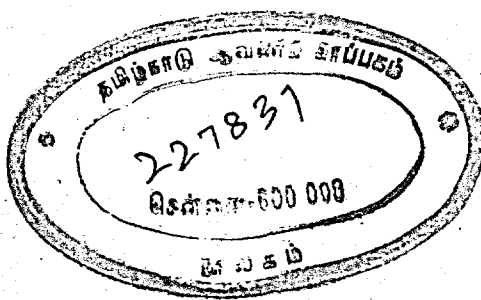


R
V21185-479
MCO



REPORT
ON THE
ADMINISTRATION
OF THE
MADRAS PRESIDENCY,
DURING THE YEAR
1879-80.

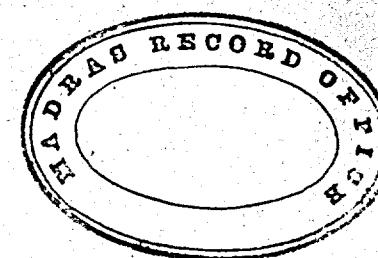
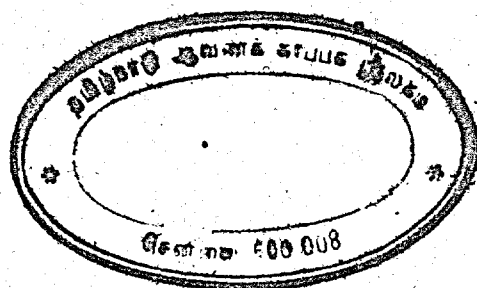
I.—SUMMARY OF THE ADMINISTRATION.
II.—DEPARTMENTAL CHAPTERS.
III.—STATISTICAL RETURNS.
IV.—SPECIAL APPENDIX.

MADRAS:
PRINTED BY E. KEYS, AT THE GOVERNMENT PRESS.
1880.

SECRETARIAT LIBRARY,
MADRAS.
Class *TH. 24*
Book-case *3*
189.

161

2828/26



CONTENTS.

SUMMARY OF THE ADMINISTRATION.

	PAGE
SECTION I.—GENERAL AND POLITICAL.	
Changes in Council	(3)
Governor's Tour	(3)
Travancore State	(4)
Cochin State	(5)
Ganjam Agency	(7)
Vizagapatam Agency	(7)
Godavari Agency	(7)
Pudukota State	(12)
Banganapalle State	(13)
Sandur State	(14)
Carnatic Stipends	(14)
SECTION II.—LAND REVENUE, ANNUAL SETTLEMENT.	
Land Revenue, Annual Settlement	(14)
Land Revenue, Administration	(16)
Revenue Survey	(16)
Revenue Settlement	(17)
Inam Commission	(17)
Court of Wards	(18)
SECTION III.—PROTECTION.	
Legislation	(19)
Police	(19)
Arms Act	(20)
Crime and Offences	(20)
Criminal Justice	(21)
Vagrancy	(22)
Public Charities	(22)
Jails	(22)
Civil Justice	(23)
Registration	(24)
Military	(25)
Marine	(26)
Agricultural Protection	(26)

CONTENTS.

	PAGE
SECTION IV.—PRODUCTION AND DISTRIBUTION.	
Weather, Crops, Prices and Wages	(27)
Mineral Resources	(28)
Government Agricultural Operations	(29)
Government Horticulture	(30)
Government Chinchona	(30)
Forests	(31)
Trade	(32)
Public Works	(33)
Irrigation	(35)
Railway	(36)
Irrigation and Canal Company	(40)
Imperial and District Post	(40)
Imperial Telegraph	(40)
SECTION V.—REVENUE AND FINANCE.	
Gross Revenue	(41)
Land Revenue	(42)
Abkari	(43)
License Tax	(43)
Sea Customs	(43)
Land Customs	(44)
Salt	(44)
Stamps	(45)
Condition of Taxation—General	(45)
Public Works expenditure	(45)
Provincial Services	(46)
Fettered and Unfettered Funds	(46)
Loans	(47)
Money Order	(48)
Currency	(48)
SECTION VI.—VITAL STATISTICS AND MEDICAL SERVICES.	
Sanitary Statistics—General, Municipalities, Jails, Vaccination	(48)
Emigration	(51)
Medical Relief	(51)
Lunatic Asylums	(52)
Civil Lock Hospital, Madras	(52)
Health of the Troops	(52)
Military Lock Hospitals	(53)
SECTION VII.—INSTRUCTION.	
University Education	(54)
Secondary Education	(55)
Primary Education	(55)
School Fees	(57)
Government Book Depot	(57)
Book Registration	(58)
Madras Medical College	(58)
Ootacamund Lawrence Asylum	(58)
U.C.S. Examinations	(59)
Madras School of Arts	(59)
Museum	(59)
Madras Observatory	(59)

CONTENTS.

	PAGE
SECTION VIII.—ARCHÆOLOGY.	
Operations of the year	(60)
SECTION IX.—MISCELLANEOUS.	
Local Funds	(60)
Madras Municipality	(61)
Municipal Administration—Mofussil	(61)
Ecclesiastical	(62)
Stationery Office	(62)
Government Press	(62)
Lawrence Asylum Press	(63)
District Presses	(63)
Chemical Examiner's Department	(63)

DEPARTMENTAL CHAPTERS.

CHAPTER I.—GENERAL AND POLITICAL.

	PAGE
FAMINE ADMINISTRATION	3
TRAVANCORE STATE.	
Legislation	3
Justice—Civil	4
Justice—Criminal	5
Police	6
Jails	6
Registration of Assurances	6
Revenue	6
Forests	7
Education	7
Public Works	8
Museum	8
Revenue Survey	9
Unjcl or Postal Department	9
Marine	9
Mint	9
Medical	9
Finance	9
COCHIN STATE.	
Legislation	10
Justice—Civil	10
Justice—Criminal	11
Jails	11
Police	11
Revenue	12
Registration	12
Education	12
Public Works	13
Forests	13
Medical	13
Ports	13
Postal Department	13
Military	13
Press	14
Financial	14
GANJAM AGENCY.	14

	PAGE
VIZAGAPATAM AGENCY.	
General	15
Justice	15
Public Works	16
Police	16
GODAVARI AGENCY	16
PUDUKOTA STATE.	
Season	36
Vaccination	36
Cultivation of land	36
Demand, collection and balance	36
Receipts and expenditure	37
Public Works	37
Registration	37
Civil Courts	37
Police and crimes	38
Jail	38
Education	38
General review	38
BANGANAPALLE	38
SANDUR	40
POLITICAL PENSIONS.	
Carnatic stipends	41

CHAPTER II.—ADMINISTRATION OF THE LAND.

GOVERNMENT AND ALIENATED LANDS.	
Territorial changes	42
Number of puttas	42
Ryotwari settlement	43
Actual cultivation	44
Second crop assessment	45
Water-tax on Government lands	45
Total assessment	45
Waste remitted	45
Remissions dependent upon season and otherwise fluctuating	47
Item No. 1, Shavi	47
Item No. 2, Palanastam or short produce	47
Item No. 4, Teerwacummi or difference between dry and wet assessment	48
Item No. 5, Fasalcummi	48
Item No. 6, Remission of water-tax	48
Item No. 9, Miscellaneous	48
Fixed remissions	49
Beriz deductions	49
Land revenue—ryotwar and variations therein	50

CONTENTS.

	PAGE
Entire land revenue demand, including permanently-settled revenue, shrotriem jodi, and miscellaneous	50
Permanently-settled estates	51
Miscellaneous	51
Total land revenue demand	52
Ditto, divided into wet and dry	52
Land revenue, special items—lands held on cowle	52
Ditto, ditto, amani	53
Ditto, ditto, cultivation of special crops	53
Land revenue, rate of assessment	53
Entire current demand, collection, and balance of land revenue	54
Arrear demand, collection, and balance under all sources of land revenue	54
Comparative view of collections of land revenue, current and arrears, within the fasli	55
Coercive processes	56
Miscellaneous subjects—Hoonjeram and Palkonda Estates in the district of Vizagapatam	56
Revenue administration of the Bhadrachalam and Rekapalle taluks in the Godavari district	56
Civil suits	56
SURVEYS.	
Outlay of the year compared with estimate	57
Results of expenditure in outturn of work	57
Rates or cost of work per unit of area	58
Results of comparison of rates in Survey Parties	58
Rates in the Central Office	58
Variations in the strength of establishment	59
Comparison of area in the Presidency surveyed and remaining to be surveyed	59
Tests of accuracy	59
REVENUE SETTLEMENT.	
Survey operations	60
Cost	60
Results	61
INAM COMMISSION	62
COURT OF WARDS.	
Season	64
Collections of the current demand	64
Total demand, current and arrears	64
Receipts and charges	64
Public Works	65
Balances in hand	67
Debts	68
Education	68
Chattrams and Devasthanams	69
Parlakimedi Forests	69

CONTENTS.

CHAPTER III.—PROTECTION.

	PAGE
LEGISLATION	70
POLICE.	
Strength of force	70
Enlistments and casualties	71
Police officers convicted	72
Rewards	72
State of education	72
Instruction	72
Convicts guarded	72
Escapes and re-captures	73
Hutting and buildings	73
Processes served	73
Violent and unnatural deaths	73
Fires	74
Known depredators and suspected persons	74
Old offenders re-convicted	74
Cognizable crime	74
Non-cognizable cases	75
Murders	75
Dacoities	76
Particulars as to dacoities	76
Robberies	77
House-breaking	77
Cattle thefts and poisoning	78
Revenue Laws	78
Cases referred	79
Inspection, casualties, &c.	79
PUBLIC CHARITIES.	
Monegar Choultry and connected charities	79
Triplacane Langarkhana	80
REWARDS.	
General	80
By District Magistrates	81
By Inspectors-General of Police and Jails	81
SULPHUR LICENSES	81
ARMS ACT	82
CRIME AND OFFENCES.	
Total offences reported	82
Offences under Penal Code	84
Offences against Special Laws	84
Comparison with previous year	84
Sub-division into Cognizable and Non-cognizable	85
Special and Local Laws	87
Offences under Sanitary Laws	87
Summary jurisdiction of Magistrates	88
High and District Courts	90
Heads of villages	91

CONTENTS.

Sexes of persons convicted	91
Punishments	92
Castes of convicted offenders under the Penal Code	93
VAGRANCY	93
CRIMINAL JUSTICE.	
High Court, Original jurisdiction	94
High Court, appeals	94
Appeals against acquittal	94
Jury disagreement	94
Confirmation of sentences of death	94
Revision of sentences	95
Convictions and appeals in Lower Criminal Courts	95
Diminution of convictions	96
General result of appeals	96
Trial by jury	97
Trials with assessors	97
Whipping Act	97
PRISONS.	
Admission and disposal of prisoners	97
Religion, age, and previous occupation	98
Numbers according to nature and length of sentences	98
Escapes and recaptures	99
Jail offences and punishments	99
Education	100
Foreign convicts	100
Employment of women	100
State prisoners	101
Lunatics	101
Remission system and convict servants	101
Juvenile offenders	101
Financial	101
Rations	102
Fixed establishment	102
Police guards	102
Hospital charges	102
Clothing and bedding	102
Contingencies	103
Total cost	103
Employment of convicts	103
Manufactures	104
Diet	104
Health of prisoners	105
Mortality according to seasons	105
Subsidiary jails	106
Employment of convicts in subsidiary jails	107
Health of prisoners in subsidiary jails	107
CIVIL JUSTICE.	
High Court, Original jurisdiction	108
High Court, Appellate jurisdiction	109
Miscellaneous work	109
Appeals to Privy Council	110

CONTENTS.

Lower Courts, Original jurisdiction	110
Lower Courts, Appellate jurisdiction	113
Process Service fees	114
Coercive processes in execution	114
Probates	115
Madras Court of Small Causes	115
General.	
Judges of the High Court	116
Practitioners of the High Court	116
Trial by jury	116
Act III of 1863 (Madras)	116
Investiture of the Sub-Judge and the District Munsifs of Tinnevely with Small Cause powers	117
Abolition of Small Cause Courts	117
REGISTRATION.	
Registration in Books I and IV	117
Nature of instruments registered	118
Aggregate value of transactions registered	118
Compulsory and optional registrations	119
Wills and authorities to adopt	120
Registrations on payment of fine	120
Refusal to register	120
Appeals	121
Arrears	121
Documents destroyed	121
Unclaimed documents	121
Documents impounded	121
Prosecutions	121
Changes, &c.	122
Financial results	122
Average registration fee	124
REGISTRATION OF JOINT STOCK COMPANIES	124
MILITARY.	
Strength of Army	125
Distribution and employment of troops	125
Ordinary relief of troops	125
Rampa disturbance	126
Burmah	126
Reduction in strength of garrisons	126
Communications	126
Native Army equipment	126
Recruits	127
Health of British troops	127
Health of Native troops	128
Lock Hospitals	129
Ordnance Department	130
Military Account Department	130
Clothing Department	131
Pension and Family Payment Department	131
Commissariat Department	131
Transport	132
Remount Depot	132

CONTENTS.

	PAGE
MARINE.	
Shipping and dues	133
Weather	134
Native Passenger Ships Act VIII of 1876	134
Wrecks and casualties	134
Pamban Channel	134
Port Fund	135
AGRICULTURAL PROTECTION.	
Land Improvement Act	135
Destruction of wild animals	136

CHAPTER IV.—PRODUCTION AND DISTRIBUTION.

WEATHER, CROPS, PRICES AND WAGES.	
Season and rainfall	138
Cultivation	142
Cotton	143
Indigo	144
Health of cattle	145
Prices	145
Wages	145
Mines	147
Manufactures	148
Condition of the people	149
GOVERNMENT AGRICULTURAL OPERATIONS.	
Agricultural education	149
Agricultural tours	150
The Saidapet Experimental Farm—Season	150
Drainage	150
Area of land cultivated	150
Crops	151
Manures	151
Live stock	152
Implements	152
Estate	152
Finance	153
GOVERNMENT HORTICULTURE.	
Ootacamund Botanical Garden	153
Sin's Park	154
Barliyar Garden	155
Kalhatti Gardens	155
Medicinal Garden	155
Miscellaneous properties	155
GOVERNMENT CHINCHONA	155
FORESTS.	
Forest reserves	157
Fuel reserves	158

CONTENTS.

	PAGE
Plantations	159
License and Voucher system	160
Yield of forests	161
Financial results	161
Financial results by divisions	162
TRADE.	
Total sea-borne trade	163
External trade	163
Exports	164
Coffee	164
Cotton	165
Hides and skins	165
Rice and paddy	165
Other grains	166
Indigo	166
Seeds	166
Oils	166
Spices	167
Cotton piece-goods	167
Sugar	168
Cocoanuts	169
Coir-yarn and rope	169
Timber and wood	169
Tobacco	169
Animals, living	169
All other articles	170
Oil-cake	170
Peruvian bark	170
Tea	170
Myrabolams	170
Provisions—ghee	170
Re-exports	170
External trade—Imports	171
Cotton, twist, and piece-goods	171
Cotton piece-goods	172
Twist and yarn	172
Grain and pulse	173
Metals	174
Liquors	174
Spirits	174
Wines and liquors	175
Ale, beer, and porter	175
Apparel	175
Timber and wood	175
Railway materials	175
Other articles	176
Treasure exports	178
Treasure imports	179
Total external trade	179
Internal trade	180
Customs revenue	182
Government Stores—Imports	183
Exports	184

CONTENTS.

	PAGE
Land Customs	184
Shipping—foreign trade	186
Coasting trade	188
PUBLIC WORKS—GENERAL	190
PUBLIC WORKS—BUILDINGS AND ROADS.	
Imperial—Military	193
Imperial, Other Services	194
Provincial, Productive Public Works	194
Provincial, Civil Buildings	195
Provincial, Communications	195
Provincial, Miscellaneous Public Improvement	197
Special, Civil Buildings	197
Special, Communications	198
Special, Miscellaneous Public Improvements	198
Workshops	198
Presidency Public Works Stores and Workshops	198
Plans and Publications	198
Tidal gaugings	198
Dynamite experiments, Nilgiri	199
Godavari coal	199
Improvements in the Departmental Administration	199
Alteration in the status of the Examiner, Public Works Accounts	200
Changes in the strength of the Departmental Establishment and re- arrangement of charges on the orders restricting expenditure by the Government of India	200
PUBLIC WORKS—IRRIGATION.	
(a.) General.	
Classification	201
38, Productive Public Works (Capital Account)	202
33, Irrigation and Navigation	202
(b.) Outlay.	
Grants and outlay	202
Statement showing estimates, grants, and outlay for Productive Public Works (Capital Account)	204
Productive Public Works (Revenue Account)	205
Maintenance and Repairs	205
Irrigation and Navigation works for which Capital and Revenue accounts are kept	206
Irrigation and Navigation works for which Capital and Revenue accounts are kept—Revenue	207
Irrigation and Navigation works for which neither Capital nor Re- venue accounts are kept	207
General remarks	208
(c.) Receipts.	
Revenue due to Cauvery Delta, Chembrambaukam tank, and Sri- vaikuntham Anicut System	209
Statement showing the total charges and revenue for 1878-79	209
Navigation receipts	211

CONTENTS.

	PAGE
PUBLIC WORKS—RAILWAYS.	
(a.) General.	
Railway Conference	211
New Railway Act	212
Payment of land cess by Railway Companies	212
Rate of exchange for revenue expenditure in England	212
Adaptation of railway bridges for ordinary traffic	212
Education	212
Comparison of work done by Madras and South Indian Railways	212
(b.) Madras Railway.	
Open mileage	213
Capital expenditure	213
Dividend	213
Condition of way and works	213
New works	214
Rolling stock	214
Block system	214
Electrical intercommunication in trains	214
Famine bonus	214
Accidents	214
Train service	216
Comparison of earnings and working expenses	216
Passenger traffic	217
Goods traffic	218
Grain traffic	218
Cotton traffic	218
Salt traffic	219
Working expenses	219
(c.) South Indian Railway.	
Open mileage	220
Capital expenditure	220
Dividend	221
Sections opened during the year	221
Condition of way and works	221
Stations	222
Water-supply	222
Rolling stock	222
Conversions	222
Agreement for working Pondicherry Railway	222
Transfer of head-quarters to Trichinopoly	223
Accidents	223
Train service	223
Comparison of earnings and working expenses	223
Passenger traffic	224
Goods traffic	225
Working expenses	226
MADRAS IRRIGATION AND CANAL COMPANY.	
Absence of financial success	226
Navigation	227
Statement showing areas irrigated and ascertained demand	228

CONTENTS.

	PAGE
Revenue collected to 1879-80	228
Area and revenue from 1876-77	229
Outlay on Revenue account	229
Land made over to the Company	229
IMPERIAL POST	230
DISTRICT POST	232
IMPERIAL TELEGRAPH	233

CHAPTER V.—REVENUE AND FINANCE.

I. GROSS INCOME AND EXPENDITURE	235
II. DETAILED INCOME AND EXPENDITURE.	
Classification of accounts	236
Details under major heads	236
IMPERIAL SERVICES—(A) CIVIL.	
Incidence of Imperial taxation	237
(1.) Land Revenue.	
Collections under chief heads	239
Collection by districts	239
Percentage of charges to receipts	239
(2.) Assessed Taxes.	
Changes in License Tax	240
(3.) Excise	240
(4.) Customs.	
(a.) Sea Customs	241
(b.) Land Customs	241
(5.) Salt.	
Manufacture and issue	242
Cost of collection	243
(6.) Stamps.	
Receipts	243
Receipts and issues	244
(7.) Miscellaneous.	
Aggregate receipts and charges	244
Receipts	245
Charges	245
IMPERIAL SERVICES—(B) PUBLIC WORKS	245
IMPERIAL SERVICES—(C) POSTAL AND TELEGRAPH.	
(a.) Postal	247
(b.) Telegraph	247
IMPERIAL SERVICES—(D) MILITARY	247

CONTENTS.

