Up to beginning of 1896-97 -	£ 3,917,908	46,373	142,926	263	1,461	1,533	2,994
During 1896-97 - - -	115,387	2,209	5,210	6	102	73	175
" 1897-98 - - -	162,469	1,722	6,688	—5	71	62	133
" 1898-99 - - -	151,941	1,463	5,826	11	85	101	186
" 1899-1900 - - -	*163,234	1,140	10,116	8	132	121	253
" 1900-1901 - - -	217,289	2,146	11,117	13	88	113	201
To end of 1900-1901 -	4,728,228	55,055	181,883	296	1,939	2,003	3,942

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

TELE-
GRAPHS.

A general view of the operations of the Department in 1899-1900, 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.
1896-97 - - -	5,077,584	£ 589,366	£ 414,338	£ 175,028	29·7	4·34
1897-98 - - -	5,713,227	719,530	417,771	301,759	41·94	7·19
1898-99 - - -	5,448,600	591,566	427,549	164,017	27·73	3·77
1899-1900 - - -	6,237,301	681,942	447,758	234,184	34·34	5·19
1900-1901 - - -	6,449,372	753,764	472,262	281,502	37·34	5·95

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 1900-01 the receipts of the Department were sufficient to cover both the working expenses and the amount expended on capital account, and there was therefore no net charge on Government revenues.

The total number of paid telegrams sent in 1900-01 amounted to 6,449,372, as compared with 6,237,301 in 1899-1900, showing an increase of 212,071 or 3·40 per cent. The corresponding increase in value was £63,974 or 11·55 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.	1899-1900.		1900-01.	
	No.	Value.	No.	Value.
Inland State - - -	702,055	£ 110,871	805,216	£ 153,318
Foreign State - - -	11,669	5,394	17,423	9,338
Total State - - -	713,724	116,265	822,639	162,656*
Inland Private - - -	4,700,753	294,485	4,744,179	294,071
Foreign Private - - -	822,824	143,135	882,554	161,132*
Total Private - - -	5,523,577	437,620	5,626,733	455,203
Total State and Private	6,237,301	553,885	6,449,372	617,859

* These figures were abnormally influenced owing to telegraphic correspondence in connection with the China expedition.

Inland private telegrams, compared with those of the previous year, which was, however, an abnormal year for this class of traffic, show an increase of 43,426 or 0·92 per cent. in number, but a small decrease of £414 or 0·13 per cent. in value. This falling off in value is due to the more extended use of the *deferred* class of telegrams.

TELE
GRAPHS.

The following statement shows the development of the revenue from inland private traffic for the last 10 years :—

	£
1891-92 - - - - -	179,695
1892-93 - - - - -	192,571
1893-94 - - - - -	203,486
1894-95 - - - - -	214,398
1895-96 - - - - -	231,687
1896-97 - - - - -	249,228
1897-98 - - - - -	263,573
1898-99 - - - - -	244,915
1899-1900 - - - - -	294,485
1900-1901 - - - - -	294,071

Inland State traffic shows an increase of 103,161 or 14·69 per cent. in the number of messages sent, as compared with the previous year's figures, the corresponding increase in value being £42,447 or 38·28 per cent. This large increase in value is principally due to the almost exclusive use of urgent class telegrams, in connection with the despatch of the China Expeditionary Force.

In Foreign Private telegrams there has been an increase of 59,730 or 7·25 per cent. in number, and an increase in value (Indian share) of £17,997 or 12·57 per cent. The increase in this class of traffic, which includes press and all foreign transit messages, is due chiefly to the disturbances in China (which led to the exchange of a large number of long cypher telegrams between the governments in Europe and America and their representatives in China), to the continuance of the war in South Africa, and to the reduction of through rates between Europe and Australia.

Foreign State telegrams show an increase of 5,754 or 49·31 per cent. in number, and of £3,944 or 73·10 per cent. in value (Indian share only). This increase is largely due to the China expedition.

In press messages there has been a decrease both in number and value, inland press messages showing a decrease of 5·53 per cent. in number and 6·72 per cent. in value, while foreign press messages show a decrease of 6·83 per cent. in number and 2·80 per cent. in value as compared with the figures of the previous year.

The gross receipts of the Telephone Companies during the year 1900 amounted to £29,005, an increase of £1,583, as compared with the previous year. Their average annual earnings during the past five years amount to £25,791.

The subscriptions to the Telegraph Department for telephone and similar services rendered during the same calendar year amounted to £10,742, being £466 more than the amount of the previous year. The average annual subscriptions for the past five years amount to £9,471.

Communication with Europe *via* Suez was maintained uninterruptedly during the year by the Eastern Telegraph Company. The Teheran route was interrupted for about 106 hours in all, as compared with 232 hours in the previous year, while the Turkish route was interrupted for 1,227 hours, as against 492 hours in 1899-1900.

The proportion of international traffic to and from India, exclusive of transit traffic, over the several routes to Europe for the year 1900-01 was as follows :—

—		Per Cent.	
		No.	Words.
Indo-European :—			
<i>Viâ</i> Teheran - - - - -		50·56	54·28
<i>Viâ</i> Turkey - - - - -		1·66	1·13
Persian Gulf, <i>viâ</i> Karachi - - - - -		1·06	1·31
Red Sea :—			
<i>Viâ</i> Suez - - - - -		46·72	43·28
Total - - - - -		100·00	100·00

TELE-
GRAPHS.

The bulk of the transit traffic was, as usual, carried *viâ* Suez.

Telegraphic communication with the Cape by the East Coast of Africa was interrupted between Aden and Zanzibar on two occasions for a total period of 21 days, but communication on these occasions was maintained by the cables on the West Coast of Africa.

As regards the East, communication with the Straits Settlements was maintained uninterruptedly during the year. For communication with Java and the Australian colonies the Sumatra land line was utilised for three days in January.

In China telegraphic communication between Tientsin and Peking was reported as interrupted on the 11th, and between Shanghai and Tientsin on the 16th of June, when the disturbances in China commenced. The Great Northern Telegraph Company, however, intimated that they would accept telegrams in plain language and forward them from Chefoo (which office was controlled by an European employé) up to Tientsin by the best means available. On the 23rd of August a cable was opened for international traffic between Chefoo and Taku, and the latter town was placed in communication with Tientsin by military telegraph till the 26th of January, when lines constructed by the Great Northern and the Eastern Extension Telegraph Companies were opened between Peking, Tientsin, and Taku. In September cables were laid from Chefoo to Port Arthur, Wei-hai-wei, and Shanghai. In October a cable was laid from Chefoo to Tsingtau, and extended in December to Shanghai.

The land route to China *viâ* Bhamo was interrupted beyond the Indian frontier for about 152 days in the aggregate, against 88 days in the previous year. The interruption for periods aggregating 74 days from about the middle of June to the end of August was probably due to the disturbances in China.

Communication with Siam over the Moulmein-Bangkok line *viâ* Kanburi was interrupted for about 31 days, as against 21 days in the previous year. The line from Moulmein to Raheng *viâ* Myawaddy was interrupted for about 41 days as compared with 22 days in the previous year. Only one interruption was within Indian limits.

Events of interest during the year were the grant of reduced rates for telegrams passing between the field force in South Africa and the British colonies which sent contingents; the grant of reduced rates for telegrams passing between members of the allied forces in China and their friends at home; and the reduction in through rates from Europe to Australia.

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. The system comprises two sections.—The first, called the Persian Gulf Section, consists of various cables, 1,722 knots in length, running from Karachi to Bushire, and Bushire to Fao, where a connection is made with the Ottoman Government line. It includes, also, the Mekran Coast land lines, 698 miles, with 1,392 miles of wire running from Jask to Gwadar, and thence to Karachi.

The second section, called the Persian Section, consists of land lines, 683 miles with 2,070 miles of wire, running from Bushire to Teheran.

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

The administration of the Indo-European Department, which in 1888 was amalgamated with the general telegraph system of India, was re-transferred to London with effect from 1st April 1893. 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.

INDO-
EUROPEAN
TELEGRAPH
DEPART-
MENT.

INDO-
EUROPEAN
TELEGRAPH
DEPART-
MENT.

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.
1896-97 - - -	£ 769,985	£ 98,967	£ 51,432	£ 47,535	6·17	51·9
1897-98 - - -	769,054	102,677	52,132	50,545	6·57	50·77
1898-99 - - -	770,264	97,722	51,235	46,487	6·03	52·43
1899-1900 - - -	768,736	102,541	56,234	46,307	6·02	54·84
1900-01 - - -	771,680	116,825	56,244	60,581	7·85	48·14

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

The capital account increased by £2,944, owing, in great part, to the purchase of Stores for future needs.

The total earnings of the Department show an improvement of £14,284 as compared with the previous year. This is due principally to an increase in Indian and Trans-Indian traffic, chiefly owing to the war in China.

The expenditure remained at practically the same figure as in the preceding year, increased expenditure on cable maintenance, in particular, being counter-balanced by smaller expenditure on signalling and line maintenance of the Persian section.

The net result is a profit of £60,581, or 7·85 per cent., on the capital, against 6·02 realised last year. This percentage of 7·85 is the highest dividend yet earned by the Department.

Under the Joint Purse Agreement, the share of the Department was £12,553 more than last year, being £124,421 as against £111,868 in 1899-1900. The amount paid into the Joint Purse for the year under review was £134,737.

The Australian traffic was somewhat less than in the year preceding, the Department drawing out of the Australian Message Fund £10,436 as against £10,840. This is an increase of £4,201 over the revenue derived by the Department in 1889 from the Australian traffic, before the Fund Agreement was entered into.

There was nothing of particular interest to report during the year.

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.

In Bengal the number of pupils in public institutions fell from 1,566,018 in 1899-1900 to 1,520,137 in 1900-01, while in private institutions the number fell from 121,577 to 118,191. The total number of scholars (1,638,328) represented 14·2 (as against 15·4) per cent. of the total population of school-going age, the boys (1,534,667) representing 26·6 per cent. (as against 28·9 per cent.), and the girls (103,661) 1·8 (as compared with 1·9) per cent., respectively, of the male and female population of school-going age. Public schools declined from 53,891 to 52,066 and private schools from 10,762 to 10,076. This decrease has been assigned to a number of causes, such as the prevalence of plague, agricultural depression, and visitation of floods, and also to closer supervision, which has resulted in the elimination of fictitious schools and unduly swollen entries of attendance.

The total expenditure on public instruction amounted to £771,706 as compared with £759,637 in the previous year. This amount was contributed in the following proportions :—Provincial revenues, 20·1 per cent.; district funds, 10·7 per cent.; municipal funds, 0·8 per cent.; fees, 46·2 per cent.; all other sources, 22·2 per cent. The outlay was distributed as follows :—University education, £75,819; secondary schools, £266,553; primary schools, £214,497; special instruction, £42,165; buildings, furniture, &c., £34,276; direction, inspection, &c., £61,402; scholarships, £15,823; miscellaneous, £61,171.

The number of colleges in Bengal was 44, as in the previous year, of which 25 were unaided by Government. The number of students in Arts Colleges rose from 7,868 to 8,199; 1,688 candidates entered for the B.A. examination, as against 1,667, but the number of successes fell from 461 to 311. For the M.A. examination, out of 219 candidates (as compared with 206), 91 as against 92 passed. For the F.A. examination, the number of students sent up rose from 3,037 to 3,273, but the number of passes declined from 1,142 to 1,039.

EDUCATION.

The number of Muhammadan students fell off during the year from 463,343 to 458,192. This, however, would not seem to point to any retrogression of Muhammadan education, as the percentage of the Muhammadan pupils showed an increase, both in public and private institutions, rising in the former from 24·6 to 25·01, and in the latter from 64·1 to 65·5.

The question of remodelling the system of Vernacular education in the Province has long been under the consideration of the Government, and a new scheme is to be brought into gradual operation. The two main principles involved in this scheme are the training of very young children on the Kindergarten system and the employment of a Vernacular, and not an English, basis for teaching in the lower classes of high schools.

North-Western Provinces and Oudh.

The total expenditure on education in the North-Western Provinces and Oudh amounted to £303,683 as against £300,343 in 1899-1900. The increase was shared by all kinds of institutions, and was mainly in direct expenditure. The provincial revenues contributed an additional sum of £4,645 on colleges; on general schools the expenditure from provincial revenues was slightly lower, whereas on special schools there was an increased outlay from the same source of £1,173, mainly on the reformatory school at Bareilly, which was placed under the Educational Department during the year. Local funds contributed an increase of £1,380, which was devoted to raising the pay of Vernacular school teachers. The expenditure from municipal funds was nearly identical with that of 1899. With regard to outlay there was a decrease in the amount spent on inspection charges and on buildings, while the sum devoted to scholarships and to apparatus and equipment shows an advance on the previous year's figures.

There were 7,620 public and 6,300 private institutions in the provinces during the year; the former figure representing a slight decrease and the latter a corresponding increase on the returns for 1899-1900.

The total number of pupils under instruction in the provinces was 433,499 as against 425,616 in the preceding year. Of this number, which represented 6·1 (as against 6·05) per cent. of children of school-going age, 352,578 were in public and 80,921 in private institutions. Male scholars represented 11·2 of the boys and female scholars 0·6 of the girls of school-going age. The corresponding percentages in 1899-1900 were, respectively, 11·11 and 0·61. As regards statistics of race and creed, 76·69 (as against 76·23) per cent. of the pupils were Hindus and 20·75 (as against 21·06) per cent. Muhammadans. Native Christians accounted for 1·55 per cent. of the total number.

Turning to Collegiate Education, the average enrolment was 1,248, or 182 fewer than in the previous year. The number of candidates entering for the Intermediate examination rose from 472 to 526, but the results were not very satisfactory, less than 38 per cent. passing. The alteration in the age for admission to the Entrance and School Final examinations and the raising of the standard for matriculation should in due time produce a marked effect and materially improve the quality of students who proceed to the higher examinations.

Punjab.

The total expenditure on education for the year in the Punjab was £220,136 as against £221,552 in the previous year. This amount was contributed in the following proportions:—provincial funds, 23·9 per cent.; local funds, 17·4 per cent.; Imperial funds, 3·9 per cent.; municipal funds, 10·5 per cent.; fees, 28·4 per cent.; other sources, 15·9 per cent. The outlay was distributed as follows:—Collegiate education, £17,532; secondary schools, £83,232; primary schools, £38,283; special institutions, £12,146; scholarships, £10,817; other charges (including direction, inspection, buildings, &c.), £58,126.

The number of public institutions in the province rose from 3,064 to 3,123, while the number of pupils attending them increased from 186,759 to 189,405. The increase extended to almost every class of institution. Private institutions declined from 4,803 to 4,356, and the number of pupils attending them from 75,560 to 69,759. The total number of pupils under instruction was 259,164, of whom 235,494 were boys and 23,670 girls. The boys and girls represent 12·97 per cent. and 1·52 per cent., respectively, of the male and female population of school-going age. The corresponding percentages in 1899 were 14·19 and 1·57.

The number of Muhammadans under instruction fell during the year from 121,816 to 119,247. A growing preference is noted on the part of the

EDUCATION.

Muhammadan community for public schools, especially those in which English is taught. Classified by creed, the percentages of children under instruction to the population of school-going age were as follows:—Muhammadans, 11·67 per cent. of boys and 1·29 per cent. of girls; Hindus, 16·37 per cent. of boys and 1·51 per cent. of girls; Sikhs, 17·76 per cent. of boys and 2·58 per cent. of girls. Sikhs show an advance in all classes of institutions except boys' private schools.

The number of colleges in the province is now 14, two new Arts colleges having been opened during the year under report. In all there were 1,429 students receiving an university education, exclusive of 248 law and 78 engineering students. The number of candidates appearing in the various Arts examinations of the Punjab University was somewhat less than in the preceding year, but the percentage of passes was perceptibly larger. As regards the different classes of public institutions, secondary schools for boys showed a rise of 24, while primary schools of all kinds increased by 35. Girls' schools numbered six more than in the previous year, while the number of pupils rose by 842. On the whole, female education progressed during the year.

The total expenditure on education in Burma rose from £107,196 to £117,120, direct expenditure increasing by £5,972. This amount was contributed in the following proportions:—Provincial revenues, £54,842; local funds, £13,386; municipal funds, £11,688; fees, £23,282; other sources, £13,922. The outlay was distributed as follows:—University education, £4,555; secondary schools, £47,608; primary schools, £22,469; special education, £8,892; buildings, &c., £15,646; direction, inspection, scholarships, and miscellaneous, £17,950.

The number of schools rose from 17,050 to 17,599, and the number of scholars from 287,987 to 307,076. Public institutions numbered 4,481, with 159,394 pupils; private institutions, 13,118 with 147,682 pupils.

With regard to collegiate education, the number of colleges remained the same, viz., one first grade and one second. The former (Rangoon College) had a daily average attendance of 120 against 89; 12 students entered for the B.A. and 52 for the F.A. examination, and of these 6 and 22 respectively were successful. There was a substantial improvement in the number of middle school and primary passes.

Except as regard the number of primary schools, which have shown a backward tendency for several years past, the statistics as a whole give evidence of satisfactory progress. Special measures are being undertaken with a view to furthering primary education, and it is hoped that the decline in the number of primary schools may be arrested.

The total expenditure on education for the year in Assam was £54,812, as compared with £48,095 in 1899-1900. Expenditure from provincial funds rose from £14,532 to £17,421, the increase being chiefly accounted for by the outlay on buildings and apparatus, which amounted to £4,704 as against £2,440 in the preceding year. Local funds contributed £14,354 and municipal funds £459, as compared with £14,106 and £488 respectively in 1899-1900. Expenditure from other sources totalled £22,578. Fees paid for tuition increased from £9,639 to £10,041.

The year was one of steady progress in the Education Department. The total number of institutions, indeed, fell from 3,480 to 3,458, but the number of pupils attending them rose from 107,668 to 109,800. During the past 10 years the number of educational establishments has increased by 36 per cent., and the number of persons receiving instructions by 43 per cent. Of the 3,458 schools, 3,196 were public (as against 3,177 in 1899-1900) and 262 (as against 282) private. Of the scholars 101,031 were boys and 8,769 girls. These figures represent 21·43 and 1·96 per cent., respectively, of the male and female population of school-going age. The corresponding percentages in the preceding year were 23·56 and 2·20, but these results were calculated on the figures of the previous census, while those for 1900-01 are reckoned on those of the census of February 1901.

The number of students attending the Murarichand Second Grade College in Sylhet, the only Arts college open during the year, increased from 39 to 49. The buildings for the new Government college at Gauhati were completed during the year, and the college is now open. Hitherto, youths

EDUCATION. from Assam desiring to obtain a University education have had to enter colleges in Bengal, which has been a sensible impediment to the spread of higher education in the province.

Central Provinces. The year which ended on the 31st March 1901 was one in which the conditions were highly unfavourable to educational progress. Famine prevailed up to the autumn of 1900, and the census, taken early in March 1901, with the necessary preparations for it, was a disturbing element and had an adverse effect on school discipline and attendance.

The number of schools in British territory in the Central Provinces rose from 2,003 to 2,106, but the number of pupils fell from 118,021 to 114,009, the average number of scholars per school being 54, as compared with 59 in the previous year. In the Feudatory States institutions declined from 298 to 288, while pupils numbered 13,404 as against 15,880. On the whole, however, the effects of famine were less serious than might have been expected, and do not seem likely to be permanent. There was no considerable fluctuation in the number of students attending colleges; and the results, judged by the examinations, were fairly satisfactory.

The total expenditure on education in British territory amounted to £63,350 as against £63,978. This sum was derived from the following sources:—36·1 per cent. from provincial funds; 22·3 per cent. from district funds; 11·9 per cent. from municipalities; 13·2 per cent. from fees; and 16·5 per cent. from other sources. The proportional outlay was as follows:—Collegiate education, 7·7 per cent.; secondary education, 29·2 per cent.; primary education, 57·5 per cent.; technical education, 5·7 per cent.

The percentage of children under instruction to the population of school-going age was 7·7 for the whole province. In British territory the male percentage was 13·1 and the female 0·9; in Feudatory States the percentages were 7·9 and 0·29, respectively, for girls and boys. A feature of the year's educational administration was the change made in the matter of scholarships. It has been decided that, for the future, scholarships payable from the public funds shall only be awarded to a candidate who, by reason of his poverty, would otherwise be unable further to pursue his studies. In respect of special institutions, it is to be noted that the reformatory school came during the year under the control of the Education Department.

A Committee has been appointed to revise the course of instruction at the Rajkumar College at Raipur, an institution on which the officiating Chief Commissioner bestows high praise. It is intended for the training of the sons of feudatory chiefs and nobles of the province.

Berar. The famine that prevailed till October 1900, and the subsequent good harvest and auspicious season for marriages, all contributed to the fall in the number of schools and scholars and in attendance in Berar. The total number of institutions declined from 1,098 to 1,046, and of pupils from 48,555 to 46,675. The 44,417 boys at school represented 20·8 per cent. of the male population of school-going age (according to the census of 1901), and the 2,258 girls 1·4 per cent. of the female. There were only five private schools, which were attended by 423 scholars (213 girls and 210 boys).

The total expenditure on education for the year amounted to £29,204 (as against £29,966). This sum was derived from the various sources in the following proportions:—General revenues, 48·66 per cent.; district funds, 26·67 per cent.; municipal funds, 3·96 per cent.; fees, 16·24 per cent.; subscriptions, 4·38 per cent. The outlay was distributed as follows:—Direction and inspection, £3,297; miscellaneous charges, £1,846; secondary education, £5,310; primary education, £17,499; special instruction, £753; grants-in-aid and buildings, £499.

The Hindustani schools fared better than in the preceding year. Muhammadan pupils under instruction numbered 6,946 as against 6,795 in 1899. The number of pupils examined fell from 2,451 to 2,396, but 1,715 candidates were successful as compared with 1,586 in the preceding year. The number of low-caste pupils in all classes of schools rose, but their examination record was less satisfactory.

Bombay. The total expenditure on education in Bombay rose from £492,476 in 1899-1900 to £493,364. Provincial funds contributed 27 per cent. of this

EDUCATION. sum; local and municipal funds jointly contributed 18·8 per cent., while fee receipts covered 21·6 of the total expenditure. The outlay was distributed as follows:—Collegiate education, £32,090; secondary schools, £132,995; primary schools, £231,159; special instruction, £34,708; buildings and apparatus, £18,657; direction, inspection, scholarships, and miscellaneous, £43,755.

The total number of institutions of all kinds was 12,132 (as compared with 12,426 in the previous year and 12,639 in 1898-99). Public institutions fell from 9,663 to 9,617, and private institutions from 2,763 to 2,515. The total number of pupils was 632,860, of whom 569,133 (as against 561,708 in the preceding year) were in public institutions. The actual numbers of male and female scholars were 543,115 and 89,745 respectively, the boys representing 27·62 per cent. of the male, and the girls 4·83 per cent. of the female population of school-going age. The corresponding percentages in 1899-1900 were 26·01 and 4·51 respectively.

The number of pupils attending primary schools was somewhat in advance of that recorded for the previous year, and, despite a falling off in the number of primary institutions, the figures may be regarded as satisfactory in the circumstances. Famine in the northern division, with the addition, in the central division, of plague, naturally had a serious effect on the attendance at schools of every kind, but in the southern division, where a less unfavourable season was experienced, the number of scholars increased by some 10,000, a significant indication of the true state of education in the Presidency.

With regard to university education, the chief event of the year was the approval by the Senate of the scheme for the introduction of the Vernaculars into the M.A. curriculum. The total number of students at the arts colleges increased from 1,744 to 1,826 in the year under review. The condition of the Muhammadan education in the Presidency is still far from satisfactory, though a slight improvement is reported. A conference was held at Surat, in March 1901, to consider the whole question, and the Government hope that the movement thus inaugurated may be fruitful in good results throughout the Muhammadan community. In regard to night schools the report is most discouraging, and this class of institution seems quite unable to maintain the position it once enjoyed.

The total expenditure on education in the Madras Presidency rose from Madras. £477,544 to £495,806, which was contributed in the following proportion:—Provincial revenues, 26·19 per cent.; local funds, 10·79 per cent.; municipal funds, 3·68 per cent.; fees, 31·13 per cent.; other sources, 28·21 per cent. The outlay (exclusive of surplus fees and expenditure on indigenous and private schools) was distributed as follows:—Arts colleges, 9·01 per cent.; professional colleges, 3·43 per cent.; schools (general), 59·8 per cent.; schools (special), 7·13 per cent.; general or indirect charges, 20·63 per cent.

The total number of pupils under instruction fell from 862,991 to 850,224, the boys and girls representing, respectively, 25·3 per cent. of the male and 4·4 per cent. of the female population of school-going age. Institutions totalled 26,926, of which 21,215 were public and 5,711 private, the corresponding figures for the preceding year being, respectively, 27,450, 21,913, and 5,537. There were, on the 31st March 1901, 731,207 pupils at public and 119,017 at private schools.

The number of candidates admitted to university degrees during the year rose from 511 to 532. For the M.A. degree examination, 36 were examined, and 19 passed, as compared with 9 out of 27 in 1899. One of the successful candidates was a Native Christian Lady. The number of first-grade colleges was 11, and they had 30 M.A., 1,198 B.A., and 1,012 F.A. students, against 18, 1,006, and 884, respectively, in the previous year. Second-grade colleges increased in number from 29 to 30.

The number of primary schools for boys fell from 20,075 to 19,483, and their strength from 598,704 to 583,197. In upper secondary schools for boys, pupils numbered 43,485, and in lower secondary schools 35,786. With regard to female education, there was a fall of 7·1 per cent. in schools, and 0·7 per cent. in strength; three second-grade colleges for women existed as in the previous year. The decline is attributed to the unfavourable conditions of the year due to the prevalence of scarcity and plague.

EDUCATION.
oorg.

The year under notice was not very favourable to the progress of education owing to the high price of food grains and, in some parts of the district, to the prevalence of small-pox. As a result, there was a decrease of about 300 pupils in Government schools. There was, however, a rise in the number of pupils attending aided schools, as well as private schools. The total number of scholars under instruction was 4,723, the boys representing 25·399 per cent. of the male, and the girls 7·518 of the female population of school-going age. The corresponding figures for 1899 were, respectively, 4,800, 26·99, and 7·924.

The number of schools declined from 108 to 101, of which 76, as in the previous year, were public institutions.

The total expenditure on education rose from £2,122 to £2,616, the increase being chiefly under the head of "Instruction."

LITERA-
TURE.

LITERATURE AND THE PRESS.

	English	Bilingual, English and another language	Sanskrit	Arabic	Persian	Urdu	Hindi	Bengali	Punjabi	Marathi	Gujarathi	Tamil	Telugu	Burmese	Cantonese	Assamese	Regional (classified in a separate column)
Bengal	286	87	99	2	3	11	81	319	-	-	-	-	-	-	-	-	150 (mostly Sanskrit and Bengali)
N.W.P. and Oudh	111	65	57	29	62	535	457	-	6	1	1	-	-	-	-	-	156, chiefly (a) Sanskrit and Hindi, (b) Arabic and Urdu.
Punjab	80	18	15	35	51	183	85	-	341	-	-	-	-	-	-	-	73, chiefly Arabic and Urdu.
Mysore	3	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Benar	-	-	-	-	-	-	-	-	17	-	-	-	-	-	-	-	-
Bombay	69	72	26	6	-	17	18	-	197	223	-	-	-	-	-	10	78, chiefly Sanskrit and Hindi, or Gujarathi, 48 (Pali and Burmese).
Burma	12	4	-	-	-	-	-	1	-	-	-	2	-	41	-	-	-
Assam	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-
Madras	299	57	-	-	-	2	-	-	4	-	286	258	-	25	-	-	-
Central Provinces	3	1	1	-	-	-	17	-	-	8	-	-	-	-	-	-	-

This table gives concisely the number of publications throughout India in European, Eastern classical, and the principal Indian vernacular languages. With regard to the Madras Presidency, it has not been possible to furnish an exact analysis. In addition to the figures given above it may be noted that 88 books were published in the Indian classical languages, and 175 in more than one language in that province.

The number of bi-lingual and polyglot publications makes classification difficult; other languages in which books were published during the year were Malayalam (39), Tulu, and "Sourashtra"—by which perhaps Gujarathi is meant (in Madras); Uriya (in Madras and Bengal); Konkari, Avesta, and Hebrew (in Bombay); Sindhi (in Bombay and the Punjab); Garo, Mundari, Manipuri, Musalmāni-Bengali, Santali, Nepalese, and Tibetan (in Bengal); Khassi (in Bengal and Assam); Pali (in Bengal and Burma); Gurkhalī and Gondi (in the N.W.P.); Balochi, Kashmiri, and Pashto (in the Punjab); and Sgau-Karen (in Burma).

Bengal.

The number of publications received in the Bengal Library during 1900 was 2,590 (as against 2,178 in the previous year.) Of this number 1,895 were books and 695 periodicals. 1,616 of the books were original works and the rest republications and translations. There were 832 original publications in the Bengali language and 257 in English. Sanskrit publications numbered 99 in all, while Uriya claimed 140 original works and 18 translations and republications. Classified as to subjects, language stands first as regards original compositions, but there was a considerable output under the heads of religion, poetry, and fiction. The drama was also fairly represented. Reference is made to the influence of Shakespeare on the Bengali drama; imitations of Lady Macbeth's speech prior to the murder of Duncan are said to be very common in Bengali tragedies, while the year under review saw the appearance in Bengali of a new and fairly accurate metrical version of "Macbeth." The tragedy of *Pāshāni*, which also appeared during the year, deals with the mythological story of Indra and Ahalya. Translations of Banim's "Damon and Pythias" and of Sheridan's

LITERA-
TURE

"Pizarro" were also published during the year. Bengali fiction was represented by 92 publications, but the general level of merit seems to have been poor, most of the works being founded on English novels of an inferior type. Nothing calling for special comment appeared in the field of History, but an account of the Boer War in Bengali deserves mention. In poetry, English influence for the most part predominates; an epic poem entitled *Sura Sangita* (Songs sung to gods), founded in part on Milton, is spoken of in terms of high praise.

The number of periodicals showed a slight increase on the figures for the preceding year; of the new papers, the majority were devoted to literature and science. The *Sāhitya Sanhita*, a literary and philosophical journal, is especially noticed.

The number of publications catalogued during the year was 1,565. This number included 362 works under the head of "Miscellaneous," while the next most richly represented subjects were Poetry (318), Religion (281), and Language (231). Of the total number of works, 363 were educational in character. Speaking generally, fiction and speculation were, as usual, the chief characteristics of indigenous literature, history being confined to a small group of Muhammadan writers, and science being practically unrepresented. The output of Urdu fiction was again large; as usual, a large number of these works are mere translations or adaptations of English novels. A History of England (*Pashāni-Britannia*) in Urdu deserves notice. Hindi publications included a number of philosophical works, while there was also a considerable output of fiction in that language. No original works were published in Sanskrit. Among Persian publications a History of Russian Rule in Asia calls for remark.

The total number of publications registered during the year shows a slight increase, from 1,284 to 1,301. Urdu again claims the largest share (485 as against 534 in 1899), while Punjabi is second with 341 (as against 308) works. Classified according to subjects, Poetry stands first and Religion next, as in the preceding year. A further decrease is noted in biographies, but under the head of Drama the number of works increased. As regards fiction, the influence of the modern novel is steadily increasing, and the year under review saw the appearance of a translation of Lytton's "Last Days of Pompeii," and what appears to be an adaptation of the late Mr. Grant Allen's "The Woman who Did," while the *Tukhm-i-Badi*, a detective story of the modern type, is said to possess considerable merit. A Punjab adaptation of the "Winter's Tale" and "The Merchant of Venice," taken evidently from Lamb's prose version, deserves mention. Poetry seems to have made little advance during the year; in religion the Muhammadans played the most active part. Science received but little attention, and no work on travel appeared during the year. The drama, on the other hand, seems to have made some progress.

1,158 publications were registered during the year, as compared with 1,220 in 1899. Of these, 695 were books, the Gujarathi language accounting for 223 of the number. Of the Gujarathi publications, poetry again claimed a larger proportion than any other subject, but a comparison with the analysis for the previous year points to the fact that poetry and the drama were in 1900 somewhat neglected in favour of religion and fiction. Perhaps the most striking feature of the year's output, viewed as a whole, is the large number of publications on religious subjects. Several noteworthy historical works were published in the Marathi language, while under the head of Biography great interest attaches to the Gujarathi "Lives of Great Women," written in collaboration by three Parsi ladies. Among the "great women" are included the late Queen Victoria, Lady Jane Grey, Maria Theresa, Marie Antoinette, and the mother of Napoleon I.

Periodicals totalled 463, of which 315 are classed as "Miscellaneous." As regards language, 228 were in Gujarathi, 109 in Marathi, and 77 in English.

In Madras the number of publications registered was 1,221, or 37 more than in the preceding year; 1,088 of these were original works. With regard to language, English stands first, but the output in Tamil and Telugu was considerable.

LITERA-
TURE.

Classified as to subjects, religion claimed 435 works; 265 publications were classed as "Miscellaneous," while "Language" and "Poetry" accounted for a considerable number of books. The year's output calls for little remark, no work of high literary merit having appeared. *Kanakangi*, a Telugu drama, by a Madras graduate, is well spoken of, but would seem to display little or no originality. Novels were less abundant than in other provinces, and such as did appear were of no high order.

Vernacular newspapers published during the year numbered 130 in all. The largest circulation (1,800) was obtained by the "Messenger of Truth," a religious monthly in Telugu.

Other
Provinces.

Assam produced 28 publications, of which 16 were in Assamese, 3 in English and Assamese, 7 in Khassi, and 2 in Khassi and English. In the Khassi language, the most important book was a "History of India" by Babu Jiban Ray, which is said to be a work of genuine merit, though the author's arrangement of his materials leaves much to be desired. In Burma 115 publications were issued, Burmese and Pali-Burmese together accounting for 87 of the total. As regards subjects, religion was first. In the Central Provinces only 30 publications were registered, of which 17 were in Hindi and 8 in Marathi; minor educational publications and religious poetry comprise the chief part of the year's productions. The output in Berar calls for little comment, while nothing is reported from Coorg.

CHAPTER XIV.

EMIGRATION AND MIGRATION.

I. 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, the Straits Settlements, and for employment under Government in East and Central Africa, is 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 Indians who emigrate thither. Emigration otherwise than under contract to labour is not controlled by legislation.