	PAGE
PROVINCIAL SERVICES.	
(a.) Provincial Proper	249
(b.) Unfettered Local Funds	250
LOCAL FUNDS FETTERED	251
Local Fund Act IV of 1871	251
OTHER FETTERED LOCAL FUNDS.	
Village Service Fund	253
Abolition of Buckingham Canal and Bungalow Fee Funds	253
LOCAL FUNDS EXCLUDED	253
LOANS.	
Loans	254
Special advances	256
ADVANCES UNDER LAND IMPROVEMENT ACT.	
Land advances	256
GENERAL REVENUES.	
Imperial revenues	256
III. CASH REMITTANCES AND BALANCES.	
Cash balances	257
Debt and foreign transactions	257
Remittances to other Governments	258
Remittances from other Governments	258
CURRENCY TRANSACTIONS	258
MONEY ORDER DEPARTMENT	259

CHAPTER VI.—VITAL STATISTICS AND MEDICAL SERVICES.

SANITARY STATISTICS—GENERAL POPULATION.

Rainfall	261
Prices of food	262
Registration of vital statistics	262
Births	262
Deaths	264
Deaths in town and country	264
Deaths according to season	265
Deaths according to age	265
Deaths according to classes	266
Causes of death	266
General history of chief diseases—cholera	266
Details of districts	267
Small-pox	268
Fever	269
Bowel diseases	270
Injuries	270
SANITARY STATISTICS—LOCAL FUND CIRCLES	270

CONTENTS.

CONTENTS.

	PAGE
SANITARY STATISTICS—MUNICIPALITIES.	
Births	272
Deaths	273
Sanitary works	273
SANITARY STATISTICS—JAILS.	
Increase and decrease of jail population	276
Principal diseases	276
EMIGRATION	278
MEDICAL RELIEF.	
Number of civil hospitals and dispensaries	279
Buildings	279
Agents in charge	279
Number of sick treated	280
Mortality	280
Diseases	280
Surgical operations	281
Finance	281
Lunatic Asylums	281
Accommodation	281
General results	282
Criminal lunatics	282
Civil insanes	282
Ages of patients on admission	282
Forms of insanity	283
Causes of mortality	283
Sickness in the asylums	284
Financial	284
Madras Lock Hospital and Contagious Diseases Act	284
VACCINATION	286

CHAPTER VII.—INSTRUCTION.

EDUCATIONAL DEPARTMENT.

I.—General Statistics.

Number of schools and scholars	289
Distribution of schools according to agency	290
Education in relation to area and population	290
Race and sex of pupils	291
School fees	291
Average fee	292
Cost of Government and aided schools	293
Progress of the Grant-in-aid system	293
Classification of the Grant-in-aid expenditure	294
Vaccination in schools	295
Instruction in sanitation	295
Cost of the University	295

Expenditure on Educational buildings	295
Educational Building Fund	295
Total expenditure on education from Provincial Funds and the Educational Building Fund	296
Municipal and Local Fund expenditure	297
Distribution of expenditure from all sources	297
University.	
Changes in bye-laws	297
(a.) Arts.	
M.A. Degree examination	298
B.A. Degree examination	298
First in Arts examination	298
Classes of the community represented at the B.A. and F.A. examinations	299
Attendance in Arts Colleges	299
(b.) Law.	
Faculty of Law	300
(c.) Medicine.	
Faculty of Medicine	301
(d.) Engineering.	
Faculty of Civil Engineering	301
Civil Engineering College	301
III.—Secondary Education.	
(a.) High Schools for Boys.	
Matriculation examination	301
Classes of the community represented at the Matriculation examination	302
Comparative examination of the Fifth Classes	302
(b.) Middle Schools for Boys.	
Number and strength of Middle schools	303
Comparative examination of the Upper Fourth Classes	304
Middle School examination	304
Physical training	304
(c.) High Schools for Girls	305
(d.) Middle Schools for Girls	305
IV.—Primary Education.	
Classification of Primary schools	305
Attendance in Primary schools	30
(a.) Government Schools maintained from Provincial Funds.	
Primary schools attached to colleges, high, middle, and practising schools	
Primary schools in the Hill Tracts of Ganjam	
Primary Boys' schools, Bhadrachalam and Rikapalle Taluks	
Government Muhammadan schools	
(b.) Local Fund and Municipal Schools.	
Local Fund schools	
Municipal schools	
Schools aided on the combined system by Local Fund Boards	

CONTENTS.

	PAGE
(c.) Aided and Unaided Schools.	
Aided and Unaided Elementary Results schools	307
Attendance in Results schools and the grants paid in each circle or range	308
Summary of Results grants for each division	308
Percentage of passes in reading, writing, and arithmetic	308
Girls' schools	308
Education of poor European and Eurasian children	309
Upper and Lower Primary School examinations	309
V.—Special Education.	
(a.) Normal Schools for Masters.	
Number of Normal schools for Masters and attendance	310
Special Upper Primary examination	310
Examination for Schoolmasters' certificates	310
(b.) Normal Schools for Mistresses.	
Number of Normal schools for Mistresses and attendance	311
BOOK REGISTRATION	311
GOVERNMENT BOOK DEPOT	313
MADRAS MEDICAL COLLEGE	314
OOTACAMUND LAWRENCE ASYLUM.	
Male Branch	315
Female Branch	315
Financial	316
Health	316
The Farm	316
UNCOVENANTED CIVIL SERVICE EXAMINATIONS	316
ARTS AND SCIENCES.	
Madras School of Arts	318
Government Central Museum	319
Madras Observatory.	
The Meridian Circle	320
Extra Meridional pursuits	320
Opposition of Mars	321
Telegraphic time signals	322
Meteorology	322
Meteorological Department	322

CHAPTER VIII.—ARCHÆOLOGY.

ARCHÆOLOGY	324
-------------------	-----

CONTENTS.

CHAPTER IX.—MISCELLANEOUS.

	PAGE
ADMINISTRATION OF LOCAL FUNDS UNDER ACT IV OF 1871	325
MUNICIPAL ADMINISTRATION—MOFUSSIL.	
Receipts	327
Incidence of taxation	328
Expenditure—Public Works	330
Dispensaries	330
MUNICIPAL ADMINISTRATION—MADRAS TOWN.	
General	331
Financial	331
Water Works	332
Sewage farms	332
Education	332
Hospitals and dispensaries	333
Conservancy	333
Roads	333
Drainage	333
ECCLESIASTICAL.	
General	333
Visitation	334
Vacancies	334
Churches	334
Travancore and Cochin	335
Financial	335
STATIONERY OFFICE	336
GOVERNMENT PRESS.	
Value of work and expenditure	337
Printing	337
Binding, Letter-casting and Stereotyping	338
Penitentiary Branch	338
Private Presses	339
LAWRENCE ASYLUM PRESS	339
DISTRICT PRESSES	340
CHEMICAL EXAMINER'S DEPARTMENT	341

CONTENTS.

STATISTICAL RETURNS.

DIVISION I.—STATISTICS OF PHYSICAL, POLITICAL, AND
FISCAL GEOGRAPHY.

	PAGE
A.—PHYSICAL GEOGRAPHY.	
1.—Statement showing the area cultivated and uncultivated, and communications for the year 1879-80	v
2.—Character of the surface for the year 1879-80	viii
3.—Climate for the year 1879	ix
B.—POLITICAL RELATIONS.	
1.—Native States for the year 1879-80	x
2.—Native Chiefs and principal male members of their families for the year 1879-80	xi
C.—CIVIL DIVISIONS OF BRITISH TERRITORY FOR THE YEAR 1879-80	xiv
D.—POPULATION.—Same as in 1878-79	xxii
E.—FISCAL.	
1 a.—Particulars of Survey for the year 1879-80	xxii
1 b.—Settlement for the year 1879-80	xxiii
2.—Particulars of surveyed and assessed area in acres for the year 1879-80	xxiv
3.—Varieties of tenure held direct from Government for the year 1879-80.	xxv
5.—Register of transfers for the year 1879-80	xxvi
6.—Land revenue for the year 1879-80	xxvii

DIVISION II.—STATISTICS OF PROTECTION.

A.—LEGISLATIVE.	
1.—Statement of Acts passed by the local Legislature in the year 1879-80 and sanctioned as required by Law	xxxix
2.—Statement of Bills proposed or pending in the local Legislature in the year 1879-80	xxxix
3.—Statement of Draft Bills submitted by the Madras Government for the consideration of the Legislature of India during the year 1879-80	xxxiii
	xxii

CONTENTS.

B.—JUDICIAL STATEMENTS.

	PAGE
1.—(Civil and Criminal)—Statement showing the various judicial tribunals, original and appellate, existing on the 31st December 1879...	xxxiv
2.—(Criminal)—Statement of offences reported, and of persons tried, convicted and acquitted for each offence during the year 1879	xxxviii
3.—(Criminal)—Statement showing the general result of criminal trials in the tribunals of various classes during the year 1879	xlili
4.—(Criminal)—Statement showing the punishments inflicted by various criminal tribunals during the year 1879	xliv
5.—(Criminal)—Statement showing the result of appeals in criminal cases in the year 1879	xlvi
6.—(Civil)—Statement showing the number and nature of civil suits instituted in the several classes of courts in the year 1879	xlvi
7.—(Civil)—Statement showing the value of suits disposed of in the Civil and Revenue Courts in the year 1879	xliv
8.—(Civil)—Statement showing the general result of the trial of civil and revenue suits in the Courts of Original Jurisdiction in the year 1879	l
9.—(Civil)—Statement showing the business of the Appellate Courts in the year 1879	li
10.—(Civil)—Statement showing the execution of decrees in the Civil and Revenue Courts in the year 1879	lii
11.—(Criminal)—Statement showing the use of Juries and Assessors in the Criminal Courts in the Presidency of Madras in the year 1879.	lii
12.—(Civil)—Statement of deeds registered in the Registration Offices in the year 1879-80	liii

C.—PRISONS.

1.—Statement showing the distribution of the prisoners of all classes confined in jails during the year 1879	lvi
2.—Statement showing the number and disposal of convicts in jails during the year 1879	lxiv
3.—Statement showing the religion, age, and previous occupation of the convicts in jails on the 31st December 1879	lxvi
4.—Statement showing the convicts in jails on the 31st December 1879, according to the nature and length of sentence	lxviii
5.—Statement showing the convicts in jails during the year 1879, who had been previously convicted	lxix
6.—Statement showing the offences committed by the convicts, and the punishments inflicted on them in jails during the year 1879	lxx
7.—Statement showing the state of education of the convicts imprisoned in and released from jails for the year 1879	lxxi
8.—Statement showing the expenditure in guarding and maintaining the prisoners in jails during the year 1879, excluding the cost of building new jails, of additions, alterations, or repairs	lxxii
9.—Statement showing the employment of convicts in jails during the year 1879	lxxiv
10.—Statement showing the net cost of the prisoners in the jails during the year 1879	lxxv
11.—Statement showing the sickness and mortality among the convicts in the jails during the year 1879	lxxvi
	xxlii

CONTENTS.

	PAGE
12.—Statement showing particulars regarding civil prisoners in jails during the year 1879	lxxxviii
13.—Statement showing particulars regarding prisoners under trial in the jails during the year 1879	lxxxix
D.—POLICE.	
1.—Statement showing strength, cost, distribution, and employment of Police during the year 1879-80	xcii
2.—Return showing equipment, discipline and general internal management of the force for the year 1879	xcvi
3.—Statement showing the race and religion or caste of officers and men employed in the Police force during the year 1879	xcviii
4.—General statement of crime, showing the result of Police operations in the detection and prosecution of cognizable crime and recovery of property stolen for 1879	o
5.—General statement of crime, showing the result of Police operations in the detection and prosecution of non-cognizable crime, and recovery of property stolen for 1879	cviii
E.—MILITARY.	
1.—Statement showing the strength, &c., of the Army attached to the Madras Presidency in the year 1879-80	cx

DIVISION III.—STATISTICS OF PRODUCTION AND DISTRIBUTION.

A.—FINANCE.	
1.—Account of the gross and net revenue for the year 1879-80	cxiii
2.—Account of expenditure from the net revenue for the year 1879-80.	cxv
3.—Account of cash receipts and disbursements of the treasuries for the year 1879-80	cxvi
B.—PUBLIC WORKS.	
1.—Statement showing the expenditure of money in the Public Works Department in the year 1879-80	cxvii
2.—Statement showing the income and expenditure of reproductive works in the Public Works Department in the year 1879-80	cxix
C.—RAILWAYS.	
For the year 1879-80	cxx
D.—MARINE.	
1.—Statement showing the various Government vessels, &c., under the Madras Government in the year 1879-80	cxxi
2.—Statement showing the number of officers and men employed otherwise than in Government vessels in the Marine Department, under the Government of Madras, during the year 1879-80	cxvii
xxiv	

CONTENTS.

	PAGE
E.—AGRICULTURE.	
1.—Statement showing the total area in acres under cultivation of the chief products during the year 1879-80	cxliii
2.—Statement showing the live and dead stock for 1879-80	cxxx
F.—PRODUCE AND LABOR.	
1.—Price of produce at the end of the year 1879-80	cxxxi
2.—Statement showing average rates of wages for skilled and unskilled labor, and rates of hire for live and dead stock per day, for 1879-80	cxxxvi
G.—MINES.	
Mines and quarries for 1879-80	cxxxvii
H.—MANUFACTURES.	
For the year 1879-80	cxxxviii
I.—TRADE.	
1.—Statement of quantities and value of the principal articles of merchandise and value of treasure imported from foreign countries during the two years 1878-79 and 1879-80	cxxxix
2.—Statement of quantities and value of the principal and other articles of foreign merchandise and Indian produce and manufactures and value of treasure exported to foreign countries during the years 1878-79 and 1879-80	clvii
3.—Statement of customs duty collected on the principal and other articles of merchandise subject to duty on imports and exports at ports during the years 1878-79 and 1879-80	clxxviii
4.—Total value of merchandise (distinguishing country from foreign) and treasure imported and exported coastwise into and from the Presidency in the years 1878-79 and 1879-80	clxxix
5.—Statement showing number and tonnage of sailing and steam vessels, distinguishing their nationality, which entered and cleared with cargoes from and to foreign countries at different ports in the year 1879-80, compared with the totals of the year 1878-79	clxxx
6.—Statement showing number and tonnage of sailing and steam vessels, distinguishing their nationality, which entered and cleared in ballast from and to foreign countries at different ports in the year 1879-80, compared with the totals of the year 1878-79	clxxxii
7.—Statement showing number and tonnage of steam and sailing vessels, distinguishing their nationalities, employed in the interportal trade which entered and cleared with cargoes and in ballast in the year 1879-80, compared with the totals of the year 1878-79	clxxxv
K.—COINAGE AND PAPER CURRENCY.	
1.—Statement of coin and bullion of all kinds imported during the year 1879-80	clxxxvii
2.—Paper Currency—Madras, Calicut, and Cocanada, for the year 1879-80	clxxxviii
L.—CHARITABLE INSTITUTIONS.	
For the year 1879-80	clxxxviii

CONTENTS.

DIVISION IV.—STATISTICS OF INSTRUCTION.

	PAGE
A.—ECCLESIASTICAL.	
Return of persons according to religious denominations for the year 1879-80	cxliii
B.—EDUCATION.	
1.—Return of colleges, schools and scholars for the year 1879-80 ...	cxciv
2.—Return of colleges, schools and scholars for the year 1879-80 ...	cxcv
3.—Return of expenditure on educational establishments for the year 1879-80	cxcviii
4.—Return showing the result of prescribed examinations during the year 1879-80	cxi
C.—SCIENTIFIC AND LITERARY.	
1.—Scientific and Literary Societies for the year 1879-80	ccii
2.—The Press, for the year 1879-80	cciii

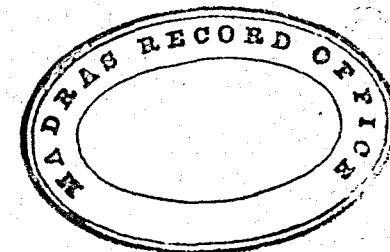
DIVISION V.—STATISTICS OF LIFE.

A.—BIRTHS AND DEATHS.	
1.—Statement showing births and deaths registered in the districts during the year 1879	ccxiii
B.—HOSPITAL RETURNS.	
2.—Statement showing the diseases of the in-door and out-door patients treated in the dispensaries of the Madras Presidency during the year 1879	ccxiv
C.—VACCINATION.	
3.—Return of vaccine operations during the years 1878 and 1879 ...	ccxv

SPECIAL APPENDIX.

STATEMENT I.	
Showing the prices in seers of 80 tolas per rupee of the three principal food grains since the commencement of the famine with those of normal years	ccxviii

DEPARTMENTAL CHAPTERS.



CHAPTER I.

GENERAL AND POLITICAL.

FAMINE ADMINISTRATION.

THE operations of the Government in connection with the special administration of famine relief works and famine charitable relief, together with the statistics connected with those two subjects, will be reported on for the whole period of the recent scarcity in a separate report.

TRAVANCORE STATE.

The review of this State is for the Malayalam year 1054 ending 15th August 1879.

Three new enactments were passed. The first relates to the abkâri revenue, clearly defining the system and approximating it nearly to that ruling in British India. It was introduced at the beginning of the year. The second was enacted in the interest of the coffee planters, the better to protect their produce from theft. It is based on the British Indian Act, and, like it, its operation is confined to the neighbourhood of the coffee districts. The third remodels the Sadr Court and affords greater facilities for business. It reduces the number of Judges from four to three with a Pundit. While it provides that two Judges shall hear and dispose of all regular and special appeals and referred criminal cases where sentence of death or imprisonment for life is awardable, it empowers a single Judge to hear minor cases and dispose of miscellaneous work. The *personnel* of the Court was improved by the addition of a judicial officer who, a native of the West Coast, had served with distinction on the Bench in British India. Two new sets of rules were passed—one for regulating the boat service at the Quilon and Colachel ports, and the other for enforcing registry of transfers of landed property.

Judicial.—
Civil Justice.

No great improvement appears to have been made in the Munsifs' Courts in the disposal of suits as regards despatch, while the total outturn of work shows a decrease of 8 per cent. In 1054, 25,916 suits were instituted against 28,873 in 1053, or less by 2,957; including those pending, the total files amounted to 29,987 against 33,642 in 1053. 27,204 cases (of which 4,088 were small cause suits under 10 rupees value) were disposed of, carrying 2,783 cases to the file of the next year. There are 29 cases of three, 11 of four, and 3 of above four years' standing; but there is a satisfactory decline in the number of old suits compared with 1053. The average duration of a suit was 60 days against 63 days in 1053. Of the appealable decisions about 23 per cent. were appealed against. Out of 1,517 appeals against Munsifs' decisions disposed of during the year, 734 were confirmed, 250 modified, and 533 or 35 per cent. reversed.

The work done by the Zillah Courts on the Original Side is noted below. There are 185 undecided cases in these Courts of over two years' standing. The average duration of suits was 8 months and 24 days against 7 months and 3 days in 1053. The greatest average delay, viz., 11 months and 9 days, was in the Alleppy Court, while in the Quilon Court the average duration has improved by 1 month and 24 days compared with 1053.

		1053.	1054.
Suits pending and filed	...	4,481	4,780
Disposed of	...	2,276	2,036
Balance	...	2,205	1,844

The appeals pending and filed numbered 2,306, or 144 less than in the previous year. Of these 1,899 or 82 per cent. were disposed of, and of suits decided on the merits, 38 per cent. were confirmed, 13 per cent. were modified, and 28 per cent. were reversed. The average duration compares very unfavorably with the two previous years, viz., 13 weeks in 1052, 14 in 1053, and 16 in 1054. While the Trivandrum and Quilon Courts show marked improvement in the average duration of appeal suits, the Alleppy Court shows the greatest delay.