There were six agencies at work in 1900, as in the previous year. The British Colonies of Demerara, Trinidad, Jamaica, Natal, and Fiji again indented for labourers. No labourers were required for the Dutch colony of Surinam, which in 1899 had asked for 600 coolies, but Mauritius, which had made no demands in the previous year, again started operations during 1900. The terms of agreement remained the same as in the preceding year, except those for the colony of Trinidad, in which two important alterations were made: (1) the period of service for female emigrants was reduced from five to three years, and (2) employers of labour are now required to provide rations for 12 instead of 3 months.

There was an increase both in the demand and supply of labour during 1900, Demerara still being first in regard to the number of coolies demanded. In the case of Natal the demand was less than half, in that of Fiji more than double that of 1899. 18,489 coolies were recruited during the year, as against 14,051 in 1899. Of these, 55 per cent. were registered in the North-Western Provinces and 26½ per cent. in Oudh; other percentages were 2½ in Bengal and 9 in Bihar. The corresponding figures in the previous year were 54, 29, 5, and 11 per cent. respectively. Emigration from the congested area of Bihar does not, for some reason, increase in popularity. After a lapse of several years, recruitment was once more extended to the Punjab and the Central Provinces, where 1,360 coolies were registered.

It is satisfactory to note that of the 1,088 recruiting licences granted during the year, only 27 were cancelled for misconduct, whereas in 1899 43 were cancelled out of a total of 801. The total number of emigrants who passed through the sub-dépôts was 19,003, and of these 14,992 actually arrived at Calcutta, while the number that embarked was 11,674. With regard to rejections by the agencies for unfitness, the figures for the year under report are an improvement on those of former years, but they are still higher than might be expected if the examination previous to the emigrants' despatch to Calcutta were more carefully made.

Of the coolies that embarked at Calcutta during the year, 10,095 were Hindus and 1,579 Muhammadans. The distribution among the various colonies was as follows:—Demerara, 4,588; Trinidad, 1,878; Jamaica, 670; Mauritius, 1,753; Natal, 481; and Fiji, 2,304. Steamships conveyed emigrants to Mauritius and Natal only, sailing vessels proceeding to the other colonies. The death rate on the whole seems to have been somewhat high, being 2·30 per cent. on 15 sailing vessels, as compared with 1·05 per cent. on 17 vessels in the preceding year. A large proportion of the deaths (66 out of 215) was due to outbreaks of cerebro-spinal meningitis, a very fatal malady, of which the causation is still obscure; measles and its *sequelæ* caused a number of deaths, and one ship, bound for Demerara, had a bad outbreak of cholera.

EMIGRATION.

The number of emigrants who returned from the colonies was 3,147 (as against 2,421 in 1899). Demerara reported the largest number (1,145), with an average saving of Rs. 139-8 per head; the lowest number of repatriations was from the French colony of Réunion, only 17 emigrants returning from there during the year, whose savings were *nil*. The death rate among returning emigrants was 2·78 per cent., as against 2·12 per cent. in the previous year.

Judging from the money order remittances by resident immigrants in the various colonies, it would seem that the coolies of Natal are either much better off or very much more provident than those elsewhere. There was a remarkable increase in the remittances from that colony during the year under review.

Madras.

Agencies were maintained at Madras by the governments of Natal and Mauritius. The Natal dépôt admitted 9,607 persons during the year, while 519 remained over from the previous year. Twelve shipments were made in all, and of those that embarked (5,017), 2,920 were men, 1,171 women, and 926 children. 288 persons returned from Natal with aggregate savings of about £4,807. Emigration to Mauritius, which was stopped from the 1st April 1899, was resumed in 1900. A total of 1,476 persons embarked from three districts—Vizagapatam, Madras, and North Arcot; 490 persons returned from Mauritius, as against 221 in 1899, but their savings could not be ascertained. There was no emigration to the French colonies, but 952 emigrants returned from those colonies with savings amounting to £778.

At Negapatam 8,838 persons under contract embarked for the Straits Settlements, against 5,090 in the previous year.

As regards free emigration, 30,752 persons embarked for the Straits Settlements (as against 15,176 in 1899), while 194,270 (as against 76,662) went to Ceylon.

Bombay.

Emigration from the port of Bombay was again prohibited throughout the year under the Epidemic Diseases Act. From Karachi 8,032 emigrants embarked for Uganda for service on the railway, as against 9,479 in 1899 and 9,903 in 1898. As in previous years, the emigrants were kept under observation for not less than 10 days at Budhapur, and on arrival at camp were disinfected, with their belongings.

The number of emigrants that returned during the year to Bombay was 21, and to Karachi 3,632. For the most part these men made no complaints. Medical examination revealed among them 332 cases of various diseases, which were sent for treatment to the civil hospital, where 15 ended fatally; 20 deaths occurred among emigrants on the homeward journey.

MIGRATION.

II. MIGRATION.

Assam.

The most important question occupying the attention of the Government during 1900 was the amendment of the law relating to immigration into Assam. Hitherto immigration into the labour districts of that province has been regulated by Act I. of 1882, as amended up to date. Since the close of the year under notice, however, the Assam Labour and Emigration Act, No. VI. of 1901, has been passed, not only amending the 1882 Act, but also embodying, with modifications, the Inland Emigrants' Health Act, No. I. (B.C.) of 1889. A short account of this important measure will be found in the chapter dealing with the year's legislation.

The year under review saw a great increase in immigration into Assam. The number of coolies imported was almost double that of 1899, and considerably in advance of the figures for 1898. The scarcity prevailing in the recruiting districts, and the consequent cheapness of the supply, facilitated the operations of recruiters; the number of coolies imported, however, was still considerably short of the figures recorded for the previous famine years, 1896 and 1897. The total number of labourers that entered Assam during the year rose from 31,908 to 62,733, the total number of adult immigrants increasing from 25,872 to 45,044. There was a marked increase in the number of immigrants from the Central Provinces, evidently due to the famine. An

increase from 11,192 to 17,605 was also shown in the number coolies imported from Chota Nagpur and the Sonthal Parganas.

As usual in a famine year, the "Sardari" system of recruitment was comparatively successful. 16,728 labourers were recruited by garden sardars during the year, as against 7,571 in 1889 and 12,080 in 1898. The large number of children accompanying the immigrants was a satisfactory feature, pointing as it does to family emigration. As regards the distribution of labourers, of the total number of adult immigrants into the province, 29·07 per cent. only were imported into the Surma Valley, and of that proportion only 4·8 per cent. were imported under Act I. of 1882.

The Assam-Bengal Railway was for the first time largely used to convey coolies to the gardens in Cachar. In 1899, out of a total of 2,542 coolies imported into that district, only 272 were brought by railway. In 1900, 3,685 coolies were imported by railway and 3,225 by steamer. Conveyance by railway was also on the increase in Sylhet. The mortality during transit showed a considerable increase, 26 deaths being recorded *en route* and 42 at the river depôts, against 0 and 5, respectively, in 1899. No deaths occurred in any of the railway depôts during the year. The death rate per thousand of the whole labour force was 29·4 (as compared with 27·5 in 1899). The year was, on the whole, a healthy one, and the increase in mortality is explained by the increase in new importations and the poor condition of many of those who came from the famine districts. The reported birth-rate among the tea-garden population rose from 26·3 in the preceding year to 27·6 per thousand. The number of gardens classed as unhealthy was 34, or 4·1 per cent. (as against 31, or 3·7 per cent., in 1899).

The total labour population at the close of the year was 662,471. The total number of contracts executed under the Act was 53,658, of which 23,961 were executed in the actual labour districts. The number of agreements dissolved by mutual consent was 2,533.

The relations between employers and labourers remained unchanged during the year. Ten cases of serious rioting were reported by the district officers, of which five took place in the district of Lakhimpur. There was a decrease in the number of desertions of Act labourers in all districts except Lakhimpur and Sibsaigar. The percentage of desertions among all adult labourers was 3·6, as compared with 3·7 in 1899 and 4·43 in 1898. There was thus an improvement in the proportion, though the total number of deserters rose slightly, from 14,807 in the preceding year to 15,021. Of 430 complaints made under Act XIII. of 1859, convictions resulted in the case of 139 coolies. Four shelters for sick and destitute coolies attached to dispensaries were maintained in Cachar and seven in Sylhet. Of the three shelters for able-bodied vagrants in Sylhet, one was closed during the year.

* The number of immigrants who passed the principal ports of the province during the year under notice was as follows:—Akyab 11,193 (as against 16,242 in the previous year), Rangoon 151,285 (as against 149,922), Moulmein 666 (as against 858).

The number of emigrants from each port increased considerably. The figures were as follows:—Akyab 19,811 (as against 16,974), Rangoon 98,328 (as against 86,819), Moulmein 2,397 (as against 1,894).

No registered emigration to Assam took place from Madras during the year. The number of free passengers to Burma was 99,038, as compared with 78,452 in the previous year; 236,950 emigrants returned to Madras during the year, as against 199,985 in 1899. The increase occurred chiefly in persons returning from Ceylon.

CHAPTER XV.

TRADE AND MANUFACTURES.

(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 1901, was valued as follows:—

—	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.
By SEA.	£	£	£	£	£
Private Imports :					
Merchandise - -	47,862,553	46,177,775	45,586,894	47,141,240	50,851,924
Treasure - - -	8,716,902	13,650,857	11,922,638	13,972,342	10,975,738
	56,579,455	59,828,632	57,509,532	61,113,582	61,827,662
Private Exports :					
Foreign Merchandise re-exported - -	2,689,091	2,500,781	2,247,464	2,195,105	2,139,021
Indian Merchandise - -	66,587,107	62,524,067	72,900,185	70,475,902	69,470,232
Treasure - - -	3,283,927	4,756,113	4,938,787	5,300,027	4,982,970
	72,560,125	69,780,961	80,086,436	77,971,034	76,592,223
Government Transactions :					
Imports { Stores -	2,882,363	2,920,248	2,483,791	3,061,745	3,077,803
Treasure -	6,140	36,221	7,771	10,115	5,408,769
Exports { Stores -	46,532	63,672	52,168	71,423	233,024
Treasure -	7,737	9,652	2,160	4,232	4,501,960
	2,942,772	3,029,793	2,542,890	3,147,515	13,221,556
Total Trade by Sea -	132,082,352	132,639,386	140,138,858	142,232,131	151,641,441
By LAND					
Imports - - -	3,758,351	3,756,401	4,053,886	4,692,714	4,732,855
Exports - - -	3,291,381	3,287,798	3,486,489	3,720,555	4,380,463
Total Trade by Land -	7,049,732	7,044,199	7,540,375	8,413,269	9,113,318
Excess imports of treasure - - -	5,431,378	8,921,313	6,989,461	8,678,198	6,899,577
Net excess of exports over imports of merchandise, Government transactions, and treasure by sea - -	13,146,437	7,060,184	20,142,670	13,861,247	11,012,973
India Council Bills paid in India - - -	16,818,600	10,374,600	18,917,100	18,623,200	12,824,490*

*As in previous years, the amount actually paid during the year in India is given in pounds, at Rs. 15 to the pound. The Bills drawn and the Telegraphic Transfers granted by the Secretary of State on India during the year 1900-01 amounted to Rs. 19,98,38,000, yielding 13,300,277½ sterling at an average rate of 13·97 pence per rupee.

Foreign sea-borne trade.

This summary shows an increase in the total seaborne trade amounting to nearly 7 per cent., as compared with the trade of the previous year 1899-1900; but putting aside the Government transactions, the private trade in

TRADE.

merchandise and treasure amounted to £138,419,800, which is slightly below the 1899-1900 figure. The imports of merchandise show a considerable increase, nearly balanced by a fall in the imports of treasure; on the other hand, private exports were lower under all heads, and the total fall was about 2 per cent., as compared with 1899-1900. Taking into account the adverse circumstances of the year the general result cannot be regarded as surprising. During the first half of the year the famine exercised a depressing influence; the plague epidemic was a disturbing element in the cold weather; the cotton-spinning industry was depressed; and there was an acute crisis in the tea trade; all manufacturing industry was affected more or less by the high price of coal; and the coffee and sugar industries, as well as the exports of food grains, suffered from the agricultural conditions. On the other hand, the famine increased the exports of hides and skins and the imports of food grains; but the total would not be so good as it is, were it not for the recovery in trade conditions during the latter half of the year. The harvests in Burma and in a vast region of Northern India proved to be good, and were sold at a high level of prices, and the people were therefore in a position to increase largely their consumption of imported articles. It is only necessary to add that there was no financial stringency, and that the Bank rate never rose above 8 per cent., and remained at that level only for about two months; while the exchange rate showed little fluctuation.

With regard to the Government transactions, the only point needing explanation is the great increase in the imports and exports of treasure. The cause of these was briefly as follows: Part of the new currency scheme was an offer on the part of the Government to give rupees in exchange for gold in India. Advantage was largely taken of this offer, and the result was an accumulation of gold in the Government treasuries and a depletion of their stock of rupees. The Government therefore decided to send the surplus gold to London, and to buy there silver for the coinage of rupees.

It will be seen, from the figures relating to private merchandise which are given below, that the chief fluctuations in the import statistics were a rise under metals, chiefly iron and steel, under silk, and under sugar, while the imports of railway material declined:—

Imports.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.
	£	£	£	£	£
Cotton woven goods -	17,616,000	15,268,000	16,459,000	18,001,000	18,231,000
Cotton yarns - - -	2,217,000	2,329,000	1,701,000	1,633,000	1,659,000
Silk, raw and manufactured -	1,495,000	1,213,000	1,439,000	1,137,000	2,683,000
Woollen goods - - -	1,129,000	765,000	1,016,000	1,172,000	1,408,000
Metals and hardware -	4,681,000	5,112,000	4,406,000	4,181,000	5,515,000
Machinery and millwork -	2,340,000	1,907,000	2,039,000	1,695,000	1,505,000
Railway material - - -	1,775,000	1,917,000	1,925,000	1,851,000	894,000
Liquors - - - - -	1,097,000	1,059,000	1,099,000	1,065,000	1,078,000
Provisions - - - -	1,025,000	1,137,000	1,021,000	1,125,000	1,317,000
Sugar - - - - -	2,101,000	3,189,000	2,678,000	2,251,000	3,770,000
Oils, chiefly petroleum -	2,293,000	2,765,000	2,368,000	2,284,000	2,505,000
Chemicals, medicines, dyes -	1,260,000	1,374,000	1,342,000	1,288,000	1,484,000
Apparel - - - - -	1,011,000	818,000	920,000	976,000	1,026,000

The exports of Indian merchandise show decreases under wheat, oilseeds, and coffee, due to the famine and bad crops; and the total value of the exports of grain and pulse showed a decrease of 2¼ millions sterling, since the failure of the spring crops of 1900 affected the trade of 1900-01. But increases in jute, opium and hides to some extent balanced this, and the total fall in the value of private exports of merchandise was about 1·5 per cent. compared with the previous year. It must, however, be borne in mind that the high prices prevailing during the year have in several cases swollen the returns for 1900-01, so that they do not accurately represent the relative quantities of commodities in that and in the preceding year. A notable example of this is the export of rice, the value of which is

TRADE.

shown below to have increased about 1 per cent.; whereas the amount exported is less than the figure of the preceding year by over 2 per cent.

Exports.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.
	£	£	£	£	£
Raw cotton - -	8,647,000	5,914,000	7,457,000	6,618,000	6,752,000
Cotton yarns - -	4,782,000	4,645,000	4,402,000	4,601,000	2,780,000
Cotton piece goods -	803,000	710,000	705,000	841,000	956,000
Jute, raw and woven -	10,510,000	10,707,000	8,493,000	9,557,000	12,488,000
Wool, raw - - -	827,000	905,000	835,000	904,000	602,000
Rice (husked) - -	7,900,000	7,725,000	10,452,000	8,671,000	8,761,000
Wheat - - - -	557,000	895,000	6,480,000	2,606,000	20,000
Oilseeds - - - -	5,341,000	5,729,000	7,898,000	6,733,000	6,009,000
Tea - - - - -	5,417,000	5,373,000	5,363,000	6,061,000	6,367,000
Coffee - - - -	1,057,000	1,013,000	1,167,000	990,000	819,000
Opium - - - -	5,319,000	4,065,000	4,751,000	5,469,000	6,304,000
Indigo - - - -	2,914,000	2,038,000	1,980,000	1,795,000	1,424,000
Hides and skins -	4,634,000	5,545,000	4,966,000	6,976,000	7,655,000

The proportion of trade directly with European countries was about 65½ per cent., omitting the trade with Egypt, much of which really goes to Europe. The trade with the United Kingdom was about 67 per cent. of the trade with Europe, and nearly 45 per cent. of the total trade, against 47 per cent. in 1896-97.

The value of India's trade in private merchandise with some of the chief countries has fluctuated as follows in the last six years:—

—	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.
	£	£	£	£	£	£
United Kingdom -	55,536,000	55,356,000	51,212,000	53,257,000	53,645,000	53,825,000
France - - - -	6,438,000	4,859,000	4,351,000	5,905,000	5,127,000	4,750,000
China - - - -	10,593,000	10,645,000	9,279,000	9,697,000	10,541,000	9,597,000
Germany - - - -	6,942,000	6,570,000	6,415,000	6,655,000	6,144,000	7,882,000
Straits Settlements -	5,523,000	4,781,000	4,649,000	5,320,000	5,157,000	6,273,000
United States of America -	4,702,000	4,190,000	4,931,000	4,500,000	5,907,000	5,655,000
Russia - - - -	1,513,000	1,631,000	1,527,000	1,455,000	1,683,000	2,059,000
Austria-Hungary -	3,117,000	2,661,000	2,835,000	3,017,000	2,733,000	3,904,000
Belgium - - - -	4,455,000	3,642,000	3,549,000	4,620,000	3,514,000	3,994,000
Italy - - - - -	2,374,000	2,357,000	2,132,000	2,585,000	2,336,000	2,630,000
Ceylon - - - -	2,809,000	2,618,000	3,447,000	3,341,000	3,273,000	3,799,000
Japan - - - - -	2,158,000	3,095,000	3,139,000	3,855,000	4,571,000	1,957,000

The following figures show the proportionate share of each province and of the five chief ports in the private trade in merchandise only:—

—	Imports (percentages).			Exports (percentages).		
	1898-99.	1899-1900.	1900-01.	1898-99.	1899-1900.	1900-01.
PROVINCES:						
Bengal - - - -	40.9	42.1	41.8	40.8	46.2	51.3
Bombay and Sind -	43.3	43.1	40.5	38.9	33.5	28.4
Madras - - - -	7.7	7.9	8.7	9.9	11.0	10.9
Burma - - - - -	8.1	6.9	9.0	10.4	9.3	9.4
	100	100	100	100	100	100
CHIEF PORTS:						
Calcutta - - - -	40.7	41.9	41.7	39.9	45.5	50.5
Bombay - - - -	37.5	37.2	34.5	31.0	27.7	25.3
Karachi - - - -	5.8	6.0	6.0	7.9	5.8	3.1
Madras - - - -	6.2	6.5	7.4	3.9	4.7	5.0
Rangoon - - - -	7.9	6.7	8.8	7.7	6.8	6.7

TRADE.

The most notable feature in this table is the decline in the foreign trade of Bombay. The famine and the depression in the mill industry combined to produce the result, which there is reason to hope will not be a lasting one. About 77 per cent. of the trade in treasure belongs to Bombay; in merchandise Calcutta was considerably ahead of Bombay, the former showing £57,346,000 and the latter (with Sind) £40,925,000 as the total value of their export and import trade. The net imports of treasure were £6,899,600, or £1,778,600 less than those of the previous year. The balance of trade, or excess of exports over imports of merchandise and treasure, both on Government and private account, was, as above stated, £11,013,000, or more than 20 per cent. below the figure of 1899-1900.

There was again a sensible increase in the frontier trade, which is beginning to attain to substantial dimensions. It must, however, be observed that the figures include trade with some tracts which are strictly speaking within the borders of India, *e.g.*, the Shan States. Of the total of £9,113,300, about two fifths crossed the north-west frontier, including trade with Kashmir, while the trade with Nepal also showed a growth, owing chiefly to imports of food grains. The latter trade is carried on, not so much with the valley of Nepal, as with the rice lands which skirt the southern face of the mountains. Trade with Kashmir has increased in a satisfactory manner; that with Kabul continues to be in a very depressed condition. The trade with Western China, so far as it is registered, grows very slowly; but there is reason to believe that a large part, perhaps half, of the frontier trade of Burma escapes registration. Taking the frontier trade as a whole, the chief items were, among imports, food grains (value £948,700) and, among exports, cotton goods (value £1,406,200).

The combined import and export trade in merchandise and treasure carried on by coasting vessels is said to have represented a value of £55,680,000 during 1900-01, or more than 3 per cent. in excess of the large trade of 1899-1900. It is to be observed that in this calculation each transaction is counted twice, and the value of the merchandise and treasure concerned stands at about half the above figure, or 27½ millions sterling. The only special feature of the trade was one common to most periods of famine, *viz.*, a large diversion of the Burma rice exports from the ordinary channels towards the famine districts of India.

MANUFACTURES.

MANUFACTURES.
General.

The domestic industries of India, such as weaving and spinning, pottery, brass-work, iron-work, and art work of many kinds, continue to be practised after ancient methods all over the continent of India. But Indian fabrics and products, made on a small scale by workers at their homes, have for years past been giving way before the cheaper cotton yarn and fabrics, and the iron or steel products of British factories. Meanwhile, without any protection, favour, or advantage other than is afforded by cheap Indian labour and by the production of raw materials in India, an important manufacturing industry has been growing up, and steam power factories are at work, among which those for spinning and weaving cotton, for spinning and weaving jute, for making paper, for husking and cleaning rice, for sawing timber, and for brewing beer, are the most important. Steam power is also largely employed in factories on tea gardens and indigo estates.

There were at the end of the year 1900-01 in British India and Native States 190 cotton mills (of which 16 did not work during the year), containing 40,542 looms and 4,932,600 spindles, and giving employment on an average to 156,000 persons every day. The capital invested is estimated to be more than £11,000,000. The industry dates from 1851, when the first mill was started. The 16 mills which were not worked during the year contained 690 looms and 242,000 spindles; and there were many other mills in which no work was done for considerable fractions of the year, owing to the depressed state of the industry. Eighty-four of the mills were in Bombay city and 54 elsewhere in the Bombay Presidency, which possesses 73 per cent. of the mills, 78 per cent. of the looms, and 72 per cent. of the spindles in all India. The consumption of cotton in the mills in the year 1900-01 was 1,111,000 bales, or 111,100,000 lbs. The value of the cotton goods manufactured in the mills in the year 1900-01 was £11,000,000.

MANUFACTURES.

June 1900 was about 1,424,000 bales, including 189,000 bales of imported cotton of longer staple. The amount of Indian cotton consumed by the mills forms an important proportion of the total yield of the crop, which is estimated, in a normal year, at about 3,000,000 bales. The out-turn of yarn in recent years has been as follows in British India :—

—		Counts above 20s.	Lower Counts.	Total.
		Lbs.	Lbs.	Lbs.
1895-96	- - -	41,606,129	388,865,873	430,472,002
1896-97	- - -	51,657,671	364,538,729	419,196,400
1897-98	- - -	61,177,032	392,482,314	453,659,346
1898-99	- - -	61,763,170	440,853,815	502,616,985
1899-1900	- - -	62,070,683	439,223,856	501,294,539
1900-01	- - -	70,005,000	272,772,438	342,777,547

The great decline in the low-count yarns in 1900-01 was due partly to the famine in India and partly to the collapse of the Chinese market, which in turn was caused by over-supply from India and Japan, and by the political and military events in China. The Bombay Presidency produced 71 per cent. of all the yarn, Bengal 4½ per cent., Madras 8 per cent., the North-Western Provinces about 9 per cent., and the Central Provinces 5½ per cent. The production of yarns of counts above 20s. continues to increase, and the Bombay mills now spin an appreciable quantity (2,196,000 lbs. in 1900-01) of yarns of counts above 40s., using Egyptian cotton. The out-turn of finer yarns, 31s. to 40s., in Indian mills increased from 7¼ to 11 millions of pounds. The production of woven goods by mills in British India rose slightly from 95,320,400 lbs. to 95,844,600 lbs., of which 84 per cent. was from the Bombay Presidency. There is hardly any weaving done by factories in Bengal; Madras and the Central Provinces contributed 6 and 5 per cent. respectively of the woven goods. These goods are mainly unbleached grey fabrics; only in Madras did any large proportion of the weaving consist of finer goods, and there these fabrics were 76 per cent. of the production. The difficulties of the last three years culminated in the year under review, when the output of coarser yarns, which forms the most important part at present of the trade, fell to the low figure recorded above. The out-turn of mills in Native States is stated as follows:—1898-99, yarn 9,754,841 lbs., woven goods 3,031,654 lbs.; 1899-1900, yarn 12,238,053 lbs., woven goods 2,744,450 lbs.; 1900-01, yarn 10,195,500 lbs., woven goods 2,903,000 lbs.

The number of jute mills in 1900-01 was 35, containing 15,242 looms and 315,264 spindles, and employing a daily average of 110,462 persons. All the mills, with the exception of one at Cawnpore, are in the province of Bengal, and most of them are in the vicinity of Calcutta. The capital employed by these mills is about £3,700,000. In 1891-92 the corresponding figures were 25 mills, 64,724 hands, 8,218 looms, and 171,148 spindles. There were four woollen mills at work at the end of 1900, containing 22,986 spindles and 594 looms, and producing goods valued at £202,000 in the year. Only two of the mills, those at Cawnpore and at Dhariwal, in the Punjab, are of great importance. The fabrics consist chiefly of blankets, serges, and cloths worn by the Army and the police.

There were eight paper mills at work in India, employing a daily average of 4,871 hands, and producing in 1900 about 46 million lbs. of paper, valued at £416,800. Most of the foolscap, blotting paper, notepaper and envelopes used in Government offices is now obtained from the Indian mills; but the value of paper imported into India in 1900-01 was £291,700 as compared with £266,000 in 1899-1900. Small paper works, making common paper without machinery, exist in several provinces, but for these petty industries

MANUFACTURES.

produced during the year 4,951,700 gallons of beer and porter, or 618,600 gallons less than they produced in the previous year. The Commissariat Department bought 2,586,000 gallons of this malt liquor, as compared with 2,847,000 gallons purchased in 1899, for the use of European soldiers. The largest brewery was at Murree in the Punjab Himalayas, and the output of that concern was over 718,000 gallons in 1900. The quantity of beer, porter and cider imported into India was 3,231,000 gallons in 1900-01, or about two thirds of the quantity produced in the country.

Among other "large industries," which are shown in the Indian returns for 1899, may be mentioned :—

Bone-crushing factories - - -	19	Printing presses - - -	928
Coffee works - - -	23	Rice mills - - -	256
Cotton and woollen spinning and weaving establishments, not classed as mills - - -	27	Rope factories - - -	21
Dairy farms - - -	72	Silk filatures - - -	66
Dye works - - -	6	Silk mills or factories - - -	33
Jute presses - - -	142	Soap factories - - -	31
Lac factories - - -	151	Sugar factories - - -	193
Oil mills - - -	208	Tanneries - - -	147
Pottery and tile factories - - -	146	Tobacco and cigar factories - - -	24
		Timber mills - - -	94

There are also a large number of cotton spinning factories or presses, indigo factories of all sizes and kinds, iron and brass foundries, &c. scattered throughout the country, in the enumeration of which it would not even be possible to attain the moderate degree of accuracy which is all that is claimed for the above figures.

The number of persons employed in the above industries is given as follows :—

—	Men.	Women.	Children and Young Persons.	Total.
Cotton mills (figures for 1900-01) -	99,697	31,247	25,095	156,039
Jute mills (" ") -	73,318	18,417	18,727	110,462
Woollen mills(" ") -	—	—	—	2,874
Paper mills (" ") -	—	—	—	4,871
Other industries (figures for 1899) -	—	—	—	421,649
Total - - -	—	—	—	695,895

In the ensuing paragraphs the figures given are, wherever it is possible, those for 1900-01; but in some cases the information has not been received, and the figures for an earlier year are given.

Bengal in 1900-01 contained 34 jute mills, 10 cotton mills, four paper mills, and some 200 collieries. The jute industry is the most important of the Bengal manufacturing industries, and it has been very prosperous in recent years. There were in the province in 1899 indigo factories to the number of 282, 142 jute presses, 107 lac factories, 103 oil mills, 408 printing presses, 65 silk filatures and 30 silk mills, 182 sugar factories, 54 iron and brass foundries, including the only large iron-works in India, and the largest pottery factory in the country. The coal output of 1900 amounted to about five million tons, or nearly 25 per cent. more than in the preceding year, and over four fifths of the total Indian production. The production of iron ore rose to 57,000 tons. The progress of the Barrakur iron-works is noted above, in the portion of this Statement which deals with mineral resources. The output of mica from mines in various parts of the province showed a good increase, and amounted to 429 tons in 1900. The attempts that are being made to revive

Bengal.

MANUFACTURES. and improve the silk industry in Bengal are noticed in another portion of the Statement. Among native industries are to be noticed the weaving of tussur silk (wild silk) cloth, filagree work, muslins, brass manufactures, etc.

North-Western Provinces.

In the North-Western Provinces there were in 1900-01 six cotton mills, chiefly at Cawnpore, one small jute mill and a large woollen mill at the same place, one paper mill, and six breweries. For the other industries no later report than that for 1899 is available. There were then 53 cotton presses, 1,335 indigo works, 41 lac factories, and 81 potteries, besides other industrial concerns. The accuracy of these figures is subject to the reserve mentioned above. Among native industries, brass-work, stone quarrying and stone-carving, and weaving are the most important; but these provinces, which contain more large cities than any part of India, possess a great number of flourishing arts and crafts. The ordinary industries supply for the most part only local needs.

Punjab.

In the Punjab there were one colliery, eight breweries, one woollen and five cotton mills, 83 cotton pressing and ginning factories, 16 flour mills, 11 indigo factories, 11 iron and brass foundries, 174 printing presses, and one large sugar concern. It has been shown above, in the eighth chapter of this Statement, that a very large amount of salt is produced in the Punjab, chiefly from mines, which yield an apparently inexhaustible supply. The output of coal in the Punjab is stationary. The amount of saltpetre produced is increasing. A monograph on the ivory industry of the province was issued during the year. There is an important carpet-weaving industry at Amritsar and at other places in the province.

Burma.

In Burma, besides the rice and timber mills mentioned below under the heading "Factory Act," the extraction of petroleum and of rubies is carried on, and there are nine iron-works for working imported iron and brass (not for smelting ore) 40 cotton ginning and pressing mills, and 29 printing presses. The average daily number of operatives employed in the Burma factories is stated to have risen from 19,100 to 22,900 in 1900. A considerable number of persons are also engaged in the manufacture of salt and of salt fish paste (*ngapi*); and among the more important local and indigenous industries are boat-building, silk-weaving, gold and silver work, wood-carving, cigar-making, pottery, lacquer-work, brass-work and marble-work.

Central Provinces.

The only important manufacturing industry in the Central Provinces is cotton-spinning and weaving. There were seven mills, besides ginning, cleaning and pressing mills; the Empress Mills at Nagpore is one of the most successful concerns of the kind in India. There are also in the province a large brewery at Jubbulpore and two important coal mines. In 1899 there were 43 cotton ginning and pressing mills, 22 printing presses, and other industrial concerns. But as a whole it may be said that the development of industries in this province is slow.

Assam.

The production of tea continues to be the first, and practically the only, industry of Assam. The number of tea gardens at the end of 1900 was 804, with an area of a little more than a million acres, of which 337,000 acres were under tea plants. The out-turn of tea in 1900 was 141 million lbs., against 128½ million lbs. in 1899. There were 13 timber mills, engaged for the most part in the manufacture of tea boxes. There are coalfields at Lakhimpur and in the Naga hills, and the output of coal in the province was 217,000 tons, against 225,000 tons in 1899. The Assam Railways and Trading Company, Limited, have large brick and pipe works in the Lakhimpur district and workshops at Dibrugarh and Margherita.

Madras.

In the Madras Presidency 11 cotton mills employed 12,600 hands during 1900-01, who worked 1,735 looms and 287,848 spindles. In 1899 there were also 83 cotton presses, 3,448 small indigo factories or vats, 20 iron and brass foundries, 78 oil mills, 272 printing presses, 23 tobacco factories, 134 rice mills, and 136 tanneries, besides 126 fish-curing yards, and a large number of saltworks, etc. Sugar was made on a large scale at seven factories, at some of which considerable quantities of rum were distilled. Weaving

continues to be the most important domestic industry in Madras, though it has greatly declined under the competition of machine-made goods. An aluminium industry is growing up in Madras under the direction of the Madras School of Art.

Bombay. Chief among the industries of the Bombay Presidency is the cotton mill industry. There were 138 mills in the presidency, or two more than in the previous year, and 84 of these were in the city of Bombay. The extent to which Bombay predominates in this industry over the other parts of India is shown above, in the paragraph describing the working of the cotton mills. The average daily number of hands employed in cotton mills in the presidency was 120,000, of whom 95,700 were employed in the town and island of Bombay. Most of the mills were closed for varying periods, principally in consequence of the depression in the China trade. In addition to the workshops belonging to the railways and the great steamship companies, there were one woollen mill, three paper mills, and one brewery at work in 1900. There were also in the presidency (the following figures are taken from the returns for 1899), 274 cotton presses, six dyeworks, 23 iron and brass foundries, 10 oil mills, three silk mills, and seven printing presses, besides other industries. The cotton ginning factories were not fully employed anywhere but in Surat and Khandesh, and industries generally suffered from depression. A new paper mill was started during the year in Surat, and a large number of rice and wheat husking factories were opened in Shikarpur. Of the domestic industries and manufactures conducted after native methods the chief are hand-loom weaving and cotton-spinning, which supply the hand-woven goods still worn by the majority of the lower classes; calico dyeing and printing; gold and silver lacemaking; the weaving of cotton and woollen carpets; brocade work, and embroidery of gold and silver, for which Gujarat, Nasik, and Sind workmen are specially renowned; the making of glass bangles or bracelets; wood-carving, the art speciality of Gujarat; and sculpture, which is practised in Cutch and Kathiawar; in some parts also silver work is done of a special kind and of much excellence, but this industry is said to be languishing.