The subjoined statement exhibits the file of the Sadr Court:—

	1053.			1054.		
	Number on the file inclusive of previous balance.	Disposed of.	Pending at close of year.	Filed inclusive of previous year.	Disposed of.	Pending at close of year.
Appeals	531	290	261	606	364	302
Special Appeals	278	191	87	359	187	172
Reviews	1	1	...	8	8	...
Total	830	482	348	1,033	559	474

There was an increase of 101 cases over those of 1053. Of 1,033 total disposable cases, 559 against 482 of 1053 were disposed of. There were 478 contested cases compared with 443 of 1053; 19 were remanded, 35 compromised, and 27 dismissed for default. The average delay in the disposal of a suit was about 6 months against 5 months and 2 days in 1053.

There were 538 applications, both pending and received, of which 115 were disposed of and 423 remained. The failure to overtake the arrears or to keep pace with the increase of suits in the Sadr is unsatisfactory. It is hoped that the new arrangements, introduced by Regulation III already described, will effect a favorable change.

The total number of suits filed in all the Courts is 30,880 against 34,107, or less by 3,227 of the previous year. The average duration of suits in all the Courts was 156 days against 170 days in 1053.

The average number of decrees in process of execution was 186 against 170 in 1053 for each Court. The judicial revenue amounted to Rupees 2,74,488 against Rupees 2,24,060 in 1053, and the judicial administrative charges to Rupees 1,79,434 against Rupees 1,70,236 in 1053.

17,499 cases were disposed of by the Magistracy in 1054 against 16,917 in 1053; 2,499 were against the person, 1,780 against property, and the rest of a miscellaneous nature. Of the 858 cases against 799 in 1053 committed to the Zillah Court, 75 related to person, 381 to property, and the remainder were of a miscellaneous character. The average duration of a case was 9 days against 12, and that of a committable case 17 days against 18 in 1053. The number of prisoners involved in all the 20,883 cases admitted was 44,938 against 20,558 prisoners in 44,153 cases admitted in 1053.

The work in 1054 in the Zillah Criminal Courts is exhibited in the following statement compared with 1053:—

Years.	Filed, inclusive of arrears.		Disposed of.		Remaining.	
	Cases.	Prisoners.	Cases.	Prisoners.	Cases.	Prisoners.
1053	...	918	1,919	771	147	313
1054	...	1,115	2,578	959	156	344

In 1054 the number of disposals increased by 188. 24 cases were referred to the Sadr. The total number remaining undisposed was 132. The percentage of convictions fell from 45 per cent. in 1053 to 40 per cent. in the current year. The average duration of cases was 19 days against 18 in 1053. Of 22,515 calendars and extracts from the registers sent up by the Magistracy and revised by them, 92 cases only were remarked upon and referred to the Sadr by the Crimi-

nal Appellate Courts. Criminal cases referred to the Sadr Court (including those pending) were 613 against 465 in 1053, all of which, except 9, were disposed of. The average disposal was 10 days to 13 days in the previous year.

Police. The salary of the Peermade Sub-Magistrate was raised to 100 rupees and his establishment increased by 1 naick and 3 peons. At Mon-umbum a new tannah was opened with a head peon and 4 peons. The additional force employed last year to secure the customs revenue consists of 1 inspector on Rupees 50, 6 amindars, 1 duffadar, 14 mudulpairs, 74 peons and 3 clerks with rowers and boats at a cost of 6,994 rupees. The total cost of the Police was 1,68,904 rupees against Rupees 1,64,710 in 1053. Two preventive stations were opened at Agusteer and Muttachimullay on the mountain-paths to Tinnevely.

Jails. The total number of convicts in the jails was 1,364 against 1,445 in 1053; and the average daily number was 548, or 64 less than in the previous year. The average mortality was 11 against 7 per cent. last year. This high rate of mortality is not accounted for. The charges amounted to Rupees 47,749 against Rupees 48,184. The average total cost per prisoner was Rupees 87 against Rupees 78½ in 1053.

Registration of Assurances. 73,921 documents against 70,787 in 1053 were admitted, being an increase of 3,134 or 4 per cent., while the value of the transactions was 259 lakhs of rupees against 248 lakhs in 1053. The financial result of the working of the department compared with the previous year is as below:—

	1053.	1054.
Receipts	RS. 1,19,416	RS. 1,24,198
Expenditure	51,824	59,628
	67,592	64,570

The receipts of the year under review from registration fees were the highest ever realized.

Revenue. The land revenue amounted to Rupees 17,10,038, or Rupees 17,469 less than in 1053. The agricultural year was favorable, and the slight falling off is in the rent of salt-pans, which is credited under this head. About 3,927 paraahs (360 acres) of rice lands and 1,577 pieces of garden lands, yielding an annual additional revenue of Rupees 1,203, were reclaimed by private individuals and registered in their names. No remission of tax was required, and there was no public sale of land for coffee cultivation. The miscellaneous revenue of the year was Rupees 6,58,746 compared with Rupees 7,04,883 in last year. The deficiency is mainly in the item of sale of surplus grain, and is due to the lower prices ruling. The export duty amounted to Rupees

3,52,065 and the imports to Rupees 8,24,423, showing a decrease of Rupees 10,734 and Rupees 24,185 respectively over the previous year's receipts, or a total decrease of Rupees 34,919. The largest falling off was in tobacco, which is attributed to the high price of that article in Ceylon. The revenue from sales of salt was Rupees 15,32,845 against Rupees 13,82,490 in 1053, or an increase of Rupees 1,50,355. The increase was due to the fact of the enhanced price having been in force throughout the year instead of only during half of it. The consumption was not affected. Five new sale depôts were opened in the year under report. The abkâri revenue increased by Rupees 10,326. The introduction of the new regulation will, it is expected, still further improve this revenue. Rupees 10,178 were recovered on account of opium and bang.

The actual revenue received from timber shows a decrease of Forest. Rupees 21,630 below the previous year, the demand both by the Public Works Department and the trade being more limited. Cardamom and other produce realized Rupees 94,125 above 1053. 26 elephants were secured in the keddah, the result of two captures; of these 9 died and the rest are being trained.

The number of boys in the College, High School, and Preparatory Education. School decreased from 989 in 1053 to 932 in 1054, and the collections increased from Rupees 8,094 to Rupees 9,040 in 1054, the revised scale of fees operating only during a part of the previous year.

	RS.
1053	1,95,236
1054	1,75,291
	— 19,945

The success in the University examinations was:—

	1877.	1878.
Matriculation	31	20
F.A.	13	17
B.A.	4	8
B.L.	1	3

Mr. Harvey, M.A., proceeded on furlough to Europe, and Mr. Shepherd, B.A., left the institution to take up an appointment in Tinnevely, and was succeeded by Mr. Labouchardier, B.A., who was an Assistant Master in the Grammar School at Ootacamund. Most of the district schools were inspected and rules drawn up for systematizing the curricula, which appear to have hitherto varied at the discretion of the masters. Greater attention to vernacular instruction has also been insisted on. The progress made by the Princes in their education is reported to be satisfactory, particularly that of the elder Prince. The

number of girls in the Trivandrum school was almost the same as in the previous year, and the progress made may be considered generally satisfactory. Vernacular schools, including grant-in-aid schools, increased from 531 in 1053 to 584 in 1054, and the total strength from 19,655 to 24,515. The schools receiving grants-in-aid were 341, showing an increase of 54. The grants disbursed to them amounted to Rupees 16,854. Two matriculates were maintained by the State as pupils of the Saidapet Agricultural School.

Public
Works.

Public works expenditure was Rupees 1,90,528 above the previous year, inclusive of the one lakh allotted for the Kodayar project and available for expenditure when that work is sufficiently matured.

	RS.
1053	11,83,887
1054	13,74,415
	+ 1,90,528

The roads seem to be in an unsatisfactory condition. As expensive cuttings, embankments, and bridges are merely a means to an end, that end being a hard even surface for the rotation of wheels, it is hoped that the roads will be provided with this essential before further extensions are commenced. The handsome suspension bridge at Pooneloor, on the high road from Quilon to Shencottah, was completed and surpasses anything in Travancore in masonry work. Of the Wurlkullay barrier works, 226 feet at the south-west and 130 feet at the north-east ends, or 560 feet out of 2,250 feet of the tunnel work, were finished, leaving 1,700 feet still to be done. Thus one quarter of the last tunnel has been completed. The work has been found to be most dangerous and difficult, and six European miners who were engaged have absconded in consequence. Five new miners were subsequently brought from England and are working satisfactorily. The danger was due to the fact of a heading having been driven several years ago; in the interval the drainage through this had washed away sand and undermined the superincumbent strata, and sudden falls of earth therefore occurred without warning. The tunnel having been advanced beyond the point to which the old headings extended, this cause of danger ceased.

Museum.

The building was transferred from the Maramut Department to the charge of the Chief Engineer. Up to the close of the year it was not available for the accommodation of the natural history collection, though one wing was in use as a library and reading-room. The building operations were sufficiently completed to admit of the laying out of the ground being taken in hand and some progress was made in this direction. The zoological collection was maintained and added to.

The outturn of work done in 1054 was 5,326 acres against 32,000 acres in 1053. This great decrease is attributed to the Revenue Surveyor and a portion of the staff having been engaged in the special work connected with the Travancore and Cochin boundary dispute.

One new station was opened at Koothaticolum, between Aitmanoor and Moovattupolay. The number of official and private covers carried was 570,092 and 342,103 respectively. The speed varied from 3½ to 5 miles per hour according to the nature of ground traversed. The total charges were 28,296 rupees. The yield on private covers was Rupees 18,514 against Rupees 17,595 in 1053, and that from official covers would have been Rupees 1,00,453 against Rupees 77,264 in 1053.

Unjel or
Postal
Department.

The number and tonnage of vessels have steadily increased at the Marine principal port at Alleppy. In 1054 there was an aggregate of 160,951 tons made up by 371 vessels against 147,814 tons and 299 vessels in 1053; but owing to the small size of the greater number of vessels the collection of port dues decreased slightly. The "Mud Bay," which is the cause of the smooth water at Alleppy throughout the monsoon, is now several miles south of the port and shows no signs of shifting northwards again as hoped.

24,62,200 copper cash were alone coined during the year. No bullion was tendered by private parties for silver coinage.

The number of patients treated in all the hospitals was 89,069 as compared with 77,153 in 1053, and the department cost Rupees 99,253 against Rupees 93,895 in 1053. Cholera and small-pox prevailed to a certain extent and necessitated the appointment of Assistant Apothecaries in the afflicted districts. The number of vaccinations increased by about 18,000, a result attributed to the proclamation of last year.

The gross revenue was Rupees 62,37,120 against Rupees 59,78,021 in 1053, and the expenditure was Rupees 59,52,888 against Rupees 56,15,211, showing a surplus of Rupees 2,84,232. The revenue was the highest on record and exceeded the previously unequalled revenue of the preceding year by 2,59,099 rupees. The increase and decrease in the several items of revenue and expenditure in 1054 are exhibited in the following statement, compared with those of the previous year. The fluctuations have already been noted under the appropriate heads.

Receipts.	1053.	1054.	Difference.	Expenditure.	1053.	1054.	Difference.
	RS.	RS.	RS.		RS.	RS.	RS.
Land Revenue ...	17,27,507	17,10,038	- 17,469	Davasom, Religious ...	5,65,707	5,75,775	+ 10,068
Miscellaneous Revenue ...	7,04,883	6,58,746	- 46,137	Oottooperah, Charitable ...	3,38,821	3,35,417	- 3,404
Judicial Fees ...	2,27,997	2,79,390	+ 51,393	Palace ...	5,42,908	5,67,263	+ 24,355
Customs ...	4,13,635	4,00,328	- 13,307	Huzur Cutcherry, Civil ...	5,96,722	6,49,980	+ 53,258
Arrack and Opium ...	1,72,357	1,81,827	+ 9,470	Judicial Establishments ...	1,78,225	1,90,503	+ 12,278
Tobacco ...	8,38,486	8,17,325	- 21,161	Police ...	1,59,857	1,57,428	- 2,429
Salt ...	13,82,490	15,32,845	+ 1,50,355	Nair Troops ...	1,45,331	1,59,723	+ 14,392
Cardamom, &c. ...	2,57,405	3,51,530	+ 94,125	Elephant and Horse Establishments ...	67,146	73,103	+ 5,957
Timber ...	1,13,513	91,883	- 21,630	Education, Science, and Art ...	1,95,239	1,75,261	- 19,978
Interest on Government Securities ...	88,246	1,55,582	+ 67,336	Medical ...	93,895	99,253	+ 5,358
Arrears of Revenue ...	51,502	57,626	+ 6,124	Pensions ...	1,46,778	1,45,070	- 1,708
				Public Works ...	11,83,887	13,74,415	+ 1,90,528
				Cost of goods sold, &c. ...	3,45,960	3,45,398	- 562
				Contingent charges ...	2,33,854	2,18,715	- 15,139
				Subsidy to British Government ...	8,20,831	8,25,920	+ 5,089
				His Highness the Maharaja's trip to Madras. ...		59,664	+ 59,664
Total ...	59,78,021	62,37,120	+ 2,59,099	Total ...	56,15,211	59,52,888	+ 3,37,677
Surplus of current year ...	...	...	2,84,232				

The steadily increasing revenue is an evidence of general prosperity as well as of careful administration, and the surplus has only resulted after all branches of public expenditure have been fully provided for.

COCHIN STATE.

The period to which the review of the administration of this State relates is the Malayalam year 1054, or from the 15th August 1878 to 15th August 1879.

Legislation. No legislative measures were passed.

Justice—Civil. In the Zillah and Munsifs' Courts 1,606 suits were pending, and 7,966 were filed during the year, making a total of 9,572 suits against 9,921 in 1053. The number of decisions is 8,304, and the number of cases undecided 1,268. The number of suits is 274, of decisions 11, and of pending cases 338, less than in the preceding year. The working of the Zillah Courts in the exercise of their appellate jurisdiction shows an improvement on last year. The number of appeals, including those pending at the beginning of the year, is 564, of decisions 419, and of cases undecided 145; while in 1053 the numbers were respectively 526, 359, and 167. Out of 325 suits pending and filed, the Appeal Court disposed of 187, thus leaving a balance of 138. In 1053 the number of suits was 298, of decisions 180, and of undecided suits 118. The average duration of suits in the Munsifs' Courts is 4 months and 6 days against 3 months and 17 days in 1053; of original suits in the Zillah Courts, 12 months and 7 days, and of appeals in the same Courts,

5 months and 13 days, against 6 months and 7 days and 3 months and 5 days respectively last year. Both the Zillah and Munsifs' Courts have retrograded in the despatch of business, and the delay allowed by the former in the disposal of original suits appears inordinate. On the other hand the Appeal Court, in reducing the average duration of Regular and Special Appeals from 8 months and 7 days to 6 months and 14 days, shows a decided improvement.

The Zillah and Munsifs' Courts executed in the year under review 2,394 decrees against 3,087 in 1053. The number of decrees remaining unexecuted is 2,135; last year it was 2,278.

The collections under institution fees and stamp penalties amounted to Rupees 58,849-11-5, less by Rupees 2,574-4-7 than the collections in 1053, which again were less than those in the preceding year by Rupees 5,697. As in the last Report, the Dewan attributes this falling off to the decrease in the number of original suits.

70 cases, 9 more than in the previous year, were committed. Of these, 19 were referred to the Appeal Court, and the remaining 51 cases were disposed of by the Criminal Courts. In these cases 142 persons were implicated, 68 were acquitted, and 74 convicted. The percentage of acquittals is 48. The average duration of each case was 5.5 days, which shows an improvement on last year, when it was 8 days. In the 19 cases referred to the Appeal Court 69 persons were concerned. Of these cases 17, involving 63 prisoners, were disposed of by the acquittal of 43 and the conviction of 20 prisoners, and 2 cases, in which 3 prisoners were implicated, were left undisposed of at the end of the year. Out of the 74 persons convicted by the Criminal Courts, 24 appealed. In 16 cases the judgments appealed against were reversed, in 3 confirmed, and in 2 modified. The proportion of reversals is large. 3 appeals were left undisposed of at the end of the year. There was 1 case of capital punishment.

At the beginning of the year under review 142 prisoners were in the Jails, and during the year 249 were admitted, making a total of 391 against 427 in 1053. Of these 228 were discharged, 2 died, and 1 was executed. At the end of the year there remained in the jails 160 prisoners, 18 more than last year. The average daily number was 158.18. The convicts were employed principally in the repair and maintenance of the public roads. The general health of the prisoners was good. The charges incurred for the maintenance of the jails amounted to Rupees 24,279-0-3, Rupees 10,219 less than last year.

The aggregate number of Police cases, including 26 pending at the Police, beginning of the year, was 2,420, or 216 more than in 1053. In these cases 3,553 persons were implicated, but only 628 were convicted,

while 2,017 were summarily discharged. The arrests appear to have been dictated rather by zeal than by discretion. There were 14 cases of murder, in which 36 persons were involved: 7 of these were discharged and 29 committed to the Courts.

Revenue.

Under land revenue there is an increase of Rupees 11,181, due to more extended operations in the Trichoor lake, to the absence of locusts, and to the assessment on waste lands newly brought under cultivation. Customs show a trifling increase of Rupees 168-11-1. The bulk of the customs revenue is drawn under guarantee from the British Government as compensation for duties foregone. Under the head of abkari there is the considerable increase of Rupees 15,646-9-2, due to keenness of competition arising from the contracts having been sold for three years instead of for one; and under opium there is also an increase of Rupees 2,850. Salt has a decrease of Rupees 2,612-5-5, and the amount of sales declined from 85,616 maunds in 1053 to 74,766 maunds, thus leaving a difference of 10,849 maunds. The decrease was to be expected, as last year exceptionally large stocks having been purchased by the traders in anticipation of the rise in the price of salt, the sales were unnaturally great. As it is, the salt revenue of the year under report exceeds that of 1052 by Rupees 1,05,135-7-2, that of 1051 by Rupees 1,05,626-2-1, and that of 1050 by Rupees 75,524-0-2. The amount paid for the purchase of salt was Rupees 31,548-0-9, or Rupees 14,225-9-8 more than last year. The difference is due to increased import.

Registration.

The total number of documents registered during the year was 16,566, or 712 more than in the previous year, and the total value of the property concerned was Rupees 62,62,295-13-2 against Rupees 8,68,815-13-2. The surplus of receipts over expenditure was Rupees 13,763-1-6 against Rupees 12,992-14-4 in 1053.

Education.

The attendance at the High School has fallen off, the number on the roll at the end of the year being 272, or 41 less than at the end of last year. The average daily attendance was 261, or nearly 90 per cent. of the whole number on the books. The diminution in the number of Brahmin boys is marked: in the year under review there were 50; in 1053, 67; and in 1052, 78. Of 17 students who went up for the F.A. Examination 10 were successful; but only 4 passed out of 14 candidates for Matriculation. The large proportion of failures in the latter examination was due apparently to the unprecedented severity with which the examination was conducted, and which was felt all over the Presidency. In the five district schools the number of boys was 461, the average daily attendance being 15.3. The attendance at the Vernacular classes in all the district schools has been irregular, and in some has declined. All the district schools have been inspected by the

Director of Education. The Rev. H. Kendall has been appointed second master in the place of Mr. D. M. Cruickshank.

The outlay on public works amounted to Rupees 2,61,906-9-2, or Public Works. Rupees 33,856-9-9 less than in the preceding year. The decrease is attributable to smaller expenditure on the Ernacollum jail, the public offices at Trichoor and Chittoor, and many of the main lines of road communication, which were in a forward state of progress at the beginning of the year and have since been completed. The Panunkutty wrought iron girder bridge and some works of minor importance have also been completed; the Ernacollum backwater reclamation and the Narrakel pier and basin improvements have made good progress. Many new works, some of which have been carried to completion, were commenced. The operations of this department have been most satisfactory.