Berar. There were three oil mills in Berar, one having been closed during the year 1900-01, and there was a cotton-spinning and weaving mill at Badnera. The oil mills, of which two are at Amraoti, produced 117,000 gallons of oil, or rather less than in 1899-1900; the cotton mill produced 4,498 bales of yarn and 2,075 bales of cloth, a smaller output than in the previous year. There were in 1899 in the province 130 cotton ginning and pressing mills. The domestic industries of Berar are the weaving of silk cotton pieces with embroidered borders, cotton carpets, coarse cotton cloth and garment pieces, turbans and blankets.

FACTORY ACT.

The present Indian Factory Act came into force on the 1st January 1892. The changes introduced 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;

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;

The hours of labour for women workers, which were unrestricted under the Indian Factory Act of 1881, were limited by the Act of 1892 to 11 hours a day;

Hours of rest during work were prescribed for all labourers, namely, half an hour in the middle of the day for all hands; and one hour interval for women workers.

MANUFACTURES.

Bombay.

Berar.

FACTORY ACT.

FACTORY ACT. The reports of factory inspectors show the number of factories inspected, and the results of the inspections, to have been as follows:—

STATISTICS OF FACTORIES IN INDIA, INSPECTED UNDER THE FACTORY ACT DURING THE YEAR 1900.

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 - - - - -	217	144,528	21,794	16,870	183,192	148	10	59	-	25	184	253	462
North-Western Provinces - -	74	25,685	1,707	1,536	28,928	55	12	7	1	3	33	69	105
Punjab - - - - -	129	16,792	2,957	835	20,584	87	29	13	-	2	7	95	104
Burma - - - - -	150	22,439	343	101	22,883	146	1	3	-	7	103	56	166
Central Provinces - - -	59	10,394	3,297	633	14,324	30	23	1	-	-	20	18	38
Madras - - - - -	78	28,594	2,416	1,483	32,493	61	16	1	-	6	32	118	156
Bombay - - - - -	356	116,674	31,347	5,941	153,962	254	100	2	7	19	52	1,029	1,100
Assam - - - - -	10	1,121	426	111	1,658	10	-	-	-	-	1	-	1
Ajmere - - - - -	1	351	31	5	387	1	-	-	-	-	-	4	4
Berar - - - - -	123	6,029	4,292	194	10,515	35	88	-	-	-	3	4	7
TOTAL, 1900 - - -	1,207	372,617	68,610	27,729	468,956	827	284	86	8	62	435	1,646	2,143
TOTAL, 1899 - - -	1,110	360,029	65,308	27,459	452,796	770	259	54	3	77	499	2,037	2,603

The work of inspectors was well performed in most provinces. The sanitary condition of the factories is reported to be generally satisfactory, and the subject continues to receive the careful attention of the inspecting officers. A satisfactory account is also given of the health and general condition of the operatives, although in Bombay they have suffered from the plague and further depression in the mill industry. Orders have been given for statistics to be collected in future years respecting the wages of mill employes, with a view to the inclusion of the information in the volume "Prices and Wages in India," published yearly by the Government of India.

Bombay. Of the factories in the Bombay Presidency, 280 were cotton factories, employing an average daily number of 120,000 hands. The number of all factories in Bombay city at the end of the year was 139, in Khandesh 97, and in Ahmedabad 35; while 17 cotton ginning factories were closed in Hyderabad. Of the total number, 157 factories were seasonal, while 200 were at work throughout the year. The average number of hands employed was 6 per cent. less than in 1899, the greater part of the decrease occurring in the cotton mills in Bombay city. Information as to wages is not complete enough for a general statement on this matter to be made, but in some districts they were below the figures quoted last year. Accidents in mills fell from 1,473 to 1,100; in Bombay only eight fatalities were due to machinery. The number of children employed in Bombay mills decreased; the necessary steps were taken in suspicious cases to prevent infringement of the rules governing their employment.

Bengal. There was an increase of 17 in the number of factories in Bengal, where 88 mills and presses were engaged in the jute industry. The results of inspections were generally satisfactory, and suggestions for improvement were readily adopted. The rules regarding the employment of women and children were duly observed. Rates of wages remained unchanged, and averaged per diem $2\frac{1}{2}$ annas for men, $1\frac{1}{2}$ annas for women, and 1 anna for children, which is generally higher than agricultural wages in the province. The number of employes in mills and factories in Bengal has increased by 31 per cent. since 1893, when the returns were first made.

Madras. In Madras the number of factories at work rose from 73 to 78, owing chiefly to the addition of four iron and brass foundries. Inspections of

factories were more numerous than in 1899, but there is still room for improvement in this direction. So far as they went, they disclosed no serious defects in factory management.

Of the factories in Lower Burma, 150 in number, 74 were rice mills, 46 were saw mills, and 9 were rice and saw mills combined. Nine mills of all kinds were brought under the Act during the year. Fifty-six of the factories were in the Rangoon town district. The average number of operatives employed rose from 19,100 to 22,800. The results of inspections were generally good, and the fencing of machinery is reported to be satisfactory, but sanitary arrangements leave room for improvement. The total number of accidents again increased, the fatal accidents numbering seven, as in 1899.

In Berar, there were 123 factories, or 13 more than in 1899, including 83 cotton ginning and 39 cotton pressing mills. The average rate of wages is reported to have been 3 annas per diem for a man and 2 annas per diem for a woman. There were few accidents, and the inspectors' reports were satisfactory.

In the Punjab there were 129 factories at work, of which 16 were first opened during 1900. Twenty-three of these belonged to Government or other public funds; 76 were cotton mills. Wages are reported to be higher at the factories than can be obtained elsewhere, being about 3 to 5 annas per diem for men.

FACTORY ACT.

Burma.

Berar.

Punjab.

CHAPTER XVI.

FRONTIERS AND NATIVE STATES.

FRONTIERS
AND
FRONTIER
STATES.
Baluchistan
and the
Persian
Frontier.

A landmark in the history of Baluchistan was the first fairly comprehensive census, taken in 1901, of its population. Kharan, Makran and the Western Sinjerani Districts were not enumerated. The number of the rest of the population was 810,746, in an area of 134,000 square miles, giving a proportion of six persons to the square mile.

After three years of drought, the rainfall of 1900-01 in Baluchistan was heavy, and the season was favourable for the crops, and consequently for the revenue. The year commenced with a deficit of £1,000 in the provincial funds, but closed with a balance of £2,600. The growth of the trade by the new Quetta Nushki route to Persia was satisfactory, the value exceeding £100,000, and being more than double what it was in 1898-1899. Various improvements were made along the route, and concessions given for the encouragement of the traders.

On the Persian border trouble was caused by a Nausherwani, Mir Muhammad Umar, who, with a following of Persians and refugees, settled in Persian territory, organised a raid into the British protectorate, plundered the village of Kuntidar, killed or wounded 43 persons, and carried off property to the value of £5,000, taking refuge again in Persian territory. Steps were taken by the Political Agent to quiet the ensuing agitation, and after the close of the year operations were undertaken in co-operation with the Persian authorities to punish the raiders. The operations were successful and resulted in the death of the brother of Mir Muhammad Umar and the destruction of his band.

There was no change of importance to report in regard to the administration of the States of Kalat and Las Bela. The latter still suffered from the effects of scarcity. The Zhob district was troubled by Mahsud raids, and there was one fanatical outrage of serious character, in which a British officer was murdered at Loralai. In this instance, family, village and tribal responsibility were enforced by the imposition of fines in accordance with the award of a *jirga* by which the case was tried.

Punjab
Frontier.

In 1899-1900 the Khyber Administration was brought under the direct control of the Government of India. Before the close of the year 1900-01 the Secretary of State had accepted generally the scheme* proposed by Lord Curzon's Government, for bringing the whole of the frontier between Baluchistan and Kashmir into a single charge, directly under the Government of India. In accordance with this decision, though with some modifications of details, the new North-West Frontier Province was constituted in November 1901. A map on another page shows the outline of this Province. The particulars of its institution will naturally find a place in next year's Statement. The history of this frontier in 1900-01, which is thus the record of the last complete year of control by the Punjab Government, was satisfactory. With the Baluch tribes the relations of the Punjab Government were wholly peaceful. Good progress was made with the organisation of the new militia both in Southern Waziristan and Kurram. Cultivation increased in the newly-administered districts of Tochi and Kurram. The principal difficulties of the year were attributable to the Waziris, who not only failed to surrender outlaws and pay up the fines imposed upon them, but continued their raids. Punishment was inflicted on the Madda Khel by a column operating from Datta Khel, and in December 1900 a strict blockade was established against the Mahsud Waziris. This measure, however, failed to enforce submission without resort to sterner operations which form part of the history of 1901-02.

The Kurram valley was peaceful and prosperous, except in so far as it suffered from raids from Afghan territory. For the first time its population was numbered in the Indian census. On the Peshawur border

MAP OF NORTH WEST FRONTIER PROVINCE.

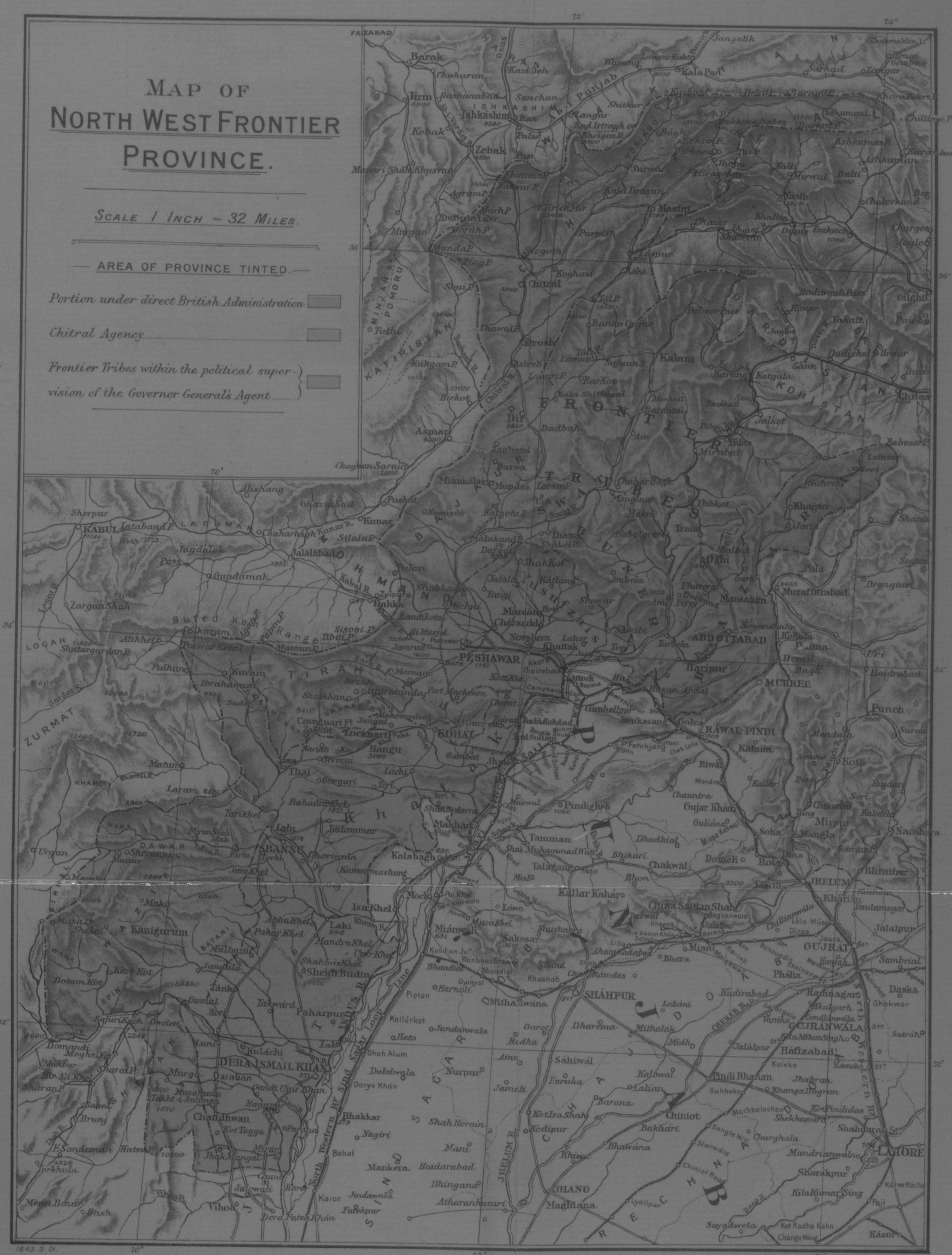
SCALE 1 INCH = 32 MILES.

— AREA OF PROVINCE TINTED. —

Portion under direct British Administration

Chitral Agency

Frontier Tribes within the political supervision of the Governor General's Agent



there was no disturbance. A blockade imposed on the Aka Khel Afridis on account of certain raids soon resulted in their submission and in the payment of the fines assessed upon them. The construction of a road through the Kohat pass met with no opposition from the tribesmen, and was nearly completed within the year. The measures taken against the Gumatti outlaws and referred to in last year's Statement prevented any subsequent disturbance from that quarter.

FRONTIERS
AND
FRONTIER
STATES.

Much work was done during the year in organising all the arrangements for the new battalions of Khyber Rifles which were enrolled in December 1899. The result achieved was considered highly satisfactory. Their health and conduct was good. Two of the Sepoys were murdered during the year and their rifles stolen. As the murderers were not brought to justice heavy fines were inflicted.

Khyber.

The year's history of the Khyber was uneventful. There was no change in the system of dealing with the tribes. Some agitation was caused by the construction of the Peshawur-Jamrud railway which was opened to traffic in January 1901, and by the rumour of a projected extension to Lundi Kotal, but it died away without giving rise to serious trouble. On the receipt of the news of the death of Her late Majesty the Queen Empress, numbers of Afridis visited the Political Officer to offer their condolences. There were feuds and raids between various tribes and sections, but on the whole the conduct of the tribes in their relation to the British Government was satisfactory and there was less raiding into Afghan limits.

In Bajour and Swat, in consequence of the usual feuds and factions, several fights occurred in which numbers were killed. But in their relations to the British authorities the tribesmen behaved well, and there was no serious trouble. On the occasion of the death of Her late Majesty, very many of the principal men offered their condolences. In Dir there was some uneasiness during the year. Towards the end of it the Nawab declared his intention of going on pilgrimage, and temporarily resigned power into the hands of his eldest son, Badshah Khan.

Dir, Swat,
Chitral, &c.

Affairs were quiet and prosperous in Chitral; there was no difficulty in connection with the Chitral reliefs.

In Gilgit the principal event was the death of the loyal Raja of Astor. Some fighting occurred in Darel, and there was an earthquake in Chilas. Otherwise there was nothing special to record.

Kashmir.

The year 1900-01 was a prosperous one for the finances of the Kashmir State. After meeting the expenditure of the year amounting to £436,000, there was a surplus of over £36,000. The State at the end of the year had an invested balance of £330,000, and a working balance of £270,000. Large returns are anticipated from the outlay for the development of silk culture and manufacture. A railway to Srinagar is in contemplation, and a road taking the course of the proposed railway from Jammu to Udhampore, where coal has recently been discovered, is being constructed.

The trade with Chinese Turkestan by the Leh route, after four years of continuous and heavy decline, showed a slight recovery in 1900-01, being valued at £260,000, imports slightly exceeding the exports. The main causes for the decline of trade on this route are stated to be the imposition of a heavy duty on *charas* in India, the enhanced value of the rupee, competition, and the prevention of smuggling into Russian territory. The political conditions of the year were not unfavourable to trade on this border.

After holding the supreme power as Prime Minister in Nepal for 15 years, Maharaja Sir Bir Shamsher Jang, G.C.S.I., died on the 5th of March 1901. He was succeeded without disturbance by his brother, General Deb Shamsher Jang, who was in command of the forces; the command of the army passing to the younger brother, General Chandra Shamsher Jang. The new régime proved a short one. Its history belongs to the next Statement for 1901-02. There was no friction between Nepal and the British Government during the year; the recruitment of Gurkhas was satisfactory.

Nepal.

No progress was made in 1900-01 towards the settlement of the frontier between Tibet and Sikkim, or towards the improvement of the facilities of trade. Owing to unsettled times and the prevalence of small-pox there was

Tibet and
Sikkim.

FRONTIERS
AND
FRONTIER
STATES.

for the first time since the opening of that trade mart in 1893 a decline in 1900 in the trade passing through Yatung, the imports into Tibet being valued at £48,700 and the exports at £47,334.

The financial condition of the Sikkim State is satisfactory, the receipts and expenditure amounting to about £7,000. A good report is given of the young Maharaja's education. More is being spent on the improvement of roads in the State, and attention is being paid to the exploitation of its forests.

Bhutan.

As usual there is nothing to record in regard to Bhutan.

Manipur and
Assam
Frontier.

There were no expeditions on this frontier in 1900-01, and the year was uneventful except for the census. The policy of disarmament was continued in regard to the hill tribes of Manipur. There was a falling off in the revenue (£26,000) of that State, owing to the interference of census operations with the collection of the State dues. The crops of the year were, moreover, poor, in consequence of a scanty rainfall. The behaviour of the tribes on the frontier was good. No serious trouble occurred. The blockade against the Bor Abors which had been in force for several years was raised during 1900-01.

Lushai
Hills.

The administration of the Lushai Hills under the Assam Government was undisturbed during 1900-01. The process of disarmament was continued, and the census was taken. The season was unfavourable, and there was some distress.

Chin Hills
(Burma).

There were no raids by the tribes of the Chin Hills into the Burma districts in 1900-01, nor was there any fighting between the tribes. For the first time a census was taken of these hills. The operations were naturally viewed with suspicion, but precautions were taken for the safety of the enumerators, and in the event no serious difficulty was met with. The policy of disarmament was maintained, and is now accepted with resignation by the tribesmen. The officers carried out extensive tours, settling outstanding disputes, punishing crime, and making arrangements for census work and for general administration. From beyond the administrative border of the Upper Chindwin district, the Peya Chins caused trouble by raiding and cattle-stealing in the administered tracts, and demands for restitution proved futile. Failing other repressive measures a punitive expedition may become necessary. In the Pakokhu Chin Hills a military police force inflicted punishment on the village of Khrum for a murderous raid on a tribute-paying village. In this district it is under contemplation to reduce the military police, and to employ a larger number of Chin civil police.

N.E. Fron-
tier of
Burma.

The regular annual tours in the Kachin hills of Myitkyina, Bhamo, and Katha districts were uneventful. Besides the ordinary business of settling disputes, collecting tribute, and road-making, the census of the hill tracts was successfully carried out. In the Katha hills there has been no violent crime since the suppression of the Kara *émute*, three years ago. But sixteen violent crimes were committed in the hill tracts of Myitkyina, and in no less than eight of these the offenders were Chinese or persons who took refuge across the administrative border. There were also four violent crimes in the Bhamo hills, and what threatens to be a serious blood feud was started between a trans-frontier Kachin village in the Chinese Shan State of Mongwan and an Atsi Kachin village in Bhamo. Smuggling of opium from China is considerable, and steps are being taken to check it. Attention is also being paid to the improvement of the frontier roads.

Shan States.

The first census revealed a total population of 1,139,000 in the Shan States, of whom more than two-thirds were in the Southern group of States. The year 1900-01 was one of continuous progress and prosperity; crops were bountiful; revenue easily paid; and trade brisk. A new Shan States Civil Justice Order came into force in May 1900. The returns of criminal cases in the Southern States showed a diminution of the number of violent crimes from 48 to 40 and of cattle thefts from 139 to 113. It is noticed that the practice of carrying arms at public gatherings has almost died out. Good work was done in most of the States in road and bridge making. Remissions of tribute were granted in many cases as rewards for carrying out works of utility. A durbar attended by the Lieutenant Governor and by a number of

the Shan Chiefs took place in March 1901 at Taunggyi, at which place also a school is being built for the education of minor chiefs and sons of chiefs.

With regard to the Chinese frontier it is stated that disturbances in the Trans-frontier State of Kengtung interfered with the trade of Ssumao, but that by the end of the year these had been put down by the Chinese officials. Communication by dak-runners was established during the year between the British officer at Kengtung and the French officials at Mong Hseng and the British consul at Ssumao. Outstanding disputes between the border inhabitants of North Hsenwi and the Chinese State of Chefang were settled during the year, and the work of marking the frontier in the Shweli valley with boundary pillars was completed. In other respects there was nothing special to report during the year respecting the relations of Burma with the adjoining powers of China, France and Siam.

NATIVE STATES.

As a result of the famines of the decade the population of the Native States in 1901 fell far short of the total of 1891. With a population of about 63 millions their aggregate revenue may be reckoned at £15,300,000, and the tribute due to the Government of India at £600,000. Their military forces consist of 85,000 local troops, mostly ill-armed and ill-disciplined, and of the Imperial Service Troops, numbering on the 1st April 1900, 16,600 officers and men, of whom 6,550 were cavalry, 300 artillery, 350 sappers and miners, 7,400 infantry, 500 camel corps, and 1,500 employed in the transport corps. The year 1900-01 was one of great importance in the history of the Imperial Service Troops. Previously, the Kashmir Corps had been employed in the Hunza Nagar operations, and the Punjab regiments saw service in the frontier expeditions of 1897; but in 1900 for the first time Imperial Service Troops, consisting of Jodhpur Lancers, Ulwar Infantry, Bikanir Camel Corps, and Maler Kotla Sappers, accompanied a British army across the seas as a contingent to the China Expeditionary Force. It may be noticed that the Jodhpur troops were commanded by Colonel Sir Pratab Singh, and the camel corps led by the chief of Bikanir in person. The Maharaja Scindia of Gwalior, who presented a hospital ship as a contribution to the expedition, also accompanied the force to China. During the expedition, though little fighting fell to the lot of the Imperial Service contingent, they won the full approval of the Commanding Officers.

Other changes and incidents in connection with the Imperial Service scheme, were the employment of these regiments on garrison duty in British cantonments, a practice which if continued is believed to be likely to have a good effect and to be popular. In Bahawalpur a Silladar camel transport train of 1,068 camels, with 120 Mounted Infantry escort on camels, has been with advantage substituted for a weak regiment and squadron of cavalry. In Jind the cavalry squadron is to be abolished and an addition is to be made to the infantry regiment. The chief of Nabha may adopt a similar change in respect to his corps. In Mysore also an independent transport corps with carts and ponies is being organised. Most of the corps were favourably reported on during the year. It is noticed that in Pattiala the Imperial Service Corps proved useful in dealing with dacoits.

The suppression of dacoity in the Native States is a matter of Imperial concern, and at times necessitates interference on the part of the paramount Power, particularly in those tracts of Native States' territory where the jurisdictions of the Chiefs are much intermingled, and where the dacoits have, therefore, great advantages in organising their crimes with comparative impunity. For the State of Hyderabad and the large Agencies of Central India and Rajputana there has long existed an organisation connected with the Government of India, charged with the duty of suppressing thuggee and dacoity. The operations of this Department in Rajputana are ordinarily conducted through and with the States' own police. In Central India, in the large States of Gwalior, Bhopal and Indore, the conditions are much the same; while in the petty States, so numerous in that Agency, the local police in cases of importance work to a certain extent in subordination to, and under the

FRONTIERS
AND
FRONTIER
STATES.

Frontier
relations
with China,
France, and
Siam.

NATIVE
STATES.
Imperial
Service
troops.

Dacoity.

NATIVE STATES.

superintendence of, the Department. In Hyderabad again the departmental agency works by arrangement side by side with that of His Highness the Nizam's police.

Owing to the famine which during a great part of 1900, as in 1899, prevailed through all three agencies, the criminal records of the year under report are exceptional, and no general conclusions as to the progress, or otherwise, made by the Department or the Native States in the suppression of violent or organised crime can be drawn from the statistics. Certain local characteristics were, however, noticeable. Thus in the northern and western part of Rajputana as far south as Sirohi, highway robbery was the favourite form of dacoity. In Mewar and the small States under the Udaipur Residency, in Kotah and Bundi, and throughout Central India, dacoits preferred attacking houses, though, in Central India, they also indulged largely in cattle-lifting. In Hyderabad again it was houses and villages that suffered more especially. Torchlight dacoities were rare in Rajputana, comparatively rare in Central India, and very common in Hyderabad, where the criminals generally seem to be more reckless and cruel than in Upper India. A very large number of dacoities were committed by Bhils who, besides being ordinarily prone to crime, suffered exceptionally from the prevailing famine. The returns for the year show 1,086 cases of dacoity in Rajputana, 1,189 in Central India, and 620 in Hyderabad. The corresponding figures for 1899, themselves far above the normal, were 660, 643, and 403 respectively.

Hyderabad Assigned Districts.

The famine in the Berars is described elsewhere in this Statement. The expenditure in connection with the relief operations amounted to nearly £800,000 of which two-thirds fell on the finances of 1900-01. As a consequence the deficit for the year exceeded £400,000, following on the deficit of the previous year of £110,000. The failure of the agricultural season of 1899 was the cause. The season of 1900 was, however, not unfavourable, and it is noticeable that the collections of land revenue for 1900-01 amounted to £530,000, or £52,000 in excess of the normal. With the heavy deficits of the two years 1899-1901, it was not only impossible to make any further payments to H.H. the Nizam on account of the surplus revenues of the Berars, but it was necessary to obtain large loans from the Government of India to enable the province to meet its expenses for famine relief and for current administration. The balance at debit of the Berar Administration at the close of 1900-01 was £517,000.

Hyderabad.

Owing to the severity of the famine the deficit of the Hyderabad State in 1900-01 was estimated to amount to nearly £1,000,000. To enable the Durbar to finance the relief works and to carry on the administration, two crores of rupees (£1,333,000) were lent to it by the Government of India. The financial position, which is serious, has induced H.H. the Nizam, since the close of the year under review, to appoint a trained financial adviser, and to invest him with adequate authority, though under the control of His Highness and his Minister, to introduce reforms and reduce expenditure in the State. Another change which took place after the close of 1900-01 was the appointment of the Peshkar, Maharaja Kishen Persad, to be the Nizam's Chief Minister in place of Nawab Vikar-ul-Umra Bahadur, who retired from that post.

Mysore.

In the year under review the usual meeting of the Mysore Representative Assembly was again postponed; an account of the administration of the State was, however, published for general information in the Mysore Gazette. The State was but slightly affected by famine; measures of relief were rendered necessary only by the immigration of the destitute from adjoining districts. Plague, however, was again severe, and entailed expenditure to the amount of £18,000. Several regulations of importance were passed during the year, relating to the preservation of game, excise, forests, local boards and civil courts. Other legislative questions were under consideration. With the accumulation of a series of large surpluses the Durbar has entered upon a policy of large public works; consequently the expenditure of 1900-01 largely exceeded the revenue; the following are the principal figures:—

NATIVE STATES.

REVENUE.		EXPENDITURE.	
	£		£
Land Revenue	655,626	Land Revenue	123,492
Mining Leases	96,364	Administration	54,569
Forests	79,657	Palace	93,333
Excise	241,143	Law and Justice	67,072
Stamps	53,284	Police	64,387
Railways	44,003	Education	42,283
		Allowances, &c. (incl. Tribute)	249,897
		Military	69,943
		Public Works and Sanitary	171,786
		Railways (including capital outlay)	65,723
		Kauveri Falls Scheme	110,879
Total (including other sources)		Total (including other charges)	
£1,272,000		£1,379,000	

The gold industry progresses, the output of 1900-01 being nearly £2,000,000 worth of gold. Greater attention is being paid to irrigation. Many of the tanks in the State have not been kept in proper repair, and so cannot be fully utilised. A complete investigation to ascertain the irrigation possibilities of the State is now being carried out. A scheme of agricultural banks was started in 1894; but the result hitherto has been disappointing.

Since last year's Statement the Baroda Durbar has issued Administration Reports for the three years ending July 1897, 1898, and 1899 respectively. The following are the chief financial figures:—

Baroda.

	1895-96.	1896-97.	1897-98.	1898-99.
RECEIPTS.				
Land Revenue	691,762	676,922	687,019	706,442
Tribute	54,236	54,036	50,620	54,066
Abkari (Excise)	52,618	64,712	64,925	64,361
Customs	57,430	46,913	48,352	46,384
Opium	80,028	49,151	46,796	70,660
Stamps	41,994	45,442	57,300	48,582
Railways (net)	36,823	23,690	19,762	30,667
Interest	52,181	49,532	48,950	49,071
Total Revenue (including other sources).	£1,199,370	1,140,681	1,801,891	1,129,587
Balances in Cash, Stock, &c., at end of year.	£2,702,932	2,707,117	2,791,148	2,833,878
EXPENDITURE.				
Palace	151,856	179,911	150,758	150,355
Land Revenue	166,291	161,131	150,768	149,999
Opium	31,818	34,130	15,451	20,407
Police	48,587	50,020	50,710	55,029
Military	226,661	237,441	213,392	210,789
Grants and Pensions	70,587	67,000	66,317	68,688
Public Works	141,484	147,241	115,770	144,455
Education	57,404	69,429	57,768	55,577
Total Expenditure (including other charges).	£1,135,846	1,194,600	1,026,571	1,068,732

The above figures have been converted at Rs. 15 to £1. The figures in the Baroda Reports for the years in question are, however, presumably given in terms of the Baroda coinage then current (i.e. Babashai rupees). In consequence of the depreciation of this coinage and its frequent fluctuations, it was finally decided by His Highness the Gaekwar in 1900-01 to substitute for the local coinage the currency of British India. Arrangements were accordingly made with the Indian Government for withdrawing Babashai rupees and exchanging them at the rate of 130 Babashai for 100 British rupees. The State Mint was closed, and under these arrangements more than two crores of British rupees were issued.

NATIVE STATES.

The years 1896-97 and 1897-98 were years of scanty crops and famine prices. In 1898-99 prices returned to normal rates in consequence of moderately good harvests. But in the following year crops again failed, and in 1900-01 famine was acute; relief on a large scale had to be given, the cost of which to the Baroda State up to 31st March 1901 is stated at £427,851. Nor did famine relief and its consequent expenditure terminate with the year 1900-01. The character of the past seasons and the resultant distress are indicated by the decline of Baroda population in the decade by 19 per cent.

Rajputana.

In Rajputana the census of 1901 shows a decline in ten years of 18 per cent. of the population. The Administration Report of this Agency for the year 1900-01 was no doubt delayed by the exigencies of famine, and was not received in time for the inclusion of its information in this Statement.

Central India Agency.

The Census, showing a decline of 18 per cent. in the population of this Agency between 1891 and 1901, gives the measure of the distress through which the Central India States have passed. April 1900 saw famine prevalent through the greater part of the area, and particularly in Bhopawar and Malwa. The rains, which commenced in July, were generally favourable, and the subsequent crops sufficient. In Bhopawar, however, there was another failure, and famine relief was continued till after the close of the year. Several of the States required and received loans either from the Government of India or from the richer States of Gwalior and Indore, to enable them to meet the prevailing distress; their own revenues were much crippled during the year.

The embarrassment of their exchequers is likely to continue for many years to come. In certain States financial difficulties are aggravated by currency depreciation; the substitution of British Indian for local rupees is a remedy which was adopted in Datia in the year under report; and in Orchha it was still under consideration.

The death of the Raja of Sitamau from cholera occurred during the year; leaving no male issue, he was succeeded by his brother. Shortly after the close of the year the illustrious Begum of Bhopal died, and was succeeded by her daughter, the third female ruler in succession in this important State. In Bijawar, the adopted son of the late Maharaja succeeded to the *gadi*. The succession was unpopular with the leading Thakors, some of whom carried their opposition to such lengths that it was necessary to inflict on them severe punishment.

The Maharaja Scindia was absent from his State for a portion of the year, having given his personal services on the Staff of General Gaselee, Commanding the China Expeditionary Force. To the support of this expedition His Highness also generously provided a hospital ship. While in Gwalior he twice inspected the famine relief works in his State, and found the arrangements satisfactory. The Gwalior education report for the year shows good progress, particularly in the number of schools for girls.

The administration of the Indore State had to face the financial difficulties caused by the famine; nevertheless many reforms and improvements were effected during the year, and existing grievances were largely redressed.

Bengal.

The Maharaja of Cooch Behar was absent from his State for a great part of the year, and the administration was meanwhile carried on by the Council. The season was not so favourable as in the previous year, but there was no scarcity. In the State finances there was a small surplus after repaying the usual instalment (£6,666) of the Government of India loan. The special repairs to public buildings necessitated by the earthquake of 1897 were completed, and it is hoped that more money would thenceforward be free for ordinary repairs and public works in the State. Attention was paid to education, and some progress was reported in the number of persons under instruction.

In Hill Tipperah the food crops suffered from an unfavourable rainfall, though cotton and oil seeds did well. There was some distress. In education the attendance of pupils showed a satisfactory increase; the State revenue was larger, and more was spent on public works.

In the Orissa Tributary Mahals the year began with scarcity, but before its close bumper crops were reaped, and the condition of the people improved.

NATIVE STATES.

Public health was poor; vaccination is unpopular, but it is hoped to remedy this by establishing a local school for training vaccinators. Education is very backward, and showed no advance during the year, except in regard to girls' schools. Settlement operations are being carried out in six of the States; and some attention is now being paid to the conservancy of the forests.

The principal matters attended to by the Commissioner in the Chota Nagpore Tributary Mahals were successions in the Jashpur and Udaipur States, appointments of Dewans, and arrangements for the management of these States and of Gangpur; questions of forest leases in several States; and the settlement of claims to coal mining rights in Gangpur. Prevailing scarcity at the beginning of the year led to an increase of criminal cases. There was a decline in vaccination, but progress in education.

In the State of Rampur a new minister was appointed during the year. Notwithstanding virulent attacks upon him through the press, he was able to secure the confidence and support of the Nawab and of the Local Government. The revenue of the State was £203,000, and the expenditure £214,000, the deficit being met by the sale of promissory notes from the State reserve, which amounts to nearly £1,500,000. The condition of education, especially primary education, in the State is considered unsatisfactory, and the system of farming the land revenue to the highest bidder calls for reform. Some safeguard to the interests of the cultivators was introduced during the year by forbidding arbitrary ejection, and requiring that five-years' leases should be given to tenants. The young Raja visited Europe during the year under report.

North-Western Provinces.