The revenue under this head shows a decrease of Rupees 12,094-2-1 Forests. as compared with last year. This decrease is attributed to reduced sales caused by the unfavorable state of the market, to reduced collections of seigniorage on wood and forest produce, and to a smaller quantity of timber having been removed by the Chittoor teak forest contractor.

There were a few cases of cholera at Ernacollum and Trichoor, and Medical. small-pox prevailed throughout the year in various parts of the State. The number of persons vaccinated amounted to 8,880, the operation being successful in 7,714 cases. The Dewan is of opinion that the vaccinators should be brought under greater control than they are under at present, which seems most desirable. The Sirkar profess themselves prepared to assist in the establishment of a hospital for the use of the plantations on the Nelliampathees, provided the planters, as appears to be the case, are willing to assist.

The total number of vessels which called at the ports of Mallipooram Ports. and Narrakel was 115, or 31 more than last year, with an aggregate tonnage of 65,245 tons against 51,033.3 tons. The port dues exceeded those of 1053 by Rupees 1,494-14-0. Owing to the sudden breaking out of the monsoon one vessel was wrecked in the Cochin roads, but Narrakel afforded a safe harbour of refuge to the other vessels there. The mud bank which obstructed the latter port two years ago has entirely disappeared.

The amount of postage collected was Rupees 788-1-1, showing a slight increase on last year, while the cost of establishment was less by Rupees 62. Postal Department.

No change has taken place in the constitution of the Military establishment. Military.

Press. The value of the work executed at the Press is estimated at Rupees 4,403-14-7 against Rupees 4,099-3-1 in the preceding year.

Financial. At the commencement of the year there was an opening balance of Rupees 3,65,655-8-5; the income from all sources amounted to Rupees 13,91,238-4-2, making a total of Rupees 17,56,893-12-7. The expenditure for the year was Rupees 13,27,875-10-0, leaving a cash balance of Rupees 4,29,018-2-7 to be carried forward to the credit of the next year, and thus the surplus of the year was Rupees 63,362-10-2. The total amount remaining at the close of the year under report to the credit of the State was Rupees 29,53,077-12-2, against Rupees 28,58,748-5-9 at the end of the preceding year. 24 lakhs of this sum are invested in Government of India securities.

The revenue realized in 1053 was the largest on record; the revenue of the year under report falls short of it only by Rupees 12-9-1, and it must be remembered that the income in the latter was not, as in the former year, influenced by exceptionally large sales of salt. The disbursements of the past year, in consequence chiefly of increased palace expenditure, of greater outlay on account of religious and charitable institutions, and the enhanced cost of the administrative establishment, in which the salaries of some officials were raised and which was strengthened by the addition of a Deputy Peshkar with his staff, exceeded those of 1053 by Rupees 6,791-15-7; yet there remains an opening balance greater than that of last year by Rupees 63,362-10-2. These results show the continued satisfactory progress of the State and reflect most creditably on its administration, and afford proof of its continued prosperity.

GANJAM AGENCY.

During the official year 1879-80 public health in the tracts comprising the Ganjam Agency was good and the seasons were favorable. Two threatened outbreaks were settled without breach of the peace. The amount of Rupees 18,000 allotted for public works was judiciously expended except in the Parlakimedi estate, which is under the Court of Wards. The most important public work completed was the bridging of all streams (save one) on the road from Russelkonda (at the foot of the hills) to Baliguda, the head-quarters of the Special Assistant and the Maliah police. The number of schools was the same as last year (18); all but two were in good condition. Out of the 779 children 181 are Khonds, and there are 15 girls. Vaccination was fairly carried out.

Of the 399 persons brought before the Magistracy 202 were Khonds, 167 Panoes (hill Pariahs), and 30 Sowrahs. Considering the great

preponderance of the Khond population, the figures speak well for the general conduct of this tribe. The Taluk Magistrates discharged their duties satisfactorily. The crime of the year compared with that of the previous year is exhibited in the following table :—

Offences.	1878.			1879.		
	Accused.	Convicted.	Dismissed.	Accused.	Convicted.	Dismissed.
Grave	23	7	16	15	8	7
Petty	629	453	171	780	471	309

The number of civil suits instituted was 179, and those pending from the end of the year were 8, the total for disposal being 187. Of these 161 cases were disposed of and 26 remained. Complaints of Brinjari that illegal taxes were levied from them under the name of grazing taxes, but in effect as transit duties, and the action of the Zemindar of Pedda Kimedi in rackrenting the Sowrah tribes through the agency of low-country speculators, were brought to the notice of the Agent. The want of discipline and the prevalence of abuses among the police, noticed in last year's Report, seem still to prevail. Their cause is the neglect of supervision of the remoter stations.

VIZAGAPATAM AGENCY.

Owing to the disturbances in those portions of the Golconda taluk General which adjoin the Rampa country, the late Agent was unable to commence his hill tour till February. He had hardly entered on the duty when he was recalled to Vizagapatam by tidings of the Rampa insurgents flying to the Madgole and Pachipenta hills. An accident led to his death on the 13th March. His successor started for the hills on the 28th idem. The tour was therefore begun only three days before the expiry of the official year 1879-80 under report. He travelled over the scene of the disturbances in the above-named tracts, but they were practically over when he arrived there. The Assistant Agent made a tour through Gunapur and Rayaghada taluks. The complaints made to these officers were few and simple.

27 sessions cases were disposed of by the Agent, in which 109 prisoners were tried, 86 being convicted and 23 acquitted. The Assistant Agents tried 7 committable cases, in which 8 persons were implicated; 6 were committed and 2 discharged. In 54 cases within their own cognizance they tried 118 persons, of whom 68 were convicted and 50 acquitted. The 10 Agency Sub-Magistrates held preliminary inquiries in 35 cases, in which 133 persons were concerned; 119 were committed

and the rest discharged. They tried 833 cases falling within their own cognizance, in which 915 persons were convicted and the rest acquitted. 4 appeals against divisional officers' judgments were disposed of by the Agent, in all of which the sentences were upheld. The former officers disposed of 10 appeals against the judgments of the Sub-Magistracy, confirming the sentences in respect of 6 persons. There were 489 civil suits for disposal, mostly in Gunapur and Rayaghada; 397 were disposed of, leaving 92 pending.

Public Works. As regards expenditure on public works during the year 1879-80 by the Agency officers, the Special Assistant spent Rupees 8,729 out of a grant of Rupees 10,040. The high road, which is to be carried to the north-west portion of the Jeypore zamindari to meet the Central Provinces road from Raipur through Dharneri, has been completed to the extent of 64 miles, and is maintained in good order. Of the high road from Jeypore south-west to Moat, which is 30 miles from Wudagudem on the Godavari, 72 miles, namely, the section from Govindapalli through Malkangiri to Moat, have been finished. In this division Rupees 600 were spent on resting-houses. To the Principal Assistant a sum of 870 rupees was assigned for jungle clearing and ghat smoothing in the Golconda hills. He spent Rupees 563 only, owing probably to the disturbed state of the taluk. The Senior Assistant spent his Provincial allotment of 4,090 rupees and the greater part of a grant of 2,930 rupees made by the Jeypore Maharaja. Rupees 1,960 of the Provincial assignment in this case were devoted to public buildings in the circle. Great attention is, however, given to the very important subject of roads, and with the aid of the Maharaja's bonus the road to Rayaghada from Parvatipur is easily passable to bandies, which proceed thence north to Bissemcuttack and Ambadala. The Local Fund has taken over a number of the roads which were formerly under the Senior Assistant Agent.

Police. The question of redistribution of the Police in these hill tracts, found necessary in consequence of the recent disturbances, is pending before Government.

GODAVARI AGENCY.

The event of the official year 1879-80 was the rising in Rampa and the neighbouring tracts. The Rampa country is an extensive but very little known tract of hill and jungle, stretching from the old Kottapalle taluk, or about 30 miles north of Rajahmundry, to the borders of the Golconda territory in the Vizagapatam district, and divided on the W. from Rekapalle by a stupendous range of ghats. It is traversed throughout by hills which are generally from 2,000 to

3,000 feet high. The only made road is one coming from Gokavaram in the plains and ending at Chodavaram near Rampa cusba, a distance of about 15 miles. Otherwise there is no communication except by tracks leading through the jungle. The country, always feverish and unhealthy, is especially so in the rainy season. It is inhabited by rude jungle tribes, and is about 30 miles broad (east to west) and about 35 miles long (north to south), and contains about 1,000 square miles.

This territory was originally held by a feudatory (called the mansubdar) of the now long since dismembered zamindari of Peddapuram. At the permanent settlement, as happened with some hill estates in Ganjam, Rampa was not noticed. In the disorders of the Godavari district, which arose early in the century, the then mansubdar, descending with an armed force from the hills, took possession of some villages in the plains. From these he was driven back, but as he submitted himself and offered to acknowledge "for ever the sovereignty of the Company," they were restored to him; and he was confirmed in their enjoyment and that of the hill country, free from all assessment, conditionally on his faithfully performing all duties of police in his villages, a tenure common to many parts of India, and known in Madras as "kaval."

This, the first mansubdar, died in 1835. His son being a bastard and a minor, the muttahdars of the four and twenty petty tracts into which the hills are divided refused to attorn to him, and recognized the legitimate daughter of the first mansubdar as his successor; but eventually they expelled her for misconduct, and she waived her claims in favor of her half brother. He was, however, driven out of the country with his retainers, and was a pensioner on Government up to 1848, when, after protracted negotiation with the authorities—for they would not covenant with the mansubdar—the muttahdars agreed to receive him back. The terms were that, in consideration of their paying in certain fixed shares the moderate annual sum of Rupees 1,000 in lieu of the Rupees 8,750 exacted from them by his father, they would perform under him the police duties which he, like his father, undertook; while he, on his part, bound himself to levy no extra cesses or higher quit-rents under any pretence whatever. "Should I do so, or become unable to prevent disturbances in the taluk. . . . for the third time. . . the Circar may resume my whole estate, and I will then bind myself to receive for maintenance such allowance as the Circar may determine." (*Vide* his agreement with the Collector of Rajahmundry, dated 22nd July 1847, confirmed in 1848.)

The manner in which the mansubdar had fared at the hands of his muttahdars did not, however, teach him the wisdom of moderation for the future. He had neither the vigour to control them nor the

sense to make the slightest attempt to win their respect. Living at Yerrampalem in the plains, and collecting all sorts of illegal cesses, he succeeded in making himself an object of extreme hatred and unpopularity. The consequence was that disturbances broke out on various occasions. In 1858, 1861, and 1862 risings against his authority took place. When order had been restored after the last occasion, in 1862, the then Collector recommended, in order that these troubles should be definitely put a stop to, that the Government should assume the hills and leave the mansubdar in possession of only so many villages in the plains as would give him an income of Rupees 200 monthly. The Board of Revenue supported his proposals. The Government at that time do not, through the want of a full inquiry by the local officers, appear to have been in complete possession of the facts forming the causes of these outbreaks; at any rate the only measure taken was to debit the mansubdar with one-third of the cost of the police force, which in consequence of his inability to maintain order it was found necessary to establish in the hill country; and he was allowed Rupees 775 yearly in compensation for certain sources of income (abkari and sayer) which he had enjoyed, but were now (1865) ordered to be discontinued. The result of this final settlement was unfortunate. Not satisfied with two muttachs which he had previously usurped, and finding that he was able to carry on his aggressions on the hill properties under the shadow of pretended Government authority, he continued a career of uninterrupted spoliation. Eventually he had got entirely under his control eight muttachs, from which he raised rents far in excess of the tribute he was entitled to; he had doubled the tribute of two others, and was levying a large revenue from fuel rents, grazing taxes, and other unauthorized cesses. Throughout, he contrived moreover to make it appear that all he did had the sanction of Government. And unfortunately the action of the local officers, and in one most important instance that of the Board of Revenue, tended to confirm the popular belief in Rampa that this was the case. In some instances parties who complained of having been despoiled of their estates were referred to the Civil Courts for redress, the agreement of 1847-48 being ignored; and in one instance, where a most flagrant breach of its provisions was brought home to the mansubdar, all that the Collector did was to instruct the Sub-Collector to "warn him of the serious consequences likely to result from his oppressive and impolitic conduct towards his retainers." In 1872 the Board of Revenue expressed acceptance with the Collector's view that muttachs in default of heirs or other good cause escheated to the mansubdar and not to the Crown, and that quit-rents on muttachs were not limited by the 1848 engagement. After this the mask was thrown off, and the mansubdar openly preferred his claim to take possession of such muttachs

as he considered ripe for annexation, "in accordance with the custom of his family and the orders of the Board of Revenue." The Board, of course, misapprehended entirely the nature of the tenure between the mansubdar and the muttahdars. The agreement made in 1848 by the muttahdars was made not with the mansubdar (with whom, as has been seen, they refused to covenant), but with the Collector as the representative of the Government: "Should we fail to fulfil these engagements (they covenant), we will submit ourselves to the orders of the Cirkar." They held, therefore, on service tenure from the Government itself; no tenement was transferable, the succession being hereditary but regulated by Government. It is necessary, however, to state that the above *obiter dictum* of the Board never received official sanction and has been altogether disavowed; but the action, or rather want of action, taken by them and the district officers for a series of years, caused a general belief that the acts of the mansubdar had official countenance and created a universal distrust of the Government.

Other causes combined to aggravate matters. Though the Rampa country is entered in the first schedule of Act XIV of 1874, no separate administration was established for it. The unfortunate consequence was that the Rampa men remained under the jurisdiction of the Civil Courts in the plains, and this was used by the traders as a means of oppressing them. Whenever a hill man failed to fulfil his contract according to the interpretation put on it by the low-country trader, a suit was brought against him in the Rajahmundry Civil Court, with the result—as the hill men could never be persuaded to enter the Court—that the claims against them were only limited by what their creditors thought they could get out of them, and excessive distrains were made on *ex-parte* decrees. Nor were the hill men able to state their grievances to the district officers, who for many years neglected to visit Rampa, partly because it was an unimportant division from a revenue point of view, and partly on account of the unhealthiness of its climate. Of late years, moreover, the Rampa police stations do not appear to have been visited by any officer above the rank of inspector; and the station-house officers and inferior police, left pretty much to their own devices, did not fail to make the best of their opportunities to the prejudice of an untaught people. Such indeed was the ignorance of Rampa affairs, that the local authorities were unaware that the muttahdars had any cause of discontent until the late rising had actually occurred.

From the above recorded facts it is apparent that for a long series of years the inhabitants of Rampa have had grave cause for being dissatisfied, and it needed but one more load to make intolerable the burden they had long borne with impatience. This came in the shape of the

toddy tax. Up to 1872 they, in common with the inhabitants of the rest of the Presidency, had enjoyed the privilege of drawing toddy for domestic consumption without a license under the provisions of Section 28, Act III of 1864 (Madras). Owing to this concession having been much abused to the detriment of the abkari revenue, it was annulled in 1872 in all parts of the Presidency except the border mountains of South Canara and the Agency tracts of Ganjam and Vizagapatam. Rampa, however, was shut out from the privileges of its neighbours—privileges to which even Rekapalle and Bhadrachalam were admitted. There can be no doubt that the refusal of a concession to the Rampa hill tribes which had been granted to neighbours identical with them in caste, habit, and customs, was a grave administrative error; the more especially as to them toddy is for many months of the year an absolute necessary of life. It was not, however, until the separation of the toddy and arrack farms in 1875 that the innovation on ancient custom made itself felt. Up to that time the renter of both farms regarded the revenue to be derived from toddy as merely auxiliary to the profits of the arrack farm, to which he principally looked for a return; and so far as Rampa was concerned, he seems to have slept on his rights as regards toddy. When in 1875, however, a separate lease for the toddy farm of Rajahmundry was granted for three years at an annual rental of Rupees 11,000, the position of affairs was of course altered, and the renter turned his attention to the toddy-producing palmyra and date trees scattered over the Rampa hills. In the plains the monopoly is managed in this manner: the renter is entitled to draw toddy free of charge from all trees growing on Government waste, and enters into arrangements with the owners of trees growing on private lands to supply him and his sub-renters with the produce at certain specified rates. The liquor thus obtained is distributed to shops scattered about the country, and the measure of the gross profits is the difference between the cost and the selling price. But in a tract of country like Rampa the conditions are entirely different. There is no Government waste with trees for use free of payment; and such a thing as a sale of toddy is almost unknown. The renter, therefore, had no profits from shops, but to compensate him for this every man had to get a license from him to tap his own trees (for the juice fermenting almost immediately, becomes in the eye of the law a manufactured article); and as every hill man has his tree and must tap it to get what is a necessary of life to him, they had to settle terms with the renter before they could do so. The arrangement made under these circumstances by the renter of 1875 was not actually to make terms with every single man, but (what was practically the same) to demand from the muttahdars payment of a fee for each muttah for the privilege of drawing toddy within its limits. However, as he does not

appear to have made very exorbitant demands for the triennial lease terminating in 1878, the people seem to have paid it without much grumbling.

But when on 1st July 1878 the toddy farm was put up to auction again and realized an advance of Rupees 9,210 per annum (Rampa being partially sub-rented), the inferior contractors immediately set to work to enhance the toddy tax. It was in many instances far in excess of the tribute the muttahdars paid for their estates; and while they were smarting under this grievous oppression, the mansubdar gave notice that he intended to share in this new source of revenue and meant to levy an additional toddy tax for himself as superior landlord (called "modalu pannu"). This seems to have been the last straw, and the Rampa hill men, unable to bear the burden imposed on them, and seeing that it bade fair to become heavier and not lighter, broke out in open insurrection against the mansubdar and the Government.

The first indications of what was coming were made known to the Rampa Division Police Inspector. On the 9th March 1879 he was informed by a certain man that his brother was called up by five muttahdars to join them in an attack on the four Rampa police stations and then in a general *loot* of the villages, and by another man that he had seen 200 people collected together with the avowed purpose of attacking the Chodavaram station (two miles from Rampa cusba), but that they dispersed as one muttahdar was not present, and further that they intended to carry out their attack on the night of the 10th.

The inspector reported this information to the Superintendent of Police, Major Morris, and sent off a head constable and nine men into the interior to ascertain the truth of the stories told him. The Collector, Mr. Foster, had only that morning (the 10th) gone up the river in a steamer to conduct the annual settlement of the Bhadrachalam taluk; the Superintendent, therefore, communicated with the Joint Magistrate, Mr. Johnson, and they decided to proceed to Gokaveram (a station about midway between Rampa cusba and Rajahmundry). On the 11th one of the already mentioned five men came to them at Gokaveram and denied all knowledge of any intention to rise, and accompanied them to Chodavaram. Next day, the 12th, two constables were sent out to a place called Geddada to bring in the reddy; but they returned with the news that they had been stopped about three miles from Chodavaram by an armed party of 50 men, who had threatened to fire on them if they advanced. The Munsif of Chodavaram offered to go out and parley with the insurgents. He returned, stating that they were in some force at Bhupatipalem, some three miles off, and that the head constable and party who had been sent out on the 9th had,

with a few exceptions, been captured at Bodalur. He was directed to return and inform the insurgents that if they had any grievances they would be redressed, but that the captured head constable and his men must be at once released and sent in with their muskets. He returned in the evening and reported that the reddis (or muttahidars) would come next morning and state their grievances, and that they had sent for the head constable from Bodalur. Early in the morning of the following day (13th) the reddis with a large party came close to the station, many of them being armed. They appeared to be about 200 strong. Mr. Johnson, Major Morris, the Sub-Magistrate, and two peons went out unarmed to meet them. A man called Sirdar Jangam Pulicanta Sambiah of Katravada and the reddi of Kakur came up first; they were immediately followed by Nedlur Rama Reddi and the reddi of Yadakur. They said they could not stand all the taxes that were being imposed; that three years ago came the "chiguru pannu" (charge made by the Government toddy contractor); that this year the mansubdar was demanding "modalu pannu;" that the police extorted chickens and the like from them; and that as they could not live, they might as well kill the Police, and die. While at Gokaveram two days before, Mr. Johnson had heard of the new tax threatened by the mansubdar (the modalu pannu), and had personally directed him (his place, Yerrampalem, is near Gokaveram) not to enforce his demand without sanction from the Collector, as it appeared illegal. He now told the leaders what he had done with respect to this part of their grievance; he further told them that if they would give details about the toddy contractors' demands, he would see what could be done; and that if they had any complaints against the police they would be inquired into. He added that if they had not harmed the head constable and his party, no notice of their past conduct would be taken; but that otherwise he could not promise them immunity.

The insurgents professed themselves satisfied, and promised to come to the police station and give further information as soon as they had taken their food. The Government officers then returned to the station, thinking all was well. A few minutes later one of the peons, who had remained behind, ran in saying that he had seen the Munsif tied to a tree, and that the insurgents had driven him (the peon) away, calling out that they could not trust the Government officials. Immediately a party of the insurgents began firing on some constables and the Sub-Magistrate's servants, who were cooking at the water, some 200 yards from the station. Then shots commenced coming into the station enclosure from all sides, but the enemy remained under cover and at a considerable distance. The party in the station-house did not return a shot till 4 p.m., when water falling short, they sent out some men in skirmishing order, who cleared the nullah and got in what water they

wanted. From that time the enemies' shots were few. The expected night attack was not made. Some of them came near the station palisade several times during the night, but finding those within on the alert, and being fired on, beat a retreat. The thatch was taken off the station as it was feared that lighted arrows would be shot at it. The police then in the station consisted of 39 men of all ranks with 32 carbines.

Communication with Gokaveram and the plains was cut off, the hill men guarding the passes. A pensioned constable, however, a hill man, managed to get through from Chodavaram with a letter from Major Morris to the Head-quarter Inspector at Rajahmundry, and a telegram from Mr. Johnson for Government. The former's letter asked for assistance, and directed that as many men as possible should be sent up under Mr. Millett, the Assistant Superintendent of Police, with carbines. Mr. Johnson's telegram requested Government to send troops at once. During the following three days reinforcements of police under Inspectors May and Fawcett arrived. They had been fired at on their way up. On the 17th the force at Chodavaram amounted to 149, armed with swords and carbines. That day a strong party of police went out to Bhupatipalem, the village of the second in command of the insurgents, called Karam Tamman Dora, and burnt it; and the next day Mr. May and 60 policemen were ordered to endeavour to reach and hold Kota, a police station to the north; but he returned after a few hours and stated that he had been so often fired at and his progress had been so slow, that he was afraid he would not be able to reach Kota (16 miles distant) before night-fall, and had returned as he wished to avoid camping out in the jungle at night.

Meanwhile the *Rajpootana* with the head-quarters of the 39th Native Infantry, consisting of 8 European and 12 Native officers, 33 Havildars and 379 privates, had arrived at Cocanada on the 16th with Lieutenant-Colonel Cunliffe, who was appointed Special Commissioner, with orders to direct all operations in the absence of the District or Joint Magistrate. The orders of Government were that the troops were to remain in the plains and not to proceed into the hills without sanction or unless the police were overpowered. The bulk of the regiment remained at Cocanada, a detachment being sent to Rajahmundry to be at hand in case of reinforcements being needed.

Rewards for the capture of the five leading rebels—among whom Sirdar Jangam and Amal Reddi of Bodalur were prominent—were sanctioned by Government. On the 20th Mr. Johnson, Colonel Cunliffe, and Major Morris went to Cheruvupalem, the place where Mr. May and his police had been fired on, and surprised a large party of insurgents who were cooking their food; one of them was killed,

another wounded. A large quantity of their provisions was found and destroyed. Mr. Johnson, who was of opinion that the failure of the large body of police under Mr. May to reach Kota met the proviso of Government as to troops entering the hills, had called in Major Wroughton with his detachment from Rajahmundry. He arrived on the 20th, having been fired at on the way. On the 21st Mr. Foster arrived in Chodavaram from Bhadrachalam, having come across from Kondamodalu quite unmolested; and on the 22nd a party of the 39th and 100 police made a raid on a rebel village called Bondapilli and destroyed some provisions. The immediate neighbourhood of Chodavaram became quieter after this display of force, but disturbances broke out in other parts of Rampa and the adjoining hill tracts.

On the 23rd March 4 constables of the party of 9 and a head constable who had been sent out on the 9th returned to Chodavaram. They related that they went as high as Bodalur, accompanied part of the way by Sirdar Jangam Sambiah, who assured them he knew nothing of any insurrection. At last on their return they were seized by Tamman Dora (4 of the constables had previously escaped) and taken near Rampa cusba, where Tamman Dora cut off the heads of the head constable and one other constable. The remaining 4 (the narrators) were taken to Amal Reddi, to whom they pleaded for mercy on the score that they were hill men. Amal Reddi told them they would not be killed just then, but would be sacrificed at the shrines of two different goddesses later on. They were reserved apparently for this purpose, and were taken about the country till the 22nd, when the insurgents had to decamp in a hurry on the approach of a Government force and left them tied up. They were released and brought in. Rupees 500 were upon this offered as a reward for the capture of Tamman Dora, who eventually turned out one of the two most formidable foes of Government during these disturbances. On the 20th, it may be mentioned, a younger brother of his had been captured.

During the end of March and beginning of April several encounters between the rebels and the Government troops and police took place, especially on the road between Chodavaram and Kota. It was very difficult to obtain reliable information of any intended movements of the insurgents, for even the few friendly villages were afraid of their future vengeance if they gave any assistance to the Government and as a matter of fact not a few informers were barbarously murdered by the insurgents. The consequence was that the encounters were generally unpremeditated and in the nature of surprises. Occasionally the rebels were chanced upon in their camp; at other times the troops or police would be fired upon when passing along some track or ghat. The casualties among the enemy were very few, and on our side there

were none up to the 15th April in fair fight; but, as has been stated, several cold-blooded murders had been committed. The shooting on both sides was very bad, but notably so on the part of the insurgents. Both they and the Government forces moved about the country in detached parties. On account of the pestilential nature* of the climate the police and troops suffered very severely from malarious fever, and constant reliefs were necessary. Frequently more than half the available force was *hors de combat* by sickness; and as the rebels could march twice as fast as the troops, were not burdened with having to carry out supplies, were in their own country—of which they knew every track and hiding place—and could watch the movements of the sepoys and police without being seen themselves, it will be apparent that the difficulties which had to be contended with were very serious.

At the end of March the Collector proposed that the mansubdar should be deposed and the management of his land undertaken by Government, and he offered, if this plan were agreed to, to make a settlement of the muttals.

The Government, however, did not consider that they were then in possession of sufficient authentic information on the origin of the rising—for all the causes which have been already stated were not fully inquired into until several months afterwards—to warrant the immediate deposition of the mansubdar; they ordered the Collector, however, to inform him that his proposed “modalu pannu” was absolutely illegal, and that he might have incurred complete forfeiture of his estate by his unwarranted procedure. As to the proposed settlement of the muttals, the Collector was ordered to refer for future report to the 1847-48 agreements, of which he then seemed to be unaware.

The sickness among the troops under Major Wroughton at Chodavaram had by the middle of April become so serious that the Collector was informed that the Government consented to the withdrawal of the bulk of them to the plains, the advisability of detaining a small detachment at Chodavaram being left to his discretion. The Collector does not seem to have interpreted this order in accordance with the meaning of Government; at any rate he kept the Chodavaram troops at that place, as he considered that otherwise the force at his disposal would become too scanty to be effective.

Major Morris having fallen ill of fever was succeeded by Mr. Lushington. The latter with a party of police was on one occasion fired on but no damage was done. Kota station was reoccupied and

* An illustration of the Rampa climate is the fact that of the Taluk and Collector's clerks employed in the hills, though they relieved each other at frequent intervals, no less than 30 had died up to 31st March 1850.

was several times attacked but without success. The Collector was authorized at this juncture to announce that the Government did not intend to prosecute any but those actually concerned in criminal acts of violence or malicious injury to property, and that the mansubdar would no longer be suffered to levy any taxes whatever pending the investigation into the abkari grievances which had been ordered; but that the insurgents would be held responsible for the villages they had burnt.

About this time, the end of April, the disturbance, which had hitherto been confined to Rampa, began to extend northwards to the Golconda hills in Vizagapatam. A party of police, 25 strong, marching from Kota in Rampa to Aditeegala station in Vizagapatam, were fired on and a head constable was killed. This was the first casualty on the Government side in open fight. The Collector of Vizagapatam and his Assistants were put on the alert to prevent, if possible, any further extension of the rising into that district. The Special Assistant, Captain Blaxland, was directed to obtain as many paiks (militia) and police as possible and direct operations from the Gudem side. To supplement the losses caused by fever among the police in Godavari, additional police were brought in from the neighbouring Kistna and Ganjam districts, and a wing of the 29th Native Infantry was moved from Vizagapatam to Rajahmundry to guard the Central Jail and to perform similar duties usually assigned to the reserve police, so that the latter were enabled to proceed to the scene of action.

On the 29th April Sirdar Jangam Pulicanta Sambiah, whose name has already appeared in the preceding pages, was arrested by one Linga Reddi of Kondamodalu, a man who all along rendered great service to the authorities by giving information, furnishing supplies, and so forth. He received the reward of Rupees 500 and the thanks of Government.

Meanwhile the Government received Mr. Foster's report on the origin of the rising viewed by the light of the 1847-48 settlement. They observed that there was abundant *prima facie* evidence that the mansubdar had broken every condition of his tenure, and directed that, pending consideration whether the full penalty under the agreement should not be exacted, he should be prohibited from entering the Rampa country, from sending any of his agents there, and from making in it any demand of revenue whatever. The rising had unfortunately, however, by this time changed its nature. Springing at first from the genuine discontent of the Rampa muttahdars at tangible grievances, it had now infected the criminal classes of the surrounding parts, and furnished them with an opportunity for general lawlessness and plunder. What the authorities had henceforth to deal with was

not only therefore the original elements, but also dacoities conducted on a large scale by one or two bold and determined leaders. Among these the most prominent was a man called Chendrayya, of notorious habits and an old offender.

He appeared first at the end of April in the Jaddangi or northern portion of Peddapuram taluk and Southern Golconda with about 200 men, and burnt the police stations of Chodavaram (near Ducharti) and Aditeegala. It was probably his gang that attacked the police party when the head constable was shot. Gangs under his orders plundered villages in the Jaddangi country, and even went as far as the lowland parts of Tuni division. To counteract Chendrayya's movements troops were moved to Narsapatam from Waltair. Mr. Willock, the Deputy Commissioner of Salt Revenue, Northern Division, was specially ordered on duty to the Gudem hills, and a strong force of Vizagapatam police was concentrated in the new theatre of the disturbances. These measures were at once attended with some success. On the 17th May Chendrayya was all but caught by Mr. Millett, a police officer, who made a rapid and successful raid, recovering property stolen by the gang, surprising the camp of the rebels, and capturing Chendrayya's brother, wife, mother, two servants, and some arms and ammunition. Chendrayya escaped with 25 men and fled to Tamman Dora for assistance. The reward for the capture of either of these two men was raised to Rupees 1,000.

The severe sickness prevailing among the troops still remaining in the hills (especially among Captain Matthias' detachment, which had relieved Major Wroughton at Chodavaram) now induced the Government to order the Collector of Godavari to remove all the troops to the plains as soon as he received sufficient police and paik reinforcements to occupy the several hill stations. It was the intention of Government to let the police as far as possible do all the hill work, and to have the troops merely as a reserve on the plains. On the 4th June two companies of the 39th Native Infantry, which had been rendered quite inefficient for duty from fever, were ordered to be sent back to Madras, and on the 13th the remaining two companies of that regiment were ordered to return also.

By this time, the beginning of June, Chendrayya had recovered courage and begun boldly to oppose the authorities. He acquired a few arms and ammunition from a small body of police which he overpowered, and gathering more followers, obstructing the hill passes with rude stone breastworks, successfully opposed first the advance of Captain Blaxland from the north and then of Mr. Millett from the south. Besides committing other outrages, he murdered in cold blood a man of the country who had aided the police on the Godavari side, as well as subsequently two constables whom he had surprised at Ducharti.

He was favored by the nature of the men he had to fight with; the paiks and police, who were insufficiently disciplined and armed for such contests, became demoralized by the loss of a few of their number in the persistent attacks made upon them. The paiks indeed proved so useless that they were eventually recalled altogether. Matters came to a climax on the 12th June, when Mr. Millett was attacked by Chendrayya between Chodavaram (Vizagapatam) and Aditeegala, and kept under fire for four and a half hours. He had to retire to Aditeegala, and being attacked again on the 15th, had to unroof the thatched station buildings. A reinforcement of 20 police sent from Annaveram returned on hearing that Chendrayya was strongly entrenched on the road. This cowardice on the part of the police was repeated on the same day by the men under Mr. Millett, who, when he endeavoured to force his way back to Annaveram, had to retire with the loss of 1 head constable killed and 1 constable wounded. Aditeegala was again attacked that night. On the receipt of this serious news the Inspector-General of Police, who was then in Rajahmundry, arranged a combined movement from four points to relieve Aditeegala, and the Government considered the situation so critical that they appointed Colonel Rammell, then the Colonel of the 29th Native Infantry in Vizagapatam, to the supreme command of both military and police in Rampa and the surrounding tracts, and ordered troops up from various quarters. The Nizam's Government on the one hand and the Commissioner of the Central Provinces on the other were requested to take measures to prevent the escape of the dacoits over their respective frontiers; and the neighbouring Zamindars and the Jeypore Raja were warned that the Government expected their assistance and co-operation. Mr. Sullivan, the First Member of the Board of Revenue, was ordered to proceed to the Godavari district for the purpose of making a searching inquiry into the causes which had led to the disturbances in Rampa, and of ascertaining the remedies which should be applied to prevent future similar agitations. And to further remove in the mean time such causes of discontent as were already known, the licenses of the toddy sub-renters were cancelled and sub-renting for the time being was prohibited.

Aditeegala station had already been relieved on the 25th June without opposition. Before Mr. Sullivan's arrival, however, fresh disturbances had broken out in the Rekapalle taluk. On the 10th July Rampa insurgents under Amal Reddi, aided by a number of Rekapalle people, attacked the Wudagudem police station. They were driven back, but this new outbreak in a fresh quarter demanded reinforcements in that part. Accordingly a party of armed police was directed to proceed up river from Rajahmundry in the steamer *Godavari*, attended by a steam launch, to reinforce stations wherever required. The launch

requiring some repair, the *Shamrock* steamer went on instead, and was incautiously allowed to proceed some hours in advance of the *Godavari*, having no guard or arms on board and only the tindal in command. She was attacked a little above the gorge, and her crew jumped overboard and abandoned her (She was, however, subsequently recovered almost uninjured.) The officer in command of the party on the *Godavari* steamer, on finding what had occurred, hesitated to attempt a recapture, as his own vessel, being in fact a mere raft, had no protection for the helmsman or engines, and had plates too thin to resist an ordinary bullet. He was obliged, therefore, to return to Rajahmundry. On the receipt of this news the Government immediately sent a wing of the 10th Native Infantry, 300 strong, up to Cocanada, and ordered that the river steamers should be armed with two 7-pounder guns and protected with mantlets and temporary bulwarks. The Nizam was requested to allow his forces, which were stationed on his (the south) side of the Godavari river, to cross it for the protection of the British side; and Lieutenant-Colonel Lord Guillamore, late Royal Artillery, was deputed specially to Rekapalle to act in communication with the Nizam's forces when they were on our side of the stream.

Mr. Sullivan and the wing of the 10th Native Infantry arrived in Cocanada on the 22nd July. Just at this time the rebels under Amal Reddi were reported to have burnt a village called Kondada and to be threatening Kondamodalu, the village of the faithful muttahdar Linga Reddi. The steamer *Godavari* was therefore sent up the river again with Lord Guillamore and 125 sepoy. Two additional steamers, the *Thistle* and the *Arthur Cotton*, were placed at the disposal of the military authorities for the purpose of patrolling both the Godavari and the Severi rivers, and a strong body of police and sepoy from the Central Provinces was sent to reinforce the Madras police in Bhadrachalam and Rekapalle. Mr. Beddy, an Assistant Commissioner from the same province, arrived at Wudagudem; military posts were established at that place and at Bhadrachalam, Rekapalle, Lukkavaram, Chintoor, Chella, and Sironcha. The river Godavari and the riparian villages were entrusted to the care of two companies Sappers and Miners. Meanwhile the northern and eastern faces of Rampa were occupied by strong detachments of sepoy, and confidence was there gradually restored amongst the villagers; and up to the middle of August no less than 70 of Chendrayya's followers had been captured.

The rebels in the western parts abated a little of their activity; they endeavoured, but without much success, to obtain support from the Bustar territory, from the Nizam's people, and also from the chief men in the Yernagudem taluk. On the whole the rising seems to have languished during August, September, and October. Tamman Dora, however, added to his past crimes by murdering in cold blood at the

beginning of August three men belonging to a friendly muttahdar. The Government steamers went cruising up and down the river, and Lord Guillamore successfully made his way up the Severi river in the *Shamrock* as far as Chintoor with a small party of Central Province police; and being fired upon from the banks, immediately landed with a portion of his party, shot two of his assailants and pursued the rest for some miles. The Inspector-General of Police was at this time ordered to return south to his other duties in the Presidency, his presence being no longer urgently required since the arrival of Colonel Rammell, and the Central Province police were withdrawn from Bhadrachalam and Rekapalle; the two companies of the 5th Native Infantry from the same province were, however, left there to be under the orders of the Madras Government.

Meanwhile a feeling of uneasiness was reported rising in the Yernagudem taluk. Colonel Robertson, the Deputy Inspector-General of Police, visited Polaveram and Gutála, two zamindaris on the west bank of the Godavari in that taluk, and reported his opinion that the inhabitants of the hills in the Gutála division were not to be depended on. The country along the face of the hills about Butayagudem was not well protected, and he was informed by Linga Reddi that some of the hill men of the Nizam's dominions had gone over to Rekapalle, and that a man of some weight in Rekapalle had crossed the Godavari and visited the chief of a village called Koratur (son of the principal leader of the insurgents in 1857) and had asked him, though apparently without success, to join the present rising. Colonel Robertson also reported differences between the above two zamindars and their ryots. The Government recognized the necessity for some additional force in the Yernagudem taluk, and considering that cavalry patrols would be the most effective, ordered (on the 19th August) that a troop of the Body Guard should be despatched thither.

It being by now clear that the persistent and oppressive exactions of the mansubdar had been a principal cause of the disturbances, the Government decided that the time had come for enforcing from him the full penalty under the 1848 agreement. They placed his estate, both the Rampa hills and his rent-free (mokhasa) villages in the plains, under attachment, and caused him to be arrested and conveyed as a State prisoner under Regulation II of 1819 to Berhampore. The anticipated rising of the Gutála people did not take place. Mr. Sullivan was ordered to make inquiries into the differences between the ryots and the zamindars alleged by Colonel Robertson. These turned out not to be well substantiated, but a grievance arising out of the toddy rents was discovered; and it is convenient to state in this place that ultimately the Government decided to prohibit sub-renting in this taluk, to settle terms of relinquishment with the original toddy renters,

and to levy on behalf of Government a moderate demand proportionate to the circumstances of each village.