The principal group of States in the Punjab consists of the Phulkian States, Patiala, Nabha, and Jind. For the first time a Political Agent was appointed for these States. In November 1900 the Maharaja of Patiala died, after a disappointing reign. His son, a minor, succeeded, and arrangements were made both for his education and for the management of the State by a Council of Regency during his minority. The Council will be required to accept the Political Agent's advice on all matters of importance. The Raja of Nabha continues to take the keenest interest in the affairs of his State, and is of the best type of ruler. The young Raja of Jind, apart from a domestic incident of unfortunate character, is also showing interest in his administration, and disposes of the work of the State in a satisfactory manner; he is shrewd, and exhibits no tendency to squander the resources of his State. Bahawalpur's affairs are being well managed by a Wazir while the young Nawab is under education. During the year steps were taken to initiate the Chief into the conduct of State affairs. As to other States, mention may be made of the change of Chief in Keonthal; the State continued under management. Famine affected the States of Loharu and Dujana and some others. The administration of Sirmur (Nahan) receives the usual commendation; that of Faridkot is said to have improved, while Suket and Bilaspur are considered to be in an unsatisfactory condition.

Central Provinces.

The only incidents of importance in the family history of the Feudatory Chiefs were the death of the Raja of Rehrakhol and the succession of his grandson. During a period of probation the latter will rule by the advice of a Government Diwan. In the Patna State, in consequence of misgovernment, it was found necessary to remove the control of the police from the Raja, and to institute a supervision by the Political Agent of his financial administration. With these exceptions, there was no change in the conditions of administration. In all the States except Patna famine relief measures were promptly started and efficiently carried out; and, again with the exception of Patna (where there was a serious outbreak of organised dacoity), in none of the States did crime present any very abnormal features. Public works were almost exclusively directed to furthering the work of relief, and mainly took the form of road-making and of construction and repair of wells and tanks. The improvement in communications should increase trade, which was not as injuriously affected by the conditions of the year as might have been expected. The traffic has mostly been in imports, but the exports of rice in certain tracts were by no means unimportant. Despite the famine, over 75 per cent. of the current revenue demand was collected without any undue coercion. The relations between the Feudatory Chiefs and the officers of

NATIVE STATES.

Madras.

Government continue cordial, and, notwithstanding the many difficulties of the year, the administration of the States was generally successful.

The Travancore report dealing with the year ended August 1900 is generally a satisfactory record. The crops were not altogether so abundant as in the preceding year, but there was no serious deficiency or distress. Three Regulations were passed, one dealing with the powers of revenue officials, the others following the lines of the Acts in force in British India in regard to legal practitioners and negotiable instruments. Good progress was made in the work of survey and settlement. The impression left by the consequent inquiries into land tenure is that the State demand on a cultivator in Travancore is extremely light. It is this which makes it easy to collect almost the whole of the land revenue in the course of the year. The principal sources of revenue in Travancore are land and salt, producing about 23½ and 20 lakhs of rupees respectively, tobacco, which yields 10 lakhs, and Excise and Customs, yielding each about 7½ lakhs; the total receipts amounting to 100 lakhs, or say £666,000. The expenditure falls short of this total, the largest item in it being one of 19 lakhs (£125,000) on public works. The balance of the State is about 100 lakhs (£666,000). The State has undertaken a guarantee for the construction of the portion of the Tinnerally Qivelon Railway, which lies within Travancore territory. Education statistics in Travancore are very encouraging; the percentage of attendance at school among children of a school-going age rose during the year to 43·8 for boys, and to 14 for girls. There was a small decline in trade in the year under report, the total value being stated at £1,750,000, of which all but 14 per cent. passes by sea or by the backwaters along the coast.

In Cochin one of the chief features of the year was the construction of the railway from Shoranur, on the Madras Railway, to Ernaculam. The outlay (£368,000) has been met by the Cochin State from its previously accumulated balance, supplemented by a debenture loan.

Education is advanced; the figures are even more favourable than in Travancore, the percentage of boys and girls at school out of those of school-going age being 49 and 19 respectively. The revenue of the year amounted to £160,000, and exceeded the expenditure, excluding capital outlay on the railway, by £13,000. Measures are being taken to improve the Police and Excise departments, and the Prisons Regulation passed during the year is likely to conduce to the better management of the jails.

The report relating to Pudukota is considered satisfactory; the revenue of the year was about £80,000, and there was a considerable surplus. The affairs of the Banganapalle State, owing to the excessive expenditure of the Nawab and the want of an efficient Dewan, are causing some anxiety to the Government; added to this, the season was not favourable in this State. In the Godavari, Vizagapatam, and Ganjam Agencies, the crops were better than in the previous year, and in the Godavari and Ganjam Agencies on the whole favourable. Epidemics of cholera and small-pox prevailed except in Ganjam. The year was otherwise uneventful.

Bombay.

Of the 363 Native States under the Bombay Government, 16 were under British administration at the beginning of the year. Idar was taken under management on the death of the Maharaja in February 1901, and Porbandar, which had been under direct administration for political reasons, was released from management in September 1900. His Highness Ajitsinhji was installed as Chief of Drangadhra in December 1900, on the death of the late Chief. In Radhanpur and Navanagar the substitution of British Indian for local currency was effected during the year.

In most of the States the season, in spite of a retarded monsoon and deficient rainfall, was more favourable than the preceding one. But partial distress prevailed almost everywhere and seriously affected the revenues. The total receipts last year were £2,114,685 as compared with £2,835,612, the average of the three years preceding the famine. The decrease was shared by all except Kolhapur and a few of the smaller States. In Cutch, Kathiawar, the Rewa Kantha, Mahi Kantha and Cambay, where the effects of two bad seasons were most severely felt, the difference between last year's collections and the average of normal years amounted in the aggregate to £554,198. The results of the recent census disclose a reduction in the total population in Native territory from 8,082,107 to 6,908,648, the principal sufferers being again some of the States north of the Narbada. The decrease

NATIVE STATES.

amounted to 37·84 per cent. in the Mahi Kantha, 34·71 per cent. in the Rewa Kantha, 27·55 per cent. in the Palanpur Agency, and 16·27 per cent. in Cambay. The largest decrease, however, occurred in the petty estates comprised in the Khandesh Agency, where the numbers of the Bhils and of other aboriginal races diminished by 43·39 per cent. On the other hand, there was an addition of 51·25 per cent. to the population of Khairpur territory in Sind, and a smaller increase in four of the minor States in the Presidency proper. In the number of cognizable offences and that of inmates of prisons there was an appreciable rise in all the more important States. Registration and civil litigation increased after the interruption due to famine. Medical relief was availed of more largely by the people, but, owing chiefly to the prevalence of cholera, and of fever of a malignant type, the mortality was unprecedentedly high. Vital statistics are not available for the Kathiawar States and some others, but such figures as are obtainable show that the number of deaths increased from 86,416 to 190,034. In the Mahi Kantha alone famine and pestilence raised the mortality from 16,454 to 97,220. The births in States for which record is kept were fewer by 23,253 than the total of 1899-1900, which in itself was low, owing to the calamities of that year. The higher death-rate and lower birth-rate affected the operations of the Vaccination Department, the number of vaccinations performed having fallen from 110,451 to 91,939. There was a decline in the number of pupils in schools, but it was confined almost entirely to Kathiawar. The sea-borne import trade of Cutch and of the maritime States of Kathiawar doubled in value as compared with the transactions of ordinary years. The increase, however, was not real gain, being due to larger imports of food-grains to supplement local stocks depleted by famine. The exports declined in value by one-half in Cutch and two-thirds in Kathiawar owing to the circumstances of the past two years.

The following statement shows the area, the population according to the Census of 1901, and the revenue of the States under the Bombay Government (the Settlement of Aden being also included):—

Name.	Area in Square Miles.	Population according to the Census of 1901.	Gross Revenue.
GROUP 1: NORTH GUJARAT—			£
Cutch	7,616	488,022	130,622
Kathiawar	20,882	2,329,196	869,940
Palanpur Superintendency	8,000	467,271	66,097
Mahi Kantha	3,528	361,545	51,672
Rewa Kantha	4,980	484,666	96,988
Cambay	350	75,225	22,220
GROUP 2: SOUTH GUJARAT—			
Dharampor	1,051	161,342	58,855
Bansda			
Sachin			
GROUP 3: NORTH KONKAN, NASIK AND KHANDESH—			
Khandesh Political Agency	1,623	33,272	4,577
Surgana	360	11,532	3,131
Jawhar	310	47,538	11,433
GROUP 4: SOUTH KONKAN AND DHARWAR—			
Janjira	324	85,414	31,042
Savantvadi	926	217,732	27,186
Savanur	70	18,446	6,640
GROUP 5: DECCAN—			
Satara Jaghirs	3,679	390,843	116,547
Akalkot			
Bhor			
Aundh			
Phaltan			
Jath			
GROUP 6: SOUTHERN MARATHA COUNTRY STATES—			
Kolhapur	2,855	910,011	305,003
Sangli	1,083	224,358	78,751
Other States	2,090	406,774	154,325
GROUP 7: SIND—			
Khairpur	6,109	199,313	79,656
GROUP 8: ADEN	75	43,974	236,753
Grand Total	65,911	6,956,444	2,351,438

NATIVE
STATES.
Aden.

There has been a continuous falling-off in the trade of Aden since 1895-96. The figures are shown below, being converted from rupees into sterling at 1s. 4d. the rupee. The trade of Aden is not included in the figures of the trade of India :—

	1896-97.	1897-98.	1898-99.	1899-1900.	1900-01.
	£	£	£	£	£
Imports :					
By sea - -	2,735,394	2,423,199	2,599,533	2,539,987	2,329,452
By land - -	201,847	220,699	180,068	183,363	194,027
Treasure - -	547,752	293,894	277,275	227,620	167,448
Total - -	3,484,993	2,937,792	3,056,876	2,950,970	2,690,927
Exports :					
By sea - -	2,173,551	2,088,651	2,109,244	2,030,684	1,916,477
By land - -	138,941	84,829	110,083	76,050	102,921
Treasure - -	457,171	325,212	346,131	242,900	170,447
Total - -	2,769,663	2,498,692	2,565,458	2,349,634	2,189,845
GRAND TOTAL -	6,254,656	5,436,484	5,622,334	5,300,604	4,880,772

CHAPTER XVII.

ARMY.

ARMY.

The sanctioned establishment for 1900-01 was as follows :—

British Troops - - - - -	73,013
Miscellaneous Officers - - - - -	792
Native Troops (including European Officers) - - - - -	144,785
Total - - - - -	218,590

Corresponding Total for 1899-1900 - - - 219,543

The actual strength and distribution of the Army in India on the 1st April 1901 was as follows :—

PUNJAB COMMAND.							
British.							
Cavalry (1 regiment) -	-	-	-	672	17,092		
Artillery (21 batteries and companies) -	-	-	-	2,989			
Engineers -	-	-	-	12			
Infantry (13 battalions) -	-	-	-	13,419			
Native.							
Cavalry (14 regiments) -	-	-	-	8,854	53,185		70,277
Artillery (9½ batteries and Native Drivers of British batteries) -	-	-	-	4,279			
Sappers and Miners (7 companies) -	-	-	-	1,279			
Infantry (42¾ battalions) -	-	-	-	38,773			
BENGAL COMMAND.							
British.							
Cavalry (2 regiments) -	-	-	-	1,258	19,883		
Artillery (22 batteries and companies) -	-	-	-	3,372			
Engineers -	-	-	-	44			
Infantry (15 battalions) -	-	-	-	15,209			
Native.							
Cavalry (9 regiments) -	-	-	-	5,864	29,589		49,472
Artillery (Native Drivers of British batteries) -	-	-	-	260			
Sappers and Miners (3 companies) -	-	-	-	547			
Infantry (25½ battalions) -	-	-	-	22,918			
MADRAS COMMAND.							
British.							
Cavalry (1 regiment) -	-	-	-	653	10,684		
Artillery (13 batteries and companies) -	-	-	-	1,902			
Engineers -	-	-	-	40			
Infantry (8 battalions) -	-	-	-	8,089			
Native.							
Cavalry (3 regiments) -	-	-	-	1,782	19,025		29,709
Artillery (1 battery and Native Drivers of British batteries) -	-	-	-	702			
Sappers and Miners (4 companies) -	-	-	-	668			
Infantry (18½ battalions) -	-	-	-	15,873			
					17,092		
					53,185		
					19,883		
					29,589		
					10,684		
					19,025		
Carried forward - - -							149,459

ARMY.

	Brought forward - -	149,458
BOMBAY COMMAND.		
<i>British.</i>		
Cavalry (1 regiment) - - - -	686	
Artillery (25 batteries and companies) -	3,635	
Engineers - - - - -	67	
Infantry (11 battalions) - - - -	10,952	15,340
<i>Native.</i>		
Cavalry (7½ regiments) - - - -	4,769	
Artillery (Native Drivers of British batteries)	520	
Sappers and Miners (5 companies) - -	751	
Infantry (22 battalions) - - - -	18,190	24,230
IN CHITRAL AND GILGIT.		
<i>Native.</i>		
Artillery (½ battery) - - - -	89	
Sappers and Miners (1 company) - -	176	
Infantry (1½ battalion) - - - -	847	1,112
TROOPS NOT UNDER THE ORDERS OF THE COMMANDER-IN-CHIEF IN INDIA.		
<i>Hyderabad Contingent.*</i>		
Cavalry (6 regiments) - - - -	2,027	
Artillery (4 batteries) - - - -	530	
Infantry (5 battalions) - - - -	4,430	6,987
Body guards (Governor General's and Governors) - - - - -	268	
Resident's escort, Nepal - - - -	95	
		363
		7,350
TOTAL - - -		197,490

* The Hyderabad Contingent is not included in the "Sanctioned Establishment" shown above.

Owing to the campaigns in South Africa and China, the establishment was short of the following troops:—

<i>British.</i>	<i>Native.</i>
7 batteries, Artillery.	3 regiments, Cavalry.
4 regiments, Cavalry.	3 companies, Sappers and Miners.
5 battalions, Infantry.	18 regiments, Infantry (one belonging to the Hyderabad Contingent).

There were also 4 battalions of Native Infantry in the Colonies, and a detachment of Native Artillery and a wing of Native Infantry in Jubaland.

The total of the Native Army Reserves in India on 1st April 1901 was 21,185.

The net expenditure on the Army in 1900-01 was £14,265,525. The total in 1899-1900 was £14,165,743.

The number of Volunteers in the whole of India on 1st April 1901 was as under:—

Command.	Enrolled Strength.	Efficient.
Punjab - - - - -	2,033	1,853
Bengal - - - - -	13,369	10,234
Madras - - - - -	10,399	9,801
Bombay - - - - -	5,679	5,481
	31,480	27,369

On the 1st April 1900 the number of enrolled Volunteers was 31,036, of whom 29,994 were efficient. The number of Volunteers enrolled in the Reserve at the end of 1900-01 was 795.

Some important changes in the organisation of the Army in India came into effect in 1900-01.

The Native Infantry regiments (including those of the Hyderabad contingent, but not the local corps in Rajputana and Central India) were reorganised on the double-company system, and the designations of the officers, other than commandants, were consequently changed.

The practice of appointing officers to officiate in native regiments in place of absentees was discontinued; and, instead, two squadron or wing officers were added to the permanent strength of each regiments, including the Hyderabad contingent and the Central India Horse, but not the other local corps, to each of which only one officer was added.

A further addition of one officer was made to each regiment of the Punjab Command and of the Bengal Command excepting the Bhopal Battalion.

The district designated the Punjab Frontier Force was extended so as to include the Peshawar district (retained as a subordinate district), the Malakhand, Tochi Valley, Waziristan, and Kurram. A new district, styled "Derajat district," was formed under a Brigadier-General subordinate to the General Officer Commanding the Punjab Frontier Force, whose designation was altered to "General Officer Commanding the Punjab Frontier Force and Frontier District."

The Rangoon district was reduced; the command of a colonel on the Staff being substituted, and some of the stations being transferred to the Mandalay district.

The Ordnance Department was reorganised in two circles, "Northern" and "Southern," instead of in four.

Regulations were framed for the organisation and governance of a reserve of transport mule drivers and artificers, and for the control and management of Government farms.

Some alterations were made in the class composition, linking, &c., of Native regiments.

Another Native mountain battery was raised, and the establishment of the existing mountain batteries, British and Native, was increased.

Five Native Infantry regiments were raised in order to provide for the permanent employment of Native troops in certain colonial garrisons under an agreement with the War Office.

EXPEDITION TO CHINA, 1900-01.

In consequence of the Boxer outbreak in China in May and June 1900, it was decided to send a force from India to co-operate with the troops of other Powers in relieving the besieged Legations in Peking, and in restoring order. The first intimation of this intention was given to the Viceroy on the 16th

ARMY. June 1900. Within a few days two infantry Brigades, besides divisional troops, &c., were detailed for service in China, and Brigadier-General Sir Alfred Gaselee, K.C.B., was nominated to command the Expeditionary Force with the local rank of Lieutenant-General. He left Calcutta on the 5th July, and arranging en route for the protection of Shanghai, arrived at Taku on the 25th July and Tientsin on the 27th. An advance on Peking was at once undertaken, and, after actions at Pei-tsang on the 5th August and at Yang-tsun on the 6th, Peking was successfully assaulted, and the Legations relieved on the 14th August. In his despatch narrating these events Sir Alfred Gaselee states "H.M. troops had the supreme gratification of finding " they were the first to relieve the sorely-pressed beleaguered garrison."