Mr. Sullivan, who had meanwhile in Gokaveram, Chodavaram, and elsewhere, been prosecuting his inquiries into the causes of the original Rampa rising, requested the instructions of Government on the three points of the disposal of the prisoners taken, the settlement to be made with the muttahdars, and the toddy question. On the first the Government considered that, as a rule, only the ringleaders should be dealt with under Chapter VI of the Penal Code (waging war against the Queen), their cases being reserved for disposal under the orders of Government, and that the rank and file of the prisoners should be indicted for the actual crimes—dacoity, arson, and so forth—which they could be proved to have committed; and the prisoners were accordingly committed and put on their trial before the ordinary courts under these and similar charges. With reference to the settlement to be made with the muttahdars, the Government expressed their wish generally to maintain their previous position. As to the muttachs annexed by the mansubdar, to which there were claimants, the next heir (provided he had not joined the rising) was to be installed; and to those annexed by the mansubdar, to which there were no legal heirs, a successor approved by the villagers was to be selected. In the case of muttachs not annexed by the mansubdar, the proprietors who had shown either doubtful loyalty or had evinced actual hostility were to be punished by the terms of the settlement, and those who had assisted the Government were to be rewarded by unclaimed muttachs or otherwise. Mr. Sullivan made his settlement with such muttahdars as appeared before him on the basis of these instructions. As to the abkari question, the Government ordered that 5 per cent. should be levied on the quit-rent of each muttah in satisfaction of all Government toddy demand, and prohibited all other taxation of it. The freedom of domestic consumption thus awarded was not, however, to include the right to sell toddy.

To return to the operations against the insurgents. They were in September generally of a successful character. A considerable number were shot or captured. Mr. Beddy at this time succumbed to the exertions of a long march, and died at Wuddagudem on the 20th. Several changes took place among the officers on the Madras side. Mr. Lee-Warner, the Acting Collector of Vizagapatam, was relieved by Mr. O. B. Irvine; Mr. Tremmenheere succeeded Captain Blaxland, who had fallen ill of fever; and Colonel Buck, Commandant of the 38th Regiment Native Infantry, was entrusted with the command of the whole operations *vice* Colonel Rammell, whose health had also failed. At the end of September Rampa was comparatively quiet. Mr. Sullivan's measures had proved most successful in getting that

part of the country to settle down. In Rekapalle taluk the people were resuming their ordinary avocations. The leaders of the insurgents were generally hiding about Darakondah and in the Gudem hills. No event of importance happened during October, but on the 1st November Mr. Sweet of the police was fortunate enough to capture with six followers Amal Reddi, a leader who had made himself conspicuous from the beginning of the rising. Shortly afterwards Jumpa Pandiah, a lieutenant of Chendrayya and a proclaimed offender, came in and surrendered of his own accord. He offered to show up Tamman Dora, but his plans failed; and in December he managed to escape from the police guard at Chodavaram. The head constable in charge of him was sentenced to six months' rigorous imprisonment for his negligence.

On the 16th January 1880 Mr. Willock, with a party of military and police, surprised Chendrayya's gang and killed six and wounded three of them. Chendrayya himself managed again to escape. His end was however near. Jumpa Pandiah came to Major Hands, who was commanding a detachment in Guteru, and offered to betray Chendrayya. An arrangement was come to. Jumpa Pandiah was leading Chendrayya to a place where it had been settled that he should be captured by the troops, when the latter became suspicious and fired at his former lieutenant, and in the scuffle which ensued Chendrayya was killed. This was the 12th February. His head was brought in and satisfactorily identified. His brother, one of his right-hand men, together with three of his followers, had already been captured and sentenced to ten years' rigorous imprisonment.

The death of Chendrayya removed a great difficulty. His band dispersed, and a number of minor rebel leaders were captured. Many of them were sentenced to death, some to transportation for life. The great mass of the insurgents were disheartened, and the villagers, being to a great extent delivered from the fear of them, gave information far more freely than heretofore.

The only important leader still at large was Karam Tamman Dora. The reward for his arrest was raised to Rupees 2,000.

Early in February His Grace the Governor and the Honorable D. F. Carmichael met the Collector of Godavari at Bezvada and discussed with him the state of the district.

Driven out of Rekapalle, Rampa and Golgonda, the last remnants of the desperate bands of dacoits, with whom the police and troops had been dealing now for nearly a year, crossed in the beginning of February into Hill Madgole. They first looted a village called Kilankote, and then on the 16th appeared within a few miles of Padéru station, where they deliberately murdered three Pariahs. Padéru station was then held by a force consisting of 1 inspector, 1 head

constable, and 13 constables. The inspector on the 19th, on the plea that he was unwell—the probability being that he was afraid—rode off to Nandapur, his head-quarters, some 40 or 50 miles away. Two days afterwards, the dacoits, numbering it is said 400 to 500 men, surrounded Padéru. The position does not appear to be an easily defensible one; and the constables not being allowed to fire by the head constable (who was afraid to incur the responsibility of giving the order to do so), slipped away in twos and threes, leaving only two men, who were made prisoners. The dacoits wrecked the lock-up and then moved away northwards. Meanwhile the head constable and his party made their way to the house of a certain Naidu, where they abandoned their arms, ammunition and uniforms, and took refuge in a hiding place which the Naidu pointed out to them. The latter then seems traitorously to have sent word to the leaders of the gang; and a party was accordingly sent out, who carried off the clothing and arms, and then robbed the head constable and his mother of Rupees 1,200 and some jewels with which they had escaped. In consideration of this booty they did not molest any of the party further.

The Superintendent of Police in Jeypore, on hearing of the Kilankota loot and the attack on Padéru, promptly moved towards the spot. He met with little opposition, and on the 26th arrived at Ugampett, the head-quarters of the insurgents. He made 13 prisoners on that day. The two constables who had been captured at Padéru made their escape and joined him. He sent his prisoners to Madgole, and on meeting Major Harris, the Police Superintendent of Vizagapatam, and Mr. Clogstoun, the Acting Principal Assistant Collector, with a party of sepoy, they all went to Padéru and then pushed on to Padwa. By this time the rebels had left Hill Madgole and crossed into Hill Pachipenta.

There they celebrated their irruption by a series of murders. They killed a constable and three watchmen and decapitated them all with sacrificial rites. They then determined to attack the police station at Araku. Here, however, they met with unexpected resistance. The constables in this station, only 7 in number, showed as much determination as their brethren of Padéru had evinced pusillanimity. With the help of a few villagers they defended the village and station all day, and at length beat off the attack after killing one and wounding two or three of the marauders. The Rampa leaders of the gang were disgusted with the resistance they had met with, and made the best of their way back to Rampa or Gudem, while the local Madgole and Pachipenta leaders hid themselves in the jungles and were continuously hunted by the police. Thus the insurgents operating over an extensive tract of country were completely checked, and 20 of them were convicted and sentenced—1 to death and 19 to transportation for

life. This result was eminently satisfactory. With the exception of some of the people at Madgole, who no doubt both countenanced and joined the insurgents, the country people generally held aloof from rendering them assistance, except under compulsion.

The history of the Rampa rising and of the disturbances arising from it has thus been brought down to the end of the official year 79-1880.

The troops actually employed in the disturbed tracts on the 31st March were 2 companies of Sappers, the 10th Native Infantry, parts of the 5th, 17th, 29th, and 38th Native Infantry, a troop of the Governor's Body Guard, and detachments from the 2nd Hyderabad Cavalry and the 3rd Hyderabad Contingent Infantry; altogether about 2,400 fighting men. To these must be added the police scattered over about 25 stations. 658 extra police were employed, viz., 200 in Godavari (of which 100 were raised in the district and 100 in Kistna); 308 in Vizagapatam, which includes 100 recruits raised in Ganjam; 108 volunteers from Kurnool, Cuddapah, North Arcot, and Salem (their places being filled up by recruits in their own districts), and 50 in Jeypore; 3 extra Assistant Superintendents (besides Mr. Sweet), and 11 extra Inspectors were also on duty.

The extent of the country thus covered was about 100 miles east to west by 50 from north to south, or 5,000 square miles. The nature of the country was most unfavorable for military operations, and as has been pointed out, to trace and capture the insurgents was a matter of the greatest difficulty. Officers and men were harassed by day and night marches through a country devoid of roads. Wherever, however, resistance was met by regular troops it was overcome at once. The military, like the police, suffered severely from fever. Troops sent into the hills returned with nearly every man on the sick list. This necessitated frequent reliefs of the parties in the hills, the sick having to return as soon as convalescent; and but for the extra food and clothing which was allowed by Government, the suffering would have been greater. At the end of March 1880 there were 590 sick out of 2,393, or a quarter of the whole; and the medical officers reported that it would take long before the men recovered from the effects of the malarious influences they had been subject to. Many deaths occurred among the troops; and Major Bayley, of the 10th Native Infantry, and Surgeon Robertson died of fever.

Of the results of Mr. Sullivan's inquiries, several, for instance the attachment of the mansubdari, the deportation of the mansubdar, the settlement with the Yernagudem toddy renters, and the practical deliverance of the Rampa hills from the toddy tax, have already been treated of in their proper place. A few are remaining and can conveniently be noticed here. The settlements with the muttahdars,

which Mr. Sullivan had been authorized to make on the basis of the agreements of 1847-48, were confirmed, and it was formally notified by the Government that they cancelled absolutely and for ever the mansubdari tenure of Rampa and the mokhasa tenure of the villages in the plains, and the latter were ordered to be attached to the ordinary assessed villages of the taluk in which they were situated. The ex-mansubdar was directed to be retained under surveillance at Berhampore with his family. For the further better supervision and administration of the Rampa hills, the Local Fund Act IV of 1871 was put in force in it, and the necessary cess under it ordered to be levied; and the fund so raised was directed to be laid out in opening up the country by means of cheap roads. The Sub-Magistrate's station was transferred to Kottapalle near Gokaveram, not far from the foot of the hills, and he was invested with subordinate civil jurisdiction under the Government Agent in order to enable him to dispose of the petty suits between the hill people and the traders. This official was ordered to visit the hills once in three months, and the Collector or Sub-Collector was required to make a tour through the muttahs once every year.

One point only remains to be noticed. The discontent in Yernagudem was traced, as has already been shown, to the heavy toddy tax imposed by the sub-renters. The causes for the rising in Rekapalle and Bhadrachalam, which as in Yernagudem was not of a serious nature—for the people settled down as soon as the Rampa gangs had been hunted away from those parts—were of a different sort. These two taluks were transferred to the Godavari district from the Central Provinces in 1874. Under the latter administration "podu" cultivation (casual cultivation by forest clearing) was practically unrestricted, the tax on it being so little as 4 annas per axe; but after the transfer to Madras, not only was the rate raised to 4 annas per *acre*, but the "podu" cultivation was (on account of the objections which exist to it from a forest point of view) restricted to certain demarcated localities, and a tax was levied on certain reserved trees, *e.g.*, teak, even if cut in a tract set apart for "podu." These new taxes and restrictions were considered a great grievance, and it was for this reason that the Rampa leaders temporarily found adherents in that quarter. Pending the thorough settlement to be made after all the disturbances have come to an end, the Government ordered the system in force when those taluks belonged to the Central Provinces to be maintained.

PUDUKOTA STATE.

Season. During Fasli 1288 (30th June 1878 to 30th June 1879) the season was not favorable, being characterized by want of rain in both monsoons, but the sanitary condition of the country was excellent notwithstanding the trying character of the season.

Vaccination. The Vaccination Department appears to have worked indifferently. 3,063 persons were vaccinated against 4,592 in the preceding year; 2,978 cases were reported successful against 4,451. The falling off in the number is attributed to the adverse season and to the general unwillingness of the people to submit to the operation. The inactivity of the vaccinators is probably the principal reason. The Sirkele has taken notice of the working of the department and warned the vaccinators that their work has not been approved.

Cultivation of land. • The annexed statement shows the extent of land cultivated during the year :—

	ACRES.
Ayacut	603,338
Deduct—	
Perumboke and long waste land	129,708
Uncultivated	124,255
Davastanums or temples	95,637
Chattrams	9,592
Survamanium and Jaghire, &c., Inams	206,887
	506,079
Balance of the cultivated land of the Circar	103,259

Demand, collection and balance. The demand, collection, and balance of the various items of revenue are shown in the subjoined abstract :—

Items.	Demand.	Collection.	Balance.
<i>Land Revenue.</i>	RS.	RS.	RS.
Waraput (share of produce)	63,432	16,746	46,686
Teervaput (assessment)	1,30,508	1,18,635	43,090
Sornadayam (ready money cesses)	31,217		
Money rent or conditional leases	48,401	35,407	12,994
Total	2,73,558	1,70,788	1,02,770
<i>Extra Sources.</i>			
House, Shop, and Loom taxes	16,031	11,828	4,403
Abkari	9,399	5,495	3,904
Earth Salt	4,185		4,185
Income from Jungles	653	139	514
Do. from Cows' stable	309	278	31
Receipts from the Registration Department	10,333	10,333	
Fees on Jividum land for Tank Repairs.	17	17	
Fines	3,224	3,224	
Sundry items	22,141	22,141	
Interest on Bengal Loan	2,191	2,191	
Total	69,083	56,046	13,037
Grand Total	3,42,641	2,26,834	1,15,807

The following statement shows receipts and expenditure :—

Receipts and expenditure.

Receipts.	Expenditure.
Land Revenue	RS. A. P.
Extra Sources	1,70,788 15 4
Collection of arrears of former faslis	17,539 13 10
Sundries, including interest on Bengal Loan	1,06,077 3 3
Refund of amount disbursed on account of Marramut works.	27,772 11 4
By recovery of advances	1,557 10 11
Receipts from Registration Department	240 0 0
Amount held in deposit	10,933 12 3
	96,526 2 8
Add balance in the Treasury at the close of the last fasli ...	4,31,436 5 7
Total ...	1,00,617 14 4
	5,32,054 3 11
Current	RS. A. P.
Allowance to the Sirkele	2,95,758 3 8
Batta to Revenue Servants	4,883 5 4
Cost of the Registration Department	232 0 6
Remission of fines	7,220 13 0
Advance made to Chattram Department	280 12 7
Charges from the Deposit Fund.	4,000 0 0
	62,583 2 5
Add balance in the Treasury at the close of the fasli ...	3,74,958 5 6
Total ...	1,57,095 14 5
	5,32,054 3 11

The unexecuted balance brought forward from the account of the previous year under Public Works was Rupees 23,483, making a total of Rupees 55,801, out of which Rupees 36,995 were actually spent, leaving Rupees 16,482 (deducting recoveries) to be worked out in the following year. Owing to the critical state of the finances it was found impossible to spend more.

The number of instruments registered in the year under report is smaller than the number of those registered last year by 6,071. The receipts of the Registration Department amounted to Rupees 10,933 and the disbursements to Rupees 8,661, leaving a surplus of Rupees 2,272.

The following table shows the working of the Civil Courts from July 1878 to June 1879 :—

	Remaining on 1st July 1878.	Number of cases received from July 1878 to June 1879.	Total.	Number of suits referred to other Courts.	Remainder.	Disposed of.				Balance.
						Decreed on merits.	Razinama.	Dismissed.	Total.	
Civil Court	107	334	441	100	341	166	75	77	318	23
Assistant Civil Court	...	100	100	...	100	59	11	27	97	3
Munsifs' Courts including Small Cause Side	216	2,960	3,176	2	3,174	1,468	752	818	3,038	136
Town Court of Small Causes.	13	1,065	1,078	1	1,077	537	344	191	1,072	5

The Civil Court had on its file at the beginning of the fasli 107 cases and received in the course of it 334, making a total of 441, of which 415 were disposed of within the year, leaving at the end of the year 26. His Excellency the Raja disposed of 175 out of 201 civil appeals and of 17 out of 23 criminal appeals. He presided at 45 out of 58 sittings of the Appeal Court, and appears to have interested himself in improving the speed with which cases are disposed of. He introduced several reforms into the administration of justice, notably the permission to the Sirkele and Appeal Judge to hold Court during

his absence, and the pronouncing of appeal judgments when passed instead of at the close of the month.

Police and
crimes.

The Police force continued under the orders of the Superintendent of Police, Trichinopoly District, and the strength has been as before—4 inspectors, 20 head constables, 152 constables. 665 cases were reported against 861 in the previous year. 382 cases were detected. 1,426 persons were arrested against 1,604 in last year. 585 were convicted against 874. Rupees 18,055 worth of property was lost against Rupees 39,480 and Rupees 2,675 recovered against Rupees 3,964.

On the whole crimes were fewer and detections fair, both of which facts speak favorably of the force, considering that the season was an adverse one.

Jail.

The inmates of the jail numbered 152 at the beginning of the fasli; admissions were 280; total 432. 255 were released on expiry of term and 11 died, leaving in jail at the end of the year 166. The charges were Rupees 8,824.

Education.

The progress of the Central School was satisfactory, that of the Branch and Taluk Schools much the reverse.

General
review.

The year under report was one of decided progress in Pudukóta. In it the foundation for many reforms has been laid with great ability and judgment by Mr. Sheshiah Sastri, in whom the Raja appears to have a considerable degree of confidence. Since the close of the year some of these reforms have already been carried out. The Raja has voluntarily consented to a plan whereby the appeals from Munsifs lie to the Civil and Sessions Judge instead of to the Higher Appellate Court, and, as before stated, has allowed appeals to be heard in his absence, thus surrendering much of his personal control over the judicial work of the State. One of the Munsifs' Courts has been abolished and its work distributed among the other Courts, the money set free being devoted to raising the salary of the Appeal Judge to Rupees 300, and the salaries of the Civil and Session Judge and Chief Magistrate to Rupees 250 each. These three appointments will now be more likely to attract able and honest men when vacancies occur, and in time it may be possible to make them more attractive still.

BANGANAPALLE.

The Nawáb was absent at Hyderabad from the 26th September 1879 on account of the marriage of his brother, and did not return to his territory till after the official year under report (1879-80) was over. During his absence the affairs of the State were managed, and the Nawáb's Sadr Court presided over, by his agent Syed Imdad Ali Saib Bahadur. Otherwise there were no changes in the administrative machinery of the State.

Including 37 suits pending at the beginning of the year, the total number of suits on the files of the Nawáb's Civil Courts was 206 against 532 in the previous year. The number disposed of was 193 against 495, the average number of days during which each case was pending being 125 days in the Adálat Court and 32 days in the Sadr Court. There were 149 criminal cases for disposal, of which 147 were tried. The disposal of criminal and civil justice in the Courts of the Nawáb in the year under report was on the whole satisfactory. There was no change in the strength or organization of the Police. There is but one jail at Banganapalle, which is in charge of the Magistrate, and consists of three wards—one assigned to convicted males, another to convicted females, and the third to under-trial prisoners. The scale of prisoners' dietary was the same as in the previous year, viz., 1 seer (86 tolas) of cholum and 3 pies batta for healthy adults, and 1 seer of rice and from 6 pies to 2 annas of batta for sick prisoners. Of the prisoners 8 were British subjects. One was a life-convict punished for murder, 2 were under sentence of imprisonment for 6 years for attempt to commit murder, and the rest for 3 years and under for dacoity, grievous hurt, rape, theft, abortion, and attempt to murder. 44 instruments, involving property valued at Rupees 7,022, were registered during the year under review, against 87 valued at Rupees 13,844 in the previous year. The season was on the whole favorable, though the rain was rather scanty in July. The crops, both dry and wet, yielded fairly. The total extent of the land in the State is reported to be 2,655 putties or 212,000 acres, whereof 1,845 putties or 147,200 acres are arable. The area under occupation during the year under report was 1,739 putties or 139,020 acres against 1,765 putties or 141,200 acres in the previous year.

Including arrears the revenue demand for 1879-80 from all sources, as compared with that of the previous year, was as follows:—

	1878-79.	1879-80.	Increase or Decrease.
Land Revenue.			
	RS.	RS.	RS.
Ryotwar	1,76,429	1,69,623	— 6,806
Inam Jodi	9,955	9,996	+ 41
Miscellaneous	1,926	1,844	— 82
Total	1,88,310	1,81,463	— 6,847
Other Sources.			
Abkari	5,238	4,957	— 281
Moturpha	3,028	3,018	— 10
Earth Salt	1,602	—	— 1,602
Stamps	2,351	1,358	— 993
Tolls	1,919	2,120	+ 201
Road Cess	7,201	10,524	+ 3,323
School Fund	406	378	— 28
Nazars	345	280	— 65
Registration Fees	86	43	— 43
Process Fees in Civil Courts	385	344	— 41
Revenue Fines	509	406	— 103
Magisterial and Cattle Trespass Fines, Escheats, &c.	2,354	2,265	— 89
Total	25,424	25,693	+ 269

In consequence of some correspondence which passed between the Agent and the Nawáb in regard to the unsuitability of the present irresponsible system of abkári administration in the State, under which it was found difficult to repress the smuggling of cheap liquor from Banganapalle into British territory, the Nawáb finally resolved to withdraw the right of managing the abkári revenue from the Sub-Jaghiredars, to establish a central distillery at Banganapalle and make issues therefrom to all the shops, distributing the net revenue derived by him rateably between himself and the Sub-Jaghiredars.

At the request of the British Government the Nawáb abolished the manufacture of earth salt in his territories during the year under report, and hence he derived no revenue from this source. For the loss of revenue sustained by him by the suppression of this industry, the Nawáb claimed a compensation of Rupees 3,000 per annum, and this Government have recommended to the Government of India that this request should be granted.

The road cess was increased from 8 to 12 pies in the rupee. Of the total revenue demand of Rupees 207,156, Rupees 171,322 were collected.

Including expenditure on public works, amounting to Rupees 360, the total charges amounted to Rupees 23,714 against Rupees 32,443 in the previous year, the decrease being due to reduced expenditure on public works. A census taken at the end of the year showed a decrease of 526 in the population of the State, the number having been 26,388 against 26,914 in the previous year. Of the population enumerated, 13,829 were males and the rest females; 22,391 were Hindus, 3,997 Mahomedans.

As no mortuary registers are maintained by the Nawáb, the actual number of deaths in the State during 1879-80 is unknown. His Highness levies an educational cess, which fetched Rupees 378 in the year under report; but he has not established any State schools, nor does he support any with grants-in-aid. The number of indigenous schools fell off from 30 to 20 during 1879-80, and the attendance in them from 380 to 220 pupils. The second annual instalment of the debt which the Nawáb owes to the British Government was paid on 7th April last. He has now a second son, who was born on the 12th January 1880.

SANDUR.

The receipts of this State during the year ending 31st May 1880 were Rupees 37,938, or about Rupees 10,000 short of those realized in 1878-79.

This decrease is chiefly due to the lower price fetched by the State contracts (abkári, forest, &c.,) and to fewer recoveries on tuccavy (cul-

tivation) advances, as well as to the fact that for the first time for many years the Agent has been paid his full salary in the year under report. The decrease in the revenue has been chiefly felt by the creditors of the State, as is shown by the comparatively small sum allotted in 1879-80 to the extinction of debt and interest. It is unsatisfactory to note that during the same period the private expenditure of the Raja has increased considerably. The debts of the State amount now to Rupees 94,704.

The harvest in the year under report was very good. The condition of the ryots is reported on the whole to be improving, although some of the poorer class have been obliged to resign their lands from want of cattle, &c., to cultivate them. A license tax was introduced during the year under report, but was found to produce so little besides dissatisfaction, that it was abandoned. The extension of the moturfa tax to persons who had been exempted from its operation without apparent reason was substituted for the proposed tax. A measure to levy a quit-rent on inams was introduced, but its operation has been postponed until the conclusion of the next harvest. The proportion of births to deaths for the year under report was 1.156 to 3.731.

Measures are in progress for restricting the private expenditure of the Rajah and for securing the gradual liquidation of the State debts.

POLITICAL PENSIONS.

The payment to Carnatic stipendiaries (including Jaghiredars and Carnatic Yeomiahdars) amounted to Rupees 4,55,580-10-7 during the official stipends year 1879-80.

The number of persons receiving pensions on the 1st April 1880 was 1,575, as against 1,590 on 1st April 1879.

The number of deaths in 1879-80 was 68; the pensions of these deceased persons amount to Rupees 914-4-9 per mensem, of which sum Rupees 582-4-1 has lapsed to the State; but probably some may have to be refunded as compassionate allowance to widows.

Prince Zahir-ud-Dowlah Bahadur died on the 16th June 1879 and was succeeded by his brother Intizam-ul-Mulk Bahadur.

CHAPTER II.

ADMINISTRATION OF THE LAND.

GOVERNMENT AND ALIENATED LANDS.

The following review of the Revenue Settlement and Collections of the Madras Presidency is for Fasli 1288, or the Revenue year ending 30th June 1879.

Territorial changes.

There were no changes either in the number of the districts or of taluks, which were 21 and 157 respectively. In the number of villages under ryotwar settlement there was a decrease of 161 for the whole Presidency. The only noteworthy variation is a decrease of 162 in Kistna, due to the clubbing of villages.

Number of puttas.

The subjoined statement shows that there was, on the whole, a decrease of 11,202 in the total number of puttas for the year.

		Fresh puttas.	Old puttas modified by additional entries.	Old puttas not altered.	Total.
Fasli 1287		299,030	640,506	1,629,565	2,569,101
Do. 1288		230,184	785,172	1,542,543	2,557,899
		Decrease. 68,846	Increase. 144,666	Decrease. 87,022	Decrease. 11,202

The decrease in the total number of puttas is nominal, and mainly due to a correction made in the figures of the Coimbatore district for the past year.

The decrease under fresh puttas is chiefly in the Tinnevely district, and is due to new puttas having been issued last year to most of the ryots. The increase under "old puttas modified by additional entries" occurs in the Malabar district, where alterations in the puttas were

rendered necessary in consequence of the introduction of Act I of 1878, raising the rate of land-cess from 1 to 2 annas in the rupee.

The ryotwar settlement is made by adding to the assessment of the Ryotwari holdings—

- (1) charge for second crop, and
- (2) water-tax on dry land,

and deducting therefrom—

- (1) the assessment of waste remitted ;
- (2) other remissions dependent upon the season ;
- (3) fixed remissions ;
- (4) deductions on account of village establishments and sundry other purposes.

To the balance, items classified as miscellaneous revenue are added. Each of the above items will be noticed in order.

The following abstract exhibits the ryots' holdings or land held on ryotwari puttas, as settled for the year, in all districts, excepting South Canara, for which particulars of areas are not known :—

Items.	Dry.		Wet.		Total.	
	Extent.	Assessment.	Extent.	Assessment.	Extent.	Assessment.
	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.
Holdings at the beginning of Fasli 1288	16,175,052	1,71,43,079	3,834,563	1,71,99,792	20,009,615	3,43,47,871
Deduct lands given up or transferred to other heads ...	842,001	7,90,504	128,629	4,07,277	970,630	11,97,781
Remainder	15,333,051	1,63,57,575	3,705,934	1,67,92,515	19,038,985	3,31,50,090
Add lands taken up or transferred from other heads ...	712,103	7,54,996	153,492	5,02,600	865,595	12,57,596
Total	16,045,154	1,71,12,571	3,859,426	1,72,95,115	19,904,580	3,44,07,686

Including South Canara* the assessment on the holdings of Fasli 1288 was more than that of the preceding fasli by Rupees 60,374, though there was a decrease of acres 105,035 in area as shown below :—

Fasli.		Assessment.	
		ACRES.	RS.
1287		20,009,615	3,56,34,688
1288		19,904,580	3,56,94,462
		Decrease. 105,035	Increase. 60,374

		RS.
* Fasli 1287		12,86,217
Do. 1288		12,86,776
	Increase ...	559

The above increase in the assessment is the net result of a gross increase of Rupees 1,47,618 and a gross decrease of Rupees 87,244 as detailed below :—

Increase.			Decrease.		
	ACRES.	RS.		ACRES.	RS.
South Arcot	31,567	44,851	Salem	29,458	22,715
Kistna	10,093	23,256	Madura	22,063	19,755
Ganjam	510	20,604	Kurnool	33,345	14,548
Coimbatore	18,908	14,472	Bellary	41,042	12,166
Godavari	9,677	11,520	Cuddapah	23,364	9,372
Trichinopoly	9,209	7,898	Malabar	8,959	2,473
Tanjore	3,849	4,433	Nellore	7,754	1,754
Vizagapatam	2,015	1,017	North Arcot	3,148	1,736
Chingleput	943	559	Tinnevely	1,310	20
South Canara	...	...	Nilgiri	...	...
Nilgiri	1,645	...	Coimbatore	5,102	...
Total	69,508	1,47,618	Total	174,543	87,244

The increase in South Arcot, Godavari, Trichinopoly, Tanjore, Vizagapatam, and Chingleput is chiefly due to the favorable character of the season; in Kistna to the extension of wet cultivation in the delta taluks of the district under the stimulus of the prevailing high prices of food-grains, combined with a better appreciation of the advantages of anicut irrigation; and in Ganjam and Coimbatore to the revision of assessments by the Settlement Department. The decrease in the districts of Salem, Madura, Kurnool, Bellary, and Cuddapah is chiefly attributable to the relinquishment of poor or unprofitable tracts by impoverished ryots. In other districts the decrease is small and does not require explanation.

—Actual cultivation.

Out of the total extent of holdings, aggregating about twenty millions of acres (excluding South Canara, for which particulars are not known), a little more than 15½ millions, or 79·2 per cent., were cultivated against 78·7 per cent. in the preceding fasli; this is however considerably below the ratios of Faslis 1284 and 1285, viz., 83·9 and 87·2 respectively.

		Total holdings.	Actual cultivation.	Percentage of cultivation to holdings.
Fasli 1287	—	ACRES.	ACRES.	ACRES.
	{ Dry	16,175,052	12,371,265	76·5
	{ Wet	3,834,563	3,381,197	88·2
Total		20,009,615	15,752,462	78·7
Fasli 1288	—	ACRES.	ACRES.	ACRES.
	{ Dry	16,045,154	12,289,951	76·6
	{ Wet	3,859,426	3,470,120	89·9
Total		19,904,580	15,760,071	79·2

The percentage of cultivation to holdings in each district in Fasli 1288, compared with Fasli 1287, is shown below :—

Districts.	Percentage of area.	
	Fasli 1287.	Fasli 1288.
Ganjam	92·1	91·3
Vizagapatam	90·3	92·4
Godavari	70·2	71·0
Kistna	79·0	76·3
Nellore	73·0	74·8
Cuddapah	80·2	85·0
Bellary	74·3	74·1
Kurnool	78·3	80·1
Chingleput	66·3	73·3
North Arcot	77·1	82·9
South Arcot	84·1	87·8
Tanjore	87·6	88·1
Trichinopoly	80·4	80·7
Madura	75·8	75·4
Tinnevely	70·9	67·2
Coimbatore	80·8	81·4
Nilgiri	69·2	68·4
Salem	76·7	74·1
Malabar	99·2	99·1

The amount charged on account of second crop assessment was Rupees 8,42,036 against Rupees 9,37,824 in Fasli 1287, showing a decrease of Rupees 95,788; the second crop charge was, however, particularly high in the preceding year. This net decrease resulted from a gross increase of Rupees 75,360 in 7 districts and a gross decrease of Rupees 1,71,148 in 7 other districts.

The revenue derived from this source amounted to Rupees 25,72,338 against Rupees 23,85,627 in the preceding year, exhibiting an increase of Rupees 1,86,711. The Godavari and Kistna districts contributed more than 18½ lakhs of rupees, a separate charge for water being imposed in these districts in addition to the dry assessment; the remaining districts yielded 7 lakhs.

The total assessment on ryotwari holdings in Fasli 1288, including the second-crop assessment and water-tax, compares with the previous fasli as follows. It is higher than the demand of any of the 5 years preceding the famine :—

	RS.
Fasli 1287	3,89,57,539
Do. 1288	3,91,08,536
Increase	1,51,297

Out of the lands under occupancy acres 4,144,509, assessed at Rupees 46,76,132, or 20·8 per cent., were left waste. Of this extent ryots were allowed remissions on 173,909 acres, assessed at Rupees 6,52,106, and required to pay on 3,970,600 acres, assessed at Rupees 40,24,026; in other words, 86·1 per cent. of the assessment of the waste was charged and 13·9 per cent. remitted.

The subjoined statement shows the waste charged and that remitted in Fasli 1288 and in the preceding year :—

	Dry.		Wet.		Total.	
	Area.	Assessment.	Area.	Assessment.	Area.	Assessment.
<i>Waste remitted.</i>	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.
Fasli 1287	479,571	2,21,327	189,248	7,01,911	668,819	9,26,896
Do. 1288	1,152	1,013	172,757	6,47,375	173,909	6,52,106
Decrease ...	478,419	2,20,314	16,491	54,536	494,910	2,74,790
<i>Waste charged.</i>						
Fasli 1287	3,324,216	23,36,511	264,118	10,46,707	3,588,334	38,83,218
Do. 1288	3,754,051	32,02,644	236,549	8,21,382	3,970,600	40,24,026
Difference ...	+429,835	+3,66,133	-47,569	-2,25,325	-382,266	+1,40,808

It will be observed that the remission granted for waste in the year under report was considerably less than in Fasli 1287, and was almost entirely on account of wet waste. Small amounts appear to have been remitted on account of dry waste without authority.

The subjoined statement shows the percentages of waste remitted and charged to the total holdings in each district :—

Districts.	Waste charged.		Waste remitted.	
	Assessment of waste charged.	Percentage of waste charged to the holdings.	Assessment of waste remitted.	Percentage of waste remitted to the holdings.
	RS.		RS.	
Ganjam	55,099	7.9	21	0.0
Vizagapatam	8,291	4.3	1,175	0.6
Godavari	2,39,748	15.6	4,419	0.2
Kistna	6,19,190	21.3	31,040	1.1
Nellore	2,33,542	12.1	1,50,697	7.8
Cuddapah	1,21,187	7.4	38,919	2.3
Bellary	3,34,841	16.3	9,399	0.4
Kurnool	1,52,208	12.3	4,352	0.4
Chingleput	1,86,893	13.1	1,12,333	7.8
North Arcot	1,82,753	10.2	12,531	0.7
South Arcot	2,79,316	8.8	23,481	0.7
Tanjore	2,36,786	5.9	9,709	0.2
Trichinopoly	1,56,858	11.4	4,872	0.3
Madura	2,28,626	14.5	75,598	4.9
Tinnevely	2,82,337	10.9	1,48,198	5.7
Coimbatore	3,63,238	13.6	8,906	0.3
Nilgiri	16,149	24.0	8,827	0.5
Salem	3,23,694	18.1	3,718	0.3
South Canara	...	...	1,791	0.1
Malabar	3,870	0.2	...	...
Total ...	40,24,026	11.3	6,52,106	1.8

The remissions under this head consist of the following items :—

	Fasli 1287.	Fasli 1288.	Difference.	Remissions dependent upon season and otherwise fluctuating.
	RS.	RS.	RS.	
1. Shavi or withered crop	7,85,448	3,36,497	— 4,48,951	
2. Palanastam or short produce, inclusive of percentage remissions on punja holdings	3,04,792	1,02,261	— 2,02,531	
3. Remission of assessment on second crop wet in Tinnevely	28,246	...	— 28,246	
4. Teerwacumnee (difference between dry and wet assessment)	1,70,941	1,66,905	— 4,036	
5. Fasalumnee or second crop not cultivated on registered double crop wet land	50,609	39,809	— 10,800	
6. Remission of water-tax	75,192	95,714	+ 20,522	
7. Pannyboodthy and Payamalay or cultivation injured by water	15,832	7,878	— 8,004	
8. Remission allowed on gradual introduction of the new rates of settlement in the districts of Nellore, Cuddapah, Kurnool, and Coimbatore, under G.Os., dated 16th October 1874, 24th July 1874, and 6th December 1878, Nos. 1,333 and 919, and 1,964	32,639	68,050	— 14,589	
9. Miscellaneous or sundry remissions	23,653	17,711	— 5,942	
Total ...	15,37,402	8,34,825	— 7,02,577	

The remission under this head was granted almost entirely on irrigated lands, and did not amount to half of the sum granted in the preceding year. —Item No. 1, Shavi.

Districts.	Dry or unirrigated.		Wet or irrigated.		Total.	
	Fasli 1287.	Fasli 1288.	Fasli 1287.	Fasli 1288.	Fasli 1287.	Fasli 1288.
	RS.	RS.	RS.	RS.	RS.	RS.
Vizagapatam	...	...	7,483	...	7,483	...
Nellore	3,757	...	17,059	62,274	20,816	62,274
Cuddapah	...	...	5,578	409	5,987	409
Bellary	1,413	...	1,375	106	2,788	106
Kurnool	1,44,667	77	6,544	127	1,51,211	204
Chingleput	479	...	54,883	81,004	55,362	81,004
North Arcot	...	...	14,831	1,548	14,831	1,548
South Arcot	94,713	...	16,515	9,363	1,11,223	9,363
Tanjore	...	...	33,805	39,924	33,805	39,924
Trichinopoly	...	...	...	6,392	...	6,392
Madura	...	...	11,814	40,203	11,814	40,203
Tinnevely	...	...	14,479	93,981	14,479	93,981
Coimbatore	2,921	...	176	189	3,097	189
Salem	3,48,923	...	1,706	903	3,50,629	903
Malabar	...	...	2,327	...	2,327	...
Total ...	5,96,873	77	1,88,575	3,36,420	7,85,448	3,36,497

The necessity for granting large remissions in the districts of Tinnevely, Chingleput, Nellore, Madura, and Tanjore arose from the failure of water-supply in the rain-fed tanks and minor rivers.

The amount remitted is only about one-third of the remissions granted in last fasli. It was given on account of irrigated lands, chiefly in the Kistna and Godavari districts, where much damage was caused to crops by heavy floods. —Item No. 2, Palanastam or short produce.

Districts.	Dry.		Wet.		Total.	
	Fasli 1287.	Fasli 1288.	Fasli 1287.	Fasli 1288.	Fasli 1287.	Fasli 1288.
	RS.	RS.	RS.	RS.	RS.	RS.
Ganjam ...	...	...	73,818	2,253	73,818	2,253
Godavari ...	...	...	37,423	39,561	37,423	39,561
Kistna ...	...	...	27,195	57,747	27,195	57,747
Nellore ...	...	...	237	...	237	...
Cuddapah ...	...	...	762	...	762	...
Bellary ...	16,618	...	176	...	16,794	...
North Arcot ...	...	...	85	3	85	3
South Arcot ...	...	...	436	141	436	141
Madura ...	1,04,341	...	2,710	...	1,07,051	...
Tinnevely ...	19,825	...	876	292	20,701	292
Coimbatore ...	15,319	...	4,325	1,677	15,319	1,677
Salem ...	340	321	...	...	340	321
South Canara ...	306	266	...	...	306	266
Malabar ...	...	...	...	...	...	...
Total ...	1,56,749	587	1,48,043	1,01,674	3,04,792	1,02,261

—Item No. 4, Ryots were allowed, under the usual rules, to raise dry crops on Teerwacummi irrigated lands when water was insufficient for a wet crop, and where or difference between dry ever a crop was so raised the difference between the wet and dry and wet assessment was remitted. This concession was granted in the districts noted below :—

Districts.	Fasli 1287.	Fasli 1288.
	RS.	RS.
Tinnevely ...	22,177	81,626
Coimbatore ...	26,718	23,955
Nellore ...	12,451	18,330
Chingleput ...	24,580	9,718
Madura ...	21,100	7,757
Kurnool ...	3,659	5,217
Cuddapah ...	7,783	4,786
Godavari ...	21,643	4,195
Salem ...	7,577	3,890
South Arcot ...	3,946	3,226
Bellary ...	4,648	2,999
North Arcot ...	10,579	1,191
Malabar ...	23	15
Tanjore ...	4,057	...
Total ...	1,70,941	1,66,905

—Item No. 5, This remission occurs chiefly in the Coimbatore district (Rupees Fasalcummi. 33,732), and the decrease in this item is due to the favorable nature of the season.

—Item No. 6, This remission refers chiefly to the Kistna district (Rupees 90,245), Remission of water-tax. and was granted in consequence of the submersion of crops by heavy floods.

—Item No. 9, The details of this item are shown below :— Miscellaneous.