Meantime more troops had been demanded and had been supplied from India. During July and August a 3rd and a 4th brigade were despatched by the Viceroy, the latter including Imperial Service Troops from Alwar, Jodhpur, Bikanir, and Maler Kotla, who were all much gratified at being employed beyond the seas. With them went Maharaj Dhiraj Sir Pertab Singh, G.C.S.I., C.B., of Jodhpur, H.H. the Maharaja of Bikanir, and H.H. the Maharaja Sindhia of Gwalior, G.C.S.I. It must be mentioned here that H.H. the Maharaja Sindhia furnished for the Expedition at his own expense a hospital ship, the "Gwalior," fully found and equipped in every respect, the services rendered by which proved of great value.

The total troops sent by India on this occasion, with hospitals, transports, or supplies, &c., complete, amounted to 15,200 men of all arms, and in addition three battalions of Native Infantry were sent to Hongkong for garrison duty.

After the capture of Peking, on the 14th August 1900, the force under Sir Alfred Gaselee bore a share in various minor expeditions and skirmishes, but order was gradually restored, and in the spring of 1901 arrangements were commenced for withdrawing the greater portion of the troops from the country.

A medal with three clasps was subsequently granted for the operations in China, and a gratuity was also given to all who took part in them. Sir Alfred Gaselee was rewarded with a G.C.I.E. and promotion to the substantive rank of Major-General, and on many other officers suitable rewards and promotions were conferred.

A small force of Indian troops was employed in Jubaland in suppressing the outbreak of the Ogaden Somalis.

MILITARY WORKS.

MILITARY WORKS. The total expenditure on Military Works, ordinary and special, amounted to £799,806 in 1900-01, against £837,436 in 1899-00. The cost of Special Defence Works amounted to £6,864.

The expenditure of £782,942 on ordinary military works included an outlay of £286,998 on new works, of £238,079 on repairs, and of £199,916 on establishment. Under the head of New Works, additions to the barrack and hospital accommodation for British and Native troops cost over £100,000, while General Cantonment Works figured at £53,097.

APPENDIX.

TABLES showing the NET REVENUE and EXPENDITURE in the several Provinces of INDIA, and in ENGLAND.

APPENDIX.

FINANCE.

BENGAL.			NORTH-WESTERN PROVINCES AND OUDH.			Bengal and North-Western Provinces and Oudh.
	1899-1900.	1900-01.		1899-1900.	1900-01.	
NET REVENUE:			NET REVENUE:			
Land Revenue - - -	£ 2,726,815	£ 2,701,918	Land Revenue - - -	£ 4,283,393	£ 4,249,584	
Forest - - - - -	75,782	81,185	Forest - - - - -	107,148	104,057	
Opium - - - - -	1,724,551	2,381,531	Opium - - - - -	35,397	33,455	
Salt - - - - -	1,707,898	1,681,752	Stamps - - - - -	497,895	545,695	
Stamps - - - - -	1,207,941	1,218,295	Excise - - - - -	423,499	458,238	
Excise - - - - -	939,370	975,508	Provincial Rates - - -	687,392	692,146	
Provincial Rates - - -	656,849	643,412	Assessed Taxes - - -	167,019	172,070	
Customs - - - - -	1,118,291	1,185,684	Other Heads - - - - -	33,710	46,122	
Assessed Taxes - - -	351,759	356,235				
Registration - - - -	96,536	101,788	TOTAL - - - - -	6,235,663	6,301,367	
Other Heads - - - -	41,254	43,667				
TOTAL - - - - -	10,638,046	11,370,975				
NET EXPENDITURE:			NET EXPENDITURE:			
Interest - - - - -	— 117,748	— 101,100	Interest - - - - -	38,987	43,104	
Collection of Revenue - -	698,642	615,969	Collection of Revenue - -	605,791	624,487	
Railways - - - - -	— 687,319	— 663,521	Railways - - - - -	— 677,006	— 680,042	
Irrigation - - - - -	153,679	158,472	Irrigation - - - - -	— 217,163	— 222,061	
General Administration - -	152,003	153,292	General Administration - -	113,184	116,446	
Law and Justice - - -	632,547	633,394	Law and Justice - - -	394,874	412,062	
Police - - - - -	356,783	359,984	Police - - - - -	502,921	518,317	
Education - - - - -	219,349	221,617	Education - - - - -	130,208	134,409	
Medical - - - - -	160,620	157,848	Medical - - - - -	92,968	103,983	
Territorial and Political Pensions.	72,143	72,333	Territorial and Political Pensions.	59,108	58,860	
Civil Superannuation - -	137,767	144,666	Civil Superannuation - -	142,148	145,857	
Stationery and Printing -	221,760	220,900	Stationery and Printing -	38,878	38,850	
Civil Works - - - - -	564,583	572,287	Civil Works - - - - -	392,243	375,962	
Famine Relief and Insurance -	915	18,707	Famine Relief and Insurance -	10,293	11,428	
Other Heads - - - - -	61,847	47,252	Other Heads - - - - -	50,767	53,934	
Provincial and Local Balances	62,304	32,858	Provincial and Local Balances	57,642	62,094	
TOTAL - - - - -	2,599,875	2,664,937	TOTAL - - - - -	1,766,203	1,797,699	
Surplus - - - - -	8,038,171	8,706,018	Surplus - - - - -	4,469,460	4,563,677	



APPENDIX.
FINANCE.Punjab and
Burma.

PUNJAB.

BURMA.

	1899-1900.	1900-01.		1899-1900.	1900-01.
NET REVENUE:	£	£	NET REVENUE:	£	£
Land Revenue - - -	1,461,550	1,547,298	Land Revenue - - -	1,978,396	2,128,180
Forest - - - - -	93,354	89,925	Forest - - - - -	520,338	535,884
Stamps - - - - -	285,149	282,300	Salt - - - - -	100,781	88,684
Excise - - - - -	172,330	172,770	Stamps - - - - -	127,740	137,142
Provincial Rates - - -	263,445	281,660	Excise - - - - -	329,231	353,489
Assessed Taxes - - -	101,632	107,697	Provincial Rates - - -	92,478	99,408
Registration - - - -	24,752	23,132	Customs - - - - -	565,642	605,247
Other Heads - - - -	29,216	35,023	Assessed Taxes - - -	72,367	76,415
TOTAL - - - - -	2,431,428	2,539,805	Other Heads - - - -	76,613	66,855
NET EXPENDITURE:			TOTAL - - - - -	3,863,586	4,091,304
Military Works - - -	33,441	44,259	NET EXPENDITURE:		
Collection of Revenue - -	380,700	362,144	Military Works - - -	45,879	41,667
Railways - - - - -	-1,081,688	-880,830	Collection of Revenue - -	532,635	571,039
Irrigation - - - - -	-606,879	-678,485	Railways - - - - -	-254,420	-304,037
General Administration -	86,946	89,949	Irrigation - - - - -	100,471	105,042
Law and Justice - - -	264,612	282,221	General Administration -	84,837	89,153
Police - - - - -	237,605	238,360	Law and Justice - - -	183,602	196,493
Education - - - - -	86,504	85,897	Police - - - - -	567,156	587,642
Medical - - - - -	72,408	85,724	Marine - - - - -	26,269	22,614
Political - - - - -	148,602	170,030	Education - - - - -	59,515	63,340
Territorial and Political Pen- sions.	19,850	18,057	Medical - - - - -	37,053	44,396
Civil Superannuation - -	75,269	79,082	Political - - - - -	34,191	28,949
Stationery and Printing -	27,061	27,162	Stationery and Printing -	41,254	42,601
Famine Relief and Insurance -	163,289	152,071	Famine Relief and Insurance -	-	95
Civil Works - - - - -	247,846	237,926	Civil Works - - - - -	526,965	637,136
Other Heads - - - - -	46,169	50,342	Other Heads - - - - -	54,499	59,393
Provincial and Local Balances	-132,297	2,606	Provincial and Local Balances	176,808	101,467
TOTAL - - - - -	69,938	366,515	TOTAL - - - - -	2,216,714	2,289,990
Surplus - - - - -	2,361,490	2,173,290	Surplus - - - - -	1,646,872	1,801,314

APPENDIX.
FINANCE.
Central
Provinces and
Assam.

CENTRAL PROVINCES.			ASSAM.		
	1899-1900.	1900-01.		1899-1900.	1900-01.
NET REVENUE:	£	£	NET REVENUE:	£	£
Land Revenue - - -	382,001	309,912	Land Revenue - - -	416,776	410,160
Forest - - - - -	54,396	64,003	Opium - - - - -	29,499	29,273
Stamps - - - - -	87,882	86,471	Stamps - - - - -	61,491	62,686
Excise - - - - -	132,285	119,018	Excise - - - - -	190,502	195,341
Provincial Rates - - -	59,680	42,196	Provincial Rates - - -	44,690	42,942
Assessed Taxes - - -	31,061	30,217	Other Heads - - - -	62,556	60,761
Other Heads - - - -	49,352	40,886	TOTAL - - - - -	805,514	801,163
TOTAL - - - - -	796,657	692,703			
NET EXPENDITURE:			NET EXPENDITURE:		
Collection of Revenue - -	189,545	182,624	Collection of Revenue - -	95,986	94,629
Railways - - - - -	-320,005	-331,998	General Administration -	23,129	23,398
General Administration -	40,542	42,004	Law and Justice - - -	38,831	42,166
Law and Justice - - -	77,328	91,975	Police - - - - -	98,194	96,269
Police - - - - -	92,885	95,525	Education - - - - -	24,354	24,532
Education - - - - -	38,870	38,676	Medical - - - - -	24,852	26,259
Medical - - - - -	32,987	31,514	Civil Works - - - - -	214,529	171,109
Territorial and Political Pen- sions.	15,968	15,619	Other Heads - - - -	39,481	31,305
Famine Relief and Insurance -	1,029,946	1,910,633	Provincial and Local Balances	-57,900	-12,788
Civil Works - - - - -	109,146	108,081	TOTAL - - - - -	501,456	496,942
Other Heads - - - - -	43,054	49,303	Surplus - - - - -	304,058	304,221
Provincial and Local Balances	-18,415	-10,767			
TOTAL - - - - -	1,331,851	2,203,249			
Surplus or deficit - -	-535,194	-1,510,546			

APPENDIX.
FINANCE.
Madras and
Bombay.

MADRAS.			BOMBAY.		
	1899-1900.	1900-01.		1899-1900.	1900-01.
NET REVENUE:	£	£	NET REVENUE:	£	£
Land Revenue - - -	3,163,907	3,350,052	Land Revenue - - -	1,960,038	1,975,936
Forest - - - - -	152,656	155,202	Forest - - - - -	160,226	196,993
Tributes from Native States -	299,226	299,007	Tributes from Native States -	83,011	69,820
Salt - - - - -	1,200,753	1,208,054	Opium - - - - -	848,030	832,948
Stamps - - - - -	549,583	564,109	Salt - - - - -	1,485,314	1,551,571
Excise - - - - -	892,763	904,766	Stamps - - - - -	383,331	384,469
Provincial Rates - - -	510,972	565,930	Excise - - - - -	664,757	638,012
Customs - - - - -	246,049	235,789	Provincial Rates - - -	173,430	182,571
Assessed Taxes - - -	194,040	195,789	Customs - - - - -	1,120,166	1,245,082
Registration - - - -	84,332	96,303	Assessed Taxes - - -	257,265	257,473
Miscellaneous - - -	25,921	18,965	Registration - - - -	38,080	40,426
TOTAL - - -	7,320,202	7,593,966	Mint - - - - -	33,689	27,380
			Miscellaneous - - -	-18,241	-24,196
			TOTAL - - -	7,194,036	7,378,490
NET EXPENDITURE:			NET EXPENDITURE:		
Army - - - - -	1,973,952	1,865,548	Interest - - - - -	-19,652	-69,909
Collection of Revenue - -	1,057,703	1,101,352	Army - - - - -	2,178,215	2,203,904
Railways - - - - -	-306,338	-507,272	Collection of Revenue - -	839,254	867,541
Irrigation - - - - -	-160,086	-196,265	Railways - - - - -	-117,380	-1,047,990
General Administration -	106,456	104,736	Irrigation - - - - -	29,569	40,443
Law and Justice - - -	305,801	318,302	General Administration -	136,120	139,363
Police - - - - -	281,642	275,479	Law and Justice - - -	315,674	347,409
Education - - - - -	161,012	157,814	Police - - - - -	383,397	398,665
Medical - - - - -	203,959	178,965	Education - - - - -	195,305	188,802
Territorial and Political Pen- sions. - - - - -	39,963	39,236	Ecclesiastical - - - -	22,377	22,170
Civil Superannuation - -	109,002	111,410	Medical - - - - -	211,284	217,534
Stationery and Printing -	91,998	92,835	Political - - - - -	53,808	58,030
Famine Relief and Insurance	5,014	13,337	Territorial and Political Pensions. - - - - -	39,525	37,015
Civil Works - - - - -	426,287	372,345	Civil Superannuation - -	114,965	118,047
Other Heads - - - - -	30,655	31,961	Stationery and Printing -	94,321	100,818
Provincial and Local Balances	-141,970	14,801	Civil Works - - - - -	252,165	241,898
TOTAL - - -	4,095,650	3,974,584	Famine Relief and Insurance-	785,010	1,909,667
			Other Heads - - - - -	33,089	37,189
			Provincial and Local Balances	-152,197	-609
Surplus - - -	3,224,552	3,619,382	TOTAL - - -	5,394,949	5,809,877
			Surplus - - -	1,799,147	1,568,613

INDIA, GENERAL, i.e., the Departments
and Districts under the direct
Supervision of the Government of
India.

NET EXPENDITURE in England.

APPENDIX.
FINANCE.
India,
General.

	1899-1900.	1900-01.		1899-1900.	1900-01.
NET REVENUE:	£	£	NET EXPENDITURE:	£	£
Land Revenue - - -	71,948	82,434	Interest - - - - -	2,845,022	3,042,182
Forest - - - - -	30,639	29,720	Army: Effective - - -	1,572,722	2,038,224
Tributes from Native States -	149,648	128,719	" Non-effective - - -	2,404,644	2,368,125
Salt - - - - -	1,079,029	1,179,860	Military Works and Special Defence Works.	32,656	47,921
Stamps - - - - -	24,908	23,617	Collection of Revenue (Stamps, &c.).	52,235	33,150
Excise - - - - -	74,802	75,487	Post Office - - - - -	95,365	97,320
Assessed Taxes - - -	95,132	97,513	Telegraph - - - - -	166,268	216,015
Mint - - - - -	258,176	5,749	Railways - - - - -	5,912,527	6,144,067
Exchange on Remittance	-80,949	-31,849	General Administration -	320,023	255,196
Other Heads - - - -	37,225	19,074	Marine - - - - -	327,970	352,023
TOTAL - - -	1,740,558	1,610,324	Political - - - - -	23,960	24,743
			Scientific and other minor Departments.	28,279	40,682
NET EXPENDITURE:			Civil Furlough Allowances -	282,881	250,864
Interest - - - - -	-1,354,993	-1,407,096	Superannuation - - -	1,875,376	1,866,666
Army - - - - -	6,036,210	5,789,723	Stationery and Printing -	59,700	67,350
Military Works and Special Defence Works.	639,919	584,180	Civil Works - - - - -	62,677	65,572
Collection of Revenue - -	88,354	84,327	Other Heads - - - - -	66,998	72,780
Post Office - - - - -	-298,154	-312,528	TOTAL - - -	16,129,303	16,982,881
Telegraph - - - - -	-272,159	-329,144			
Railways - - - - -	-2,471,939	-2,016,015			
Irrigation - - - - -	562,127	556,622			
General Administration -	320,536	326,144			
Law and Justice - - -	88,724	103,335			
Police - - - - -	46,075	47,602			
Marine - - - - -	49,390	74,522			
Political - - - - -	426,618	270,564			
Scientific and other Minor Departments.	191,028	228,744			
Stationery and Printing -	-142,949	-156,619			
Civil Works - - - - -	95,550	81,569			
Famine Relief and Insurance	100,664	132,603			
Other Heads - - - - -	70,962	63,549			
Local Balances - - -	-795	1,126			
TOTAL - - -	4,145,188	4,123,208			
Deficit - - -	-2,404,630	-2,512,884			

APPENDIX.

FINANCE.
Summary.

SUMMARY.

PROVINCES, &c.	1899-1900.		1900-01.	
	Surplus.	Deficit.	Surplus.	Deficit.
BENGAL - - - - -	£. 8,038,171	£. —	£. 8,706,018	£. —
NORTH WESTERN PROVINCES and ODDH. - - - - -	4,462,460	—	4,503,677	—
PUNJAB - - - - -	2,361,190	—	2,173,290	—
BURMA - - - - -	1,646,872	—	1,801,314	—
CENTRAL PROVINCES - - - - -	—	—535,124	—	—1,510,546
ASSAM - - - - -	304,058	—	304,221	—
MADRAS - - - - -	3,224,552	—	3,619,382	—
BOMBAY - - - - -	1,799,147	—	1,568,613	—
INDIA, GENERAL - - - - -	—	—2,404,630	—	—2,512,884
ENGLAND - - - - -	—	—16,129,303	—	—16,982,881
TOTAL - - - - -	2,774,623	—	1,670,204	—

V2, 8 'NOO

NO231