	Fasli 1287.	Fasli 1288.
	RS.	RS.
Remission for unoccupied lands in South Canara ...	8,047	7,804
Land occupied by public works ...	639	383
Five-eighths of the assessment on escheated Village Service Inam lands payable to the Village Service Fund ...	4,150	4,233
Remissions on crops damaged by locusts ...	3,603	...
Other sundry items ...	7,205	5,201
Total ...	23,653	17,711

These are independent of the vicissitudes of the season, and consist of the items detailed below :— Fixed remissions.

	Fasli 1287.	Fasli 1288.
	RS.	RS.
1. Remissions granted on account of heaviness of assessment or as class privileges ...	31,440	31,810
2. Remissions granted on account of irrigation by lift ...	10,219	11,103
3. Remissions granted under tope rules ...	13,402	10,624
4. Remissions granted on forest lands taken up for cultivation on the Nilgiris under G.O., dated 22nd September 1871, No. 1,656 ...	4,135	2,047
5. Remissions on grass lands ...	18,188	13,199
6. Remissions granted on account of the labor involved in reclaiming land ...	6,333	4,631
7. Remissions for maintaining irrigation works ...	14,043	15,829
8. Cowle remissions ...	5,575	4,770
9. Remissions on salt-pans left waste in South Canara ...	3,091	3,092
10. Other items ...	3,975	8,255
Total ...	1,10,401	1,05,360

These deductions are made in satisfaction of established claims in accordance with the terms of the existing settlement, and amounted in the year under report to Rupees 13,48,987, as particularised below :—

	Fasli 1287.	Fasli 1288.
	RS.	RS.
1. Fees to village servants (Meras) ...	10,18,865	10,29,763
2. Road-cess included in the land assessment ...	86,001	88,121
3. Share of revenue due to Inamdars ...	14,028	14,528
4. Tasdik allowance to pagodas, &c., in lieu of cash-payments formerly made from the treasury ...	1,91,881	2,12,614
5. Deductions from quit-rent of certain Kuttabadi Service Inams in the Bellary district ...	3,302	3,956
Total ...	13,14,167	13,48,987

The increase in the first item is due to the favorable character of the season, in consequence of which the ryotwar revenue on which these deductions were based improved. The increase under the fourth item is due to certain payments hitherto made in cash having been converted into beriz deductions in pursuance of the orders of Government.

The total remissions and deductions in Fasli 1288, including the remission granted on waste, compared with those of the previous years, are as follow :—

Fasli.	Remissions.	Deductions.	Total.
	RS.	RS.	RS.
1281 ...	14,12,357	12,62,131	26,74,488
1282 ...	8,65,466	11,97,659	20,63,125
1283 ...	22,21,720	11,47,033	33,68,773
1284 ...	11,17,702	11,73,833	22,91,535
1285 ...	27,31,362	11,63,247	38,94,609
Average ...	16,69,721	11,88,785	28,58,506
1286 ...	97,20,097	10,51,742	1,07,72,439
1287 ...	25,74,699	13,14,168	38,88,867
1288 ...	15,92,291	13,48,987	29,41,278

It will be seen that the remissions in Fasli 1288 fell short of the average of the 5 years preceding the famine (a series embracing good and bad years), and considering the partial character of the rainfall they appear to be moderate.

Land revenue —ryotwar and variations therein. After deducting remissions and deductions, the net ryotwar demand, exclusive of miscellaneous revenue, which will be noticed hereafter, was as follows:—

Items.	Fasli 1287.		Fasli 1288.		Increase.		Decrease.	
	Extent.	Assessment.	Extent.	Assessment.	Extent.	Assessment.	Extent.	Assessment.
Dry	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.	ACRES.	RS.
Wet	16,175,052	1,71,48,079	16,045,154	1,71,12,571	...	...	129,898	35,508
	3,834,563	1,71,99,792	3,859,426	1,72,95,115	24,363	95,323	...	...
Total ...	20,009,615	3,43,47,871	19,904,580	3,44,07,686	...	59,815	105,035	...
Second crop assessment	...	9,37,824	...	8,42,036	...	...	...	95,788
Charge for water	...	23,85,627	...	23,72,333	...	1,86,711	...	...
Revenue of South Canara	...	12,86,217	...	12,86,776	...	559	...	...
Total ...	...	3,89,57,539	...	3,91,08,896	...	1,51,297	...	...
Deduct.	...	...	...	...	...	...	...	...
Waste remission	...	9,26,896	...	6,52,106	...	...	...	2,74,790
Other do.	...	29,61,971	...	22,89,172	...	...	...	6,72,799
Total ...	...	38,88,867	...	29,41,278	...	...	...	9,47,589
Remainder ...	...	3,50,68,672	...	3,61,67,558	...	10,98,886	...	...

It is satisfactory to observe that the demand of the fasli under report exceeded that of any of the preceding 7 years, except Fasli 1284, which was an exceptionally good year.

Fasli.	RS.
1281	3,49,85,370
1282	3,58,38,619
1283	3,45,32,905
1284	3,65,54,781
1285	3,46,12,214
Average	3,53,04,777
1286	2,72,90,801
1287	3,50,68,672
1288	3,61,67,558

Entire land revenue demand, including permanently-settled revenue, shrotriem jodi, and miscellaneous.

In the above paragraphs the constituents of the ryotwar settlement have been reviewed. It is necessary now to explain the variations in the other branches of land revenue, viz., peishcush on permanently-settled estates, shrotriem jodi and quit-rent and miscellaneous. The following is a comparative abstract of these items for Faslis 1287 and 1288:—

	Fasli 1287.	Fasli 1288.	Increase or decrease.
1. Peishcush on permanently-settled estates ...	RS. 51,40,039	RS. 51,39,295	RS. — 744
2. Jodi and quit-rent on Shrotriem and Inam villages ...	6,21,566	6,21,058	— 508
3. Miscellaneous ...	39,00,114	41,82,821	+ 2,82,707
Total ...	96,61,719	99,43,174	+ 2,81,455

The number of these estates rose to 723 in the year under review from 702 in 1287 owing to sub-divisions of estates in Chingleput, Tinnevely, and South Arcot. They are distributed among fifteen districts. More than three-fourths are small properties paying under Rupees 5,000 per annum, while the number paying above one lakh is only eight.

The chief items which compose this revenue are noted below:—

Items.	Fasli 1287.	Fasli 1288.
1. Jodi on sundry, &c., inams	RS. 12,58,195	RS. 12,59,740
2. Charge for water on zamindari and inam lands	9,12,576	9,40,796
3. Receipts from Process Service fees	1,93,508	2,71,568
4. Land cultivated but not included in the janabandi	2,02,366	1,94,114
5. Revenue from rented villages	1,64,837	1,69,349
6. Rent of islands situated in rivers	1,42,915	1,64,084
7. Tax on trees on unassessed lands	1,15,246	1,22,063
8. Cultivation of poramboke lands	67,146	1,03,712
9. Grazing tax or grass rent	88,008	97,903
10. Land cultivated without darkhast for which no puttass have been granted	61,336	73,495
11. Quit-rent and ground-rent in the town of Madras	72,437	72,342
12. Rent on palmyra trees	70,624	70,283
13. Sale-proceeds of waste lands	43,177	67,273
14. Revenue from hill villages	43,131	44,771
15. Revenue derived from coir, the produce of Amindivi islands attached to the South Canara District	44,766	41,232
16. Rent of gardens and topes	26,554	33,557
17. Chank rent	19,072	31,507
18. Quit-rent on bungalows and gardens	22,877	23,197
19. Commission on private estates under Government management	21,725	21,443
20. Cultivation of jungle lands newly cleared by burning in the South Canara District	9,643	19,853
21. Sist on seri lands not included in the dowie of previous fasli	19,754	18,102
22. Chunam shell-rent	13,273	13,302
23. Revenue from sequestered inams	12,164	13,129
24. Rent of fruit trees	15,730	12,731
25. Revenue fines	14,177	12,506
26. Excess collection over the demand	14,653	11,912
27. Tax on backyards in excess of the limit allowed	9,692	11,013
28. Ransums collected from zamindaris, &c.	10,590	10,590
29. Water-tax on ayen lands for which puttass have not been granted.	10,857	9,774
30. Sale-proceeds of receipt and putta books	8,155	8,991
31. Double water-rate charged on lands irrigated without permission.	5,170	7,962
32. Amount recovered on account of Survey Establishment employed in the estates under the Court of Wards	19,603	7,491
33. Revenue from reverted inams	6,061	6,709
34. Commission on the sale of distrained property attached for arrears of revenue	6,383	6,279
35. Revenue deposits forfeited	842	5,252
36. Sundry other items	1,52,273	2,03,096
Total ...	39,00,114	41,82,821

The above sum of Rupees 41,82,821 is exclusive of remissions and deductions amounting to Rupees 39,938 as shown below:—

Item No.	RS.
2	18,229
Do. 4	7,206
Do. 29	4,537
Do. 8	2,667
All other items	7,299
Total	39,938

Total land
revenue
demand.

The total land revenue current demand, including miscellaneous, after deducting the remissions granted at the time of settlement, compares with the demand of the previous years as shown below:—

Fasli.	RS.
1281	4,45,06,331
1282	4,55,05,131
1283	4,42,02,321
1284	4,64,90,279
1285	4,41,78,112
Average ...	4,49,76,435
1286	3,65,52,191
1287	4,47,30,339
1288	4,61,10,732

It will be seen that the demand for Fasli 1288 is greater than that of any year from Fasli 1281, except Fasli 1284, an exceptionally good year.

Ditto, divided
into wet and
dry.

The following figures exhibit the proportion of the land revenue demand on lands charged as irrigated and unirrigated respectively:—

	Fasli 1287.	Fasli 1288.
Revenue derived from land charged as irrigated...	RS. 2,07,08,603	RS. 2,09,81,624
Revenue derived from lands charged as unirrigated	1,76,00,083	1,87,01,673
Revenue derived from lands with regard to which it cannot be ascertained how much is due to irrigation and how much is not	*64,21,703	*64,27,435
Total ...	4,47,30,389	4,61,10,732

	Fasli 1287.	Fasli 1288.
	RS.	RS.
* Permanently settled	51,40,030	51,30,295
Revenue of South Canara	12,81,664	12,88,140
Total ...	64,21,703	64,27,435

Land revenue,
special items
—lands held
on cowle.

The subjoined abstract shows the particulars of land held on cowle during Fasli 1288:—

	Extent.	Assessment.
Cowle as per last year	ACRES. 32,602	RS. 8,417
Deduct—Land brought up to full assessment and land abandoned	1,858	2,873
Remainder ...	30,744	5,544
Add—New cowle	711	1,107
Total ...	31,455	6,651
Deduct—Remission on account of waste	63	
Do. on do. of cowle	4,770	4,833
Net beriz		1,818

Fasli.	RS.
1287	2,636
1288	1,818
Decrease ...	868

It will be seen that the extent of land held on cowle was acres 31,455, paying to Government under the conditions of the cowle only Rupees 1,818. The lands thus held exist in the districts noted below:—

	RS.
Ganjam	760
South Canara	595
Madura	346
Bellary	33
Salem	33
Kurnool	25
South Arcot	13
Malabar	13
Total ...	1,818

The number of villages settled on the amani system, that is, on the basis of a division of the produce between the ryots and the Government, was 4 besides a portion of another village. The actual value at the current selling price of the Government share of the produce amounted only to Rupees 18, which, added to the money rents collected, made up a total of Rupees 454 against Rupees 962 in the previous year. The decrease is due to the transfer of an amani village to ryotwar in the Tanjore district.

The subjoined table shows the extent of cultivation of sugar-cane, cotton, and indigo:—

Districts.	Sugar-cane.		Cotton.		Indigo.	
	Fasli 1287.	Fasli 1288.	Fasli 1287.	Fasli 1288.	Fasli 1287.	Fasli 1288.
Government ...	ACRES. 15,382	ACRES. 19,660	ACRES. 756,831	ACRES. 812,557	ACRES. 119,097	ACRES. 144,865
Inam lands ...	6,300	6,199	251,874	259,316	25,212	33,263
Zamindari ...	15,040	15,320	157,031	176,452	3,859	7,370
Total ...	36,731	41,188	1,165,736	1,248,325	148,168	185,497

The small increase under sugar-cane is chiefly due to the abundance of the water-supply. There is an increase under cotton, which is due partly to the favorable nature of the season, and partly to the fall in the price of grain, the high value of which had stimulated the production of food crops at the expense of special crops in the preceding fasli. A decrease which appears in some districts is attributed to the ryots' Land revenue, rate of assessment.

preference for food crops. The increase under indigo cultivation is due to the favorable nature of the season.

The subjoined table shows the average rates of assessment charged per acre of dry and wet lands in each district :—

Districts.	Dry.			Wet.		
	Extent.	Assessment.	Average.	Extent.	Assessment.	Average.
	ACRES.	RS.	RS. A. P.	ACRES.	RS.	RS. A. P.
Ganjam ...	117,495	1,43,097	1 3 6	188,077	5,48,933	2 14 8
Vizagapatam ...	54,738	61,150	1 1 10	25,109	1,30,854	5 3 5
Godavari ...	421,698	6,95,783	1 10 4	324,447	8,33,389	2 9 1
Kistna ...	1,602,640	24,11,614	1 8 1	206,446	4,66,290	2 5 2
Nellore ...	769,828	8,96,774	1 2 8	104,207	8,89,032	5 6 7
Cuddapah ...	1,112,566	8,69,659	0 12 6	109,305	7,17,086	6 8 10
Bellary ...	2,346,715	14,79,760	0 10 1	115,267	5,63,310	4 14 2
Kurnool ...	1,006,093	10,54,982	0 15 5	26,892	1,72,998	6 6 11
Chingleput ...	217,230	2,51,753	1 2 6	292,225	10,64,171	3 10 3
North Arcot ...	442,298	6,15,570	1 6 3	203,983	11,64,310	5 11 4
South Arcot ...	971,347	16,39,012	1 11 0	281,443	14,99,115	5 5 3
Tanjore ...	302,144	3,73,710	1 3 9	746,864	36,29,011	4 13 9
Trichinopoly ...	848,836	7,39,896	0 15 1	134,626	564,577	4 3 1
Madura ...	709,835	9,27,240	1 4 11	136,286	574,590	4 3 5
Tinnevely ...	1,212,971	9,33,912	0 12 4	167,076	14,95,320	8 15 2
Coimbatore ...	2,225,142	20,09,766	0 14 6	86,546	6,39,677	7 6 3
Nilgiris ...	52,781	62,043	0 10 8	2,360	3,547	1 8 1
Salem ...	1,098,870	12,51,461	1 2 3	94,712	5,26,574	5 8 11
Malabar ...	403,875	6,34,351	1 9 1	386,703	11,64,986	3 0 2
Total ...	16,044,002	1,71,11,558	1 1 1	3,686,603	1,66,47,740	4 8 3

The entire demand, collections, and balances under all sources of land revenue are exhibited in the subjoined abstract :—

Items.	Current demand.	Collections.	Remissions.	Balance.	Subsequent collections and remissions up to March 1880.	Balance.
	RS.	RS.	RS.	RS.	RS.	RS.
Permanently settled.	51,39,295	39,20,744	...	12,18,551	6,31,926	5,86,625
Jodi on shrotriem, &c.	6,21,058	4,20,484	...	2,00,574	1,40,535	60,039
Ryotwar	3,61,67,558	2,94,81,116	...	66,86,442	45,02,407	21,84,035
Miscellaneous	41,82,821	31,76,674	...	10,06,147	6,19,034	3,87,113
Total	4,61,10,732	3,69,99,018	...	91,11,714	58,93,902	32,17,812

The percentage of the current balance at the end of March 1880 to the demand under each item of land revenue is as shown below :—

Permanently settled revenue	...	...	11.41 per cent.
Shrotriem jodi	...	...	9.66 do.
Ryotwar and Miscellaneous	...	...	6.37 do.

Arrear demand, collection, and balance under all sources of land revenue.

The subjoined tabular statement exhibits the arrear demand, collection, and balance under land revenue up to March 1880 :—

* Exclusive of water-rate on delta lands, which is charged separately.

Items.	Demand.	Collections within the fasli.	Remissions.	Balance at the end of the fasli.	Subsequent collections and remissions up to the end of March 1880.	Balance.		
						Recoverable and doubtful.	Amount already sanctioned but not yet written off.	Irrecoverable, now recommended to be written off.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Permanently settled	21,72,237	14,66,339	799	7,05,099	3,13,351	3,90,410	356	982
Shrotriem jodi	3,82,134	2,57,325	1,073	1,23,836	40,638	75,822	31	1,145
Ryotwar	1,37,76,633	1,06,17,531	85,252	30,73,850	10,59,755	14,10,254	2,98,755	3,25,086
Miscellaneous	20,10,344	11,28,980	61,204	8,20,160	2,42,026	3,17,760	1,93,289	67,085
Total	1,83,41,348	1,34,70,075	1,48,328	47,22,945	16,41,970	21,94,246	4,92,431	3,94,298

The annexed table affords a comparative view of collections, current and arrears, under the head of land revenue on account of the present view of collections of land and past faslis, the result being a very large increase of Rupees revenue, current 1,61,42,079 in the amount actually brought into the treasury within and arrears, within the the fasli.

Items.	Fasli 1287.			Fasli 1288.			Increase.	Decrease.
	Current.	Arrears.	Total.	Current.	Arrears.	Total.		
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Permanently settled	41,47,209	9,62,829	51,10,038	39,20,744	14,66,339	53,87,083	2,77,045	...
Jodi on shrotriem villages.	3,82,179	2,01,162	5,83,341	4,20,484	2,57,225	6,77,709	94,368	...
Ryotwar	2,40,67,242	70,81,056	3,11,48,298	2,94,81,116	1,06,17,531	4,00,98,647	89,50,349	...
Miscellaneous	26,99,937	8,49,374	35,49,311	31,76,674	11,28,980	43,05,654	7,56,343	...
Total	3,12,96,567	90,94,421	4,03,90,988	3,69,99,018	1,34,70,075	5,04,69,093	1,00,78,105	...

It will be seen that the land revenue collections within the fasli have been very satisfactory, being 504½ lakhs, or 100¾ lakhs in excess of the collections of Fasli 1287. This very large increase is made up of 57 lakhs in the current and 43¾ in the arrear collections. The land revenue balance of 138 lakhs which remained at the close of Fasli 1288 was however far higher than the ordinary balance left outstanding at the end of a normal year, viz., 55 to 60 lakhs. The greater portion, 91 lakhs, of the above balance relates to the current demand of Fasli 1288. It must be borne in mind that the ryots had to make large payments on account of the arrear demand of previous faslis, which accounts for the large amount outstanding on the current demand; but the following figures will show that the current balance of Fasli 1288 was considerably less than that of Fasli 1287.

Fasli.	RS.
1287	134,00,000
1288	91,00,000

It is also of importance to note that the current land revenue demand (461 lakhs) of Fasli 1288 is considerably in excess of the standard demand, 450 lakhs; there was therefore no falling off in that respect attributable to the famine.

Coercive
processes.

The following figures show that the number of defaulters against whom processes were issued was 42 per cent. higher than in Fasli 1287, and that the number of defaulters whose property was attached was more than half as much again. The number of defaulters whose property was actually sold was more than double that of the previous year, and the amount realized by sale of property was 80 per cent. higher. The increase is accounted for by the stringent orders issued from time to time enforcing the necessity for the adoption of all legal measures for the recovery of the large outstanding arrears.

	Fasli 1287.	Fasli 1288.
Number against whom processes were issued ...	2,059,972	2,941,642
Do. whose property (real or personal) was attached ...	265,232	420,823
Number whose property was actually sold ...	34,261	75,539
Amount actually realized by the sale of property ...	3,69,651	6,65,091

Miscellaneous subjects—
Hoonjeram and Palkonda Estates in the district of Vizagapatam.

These estates are rented to Messrs. Arbuthnot and Co. for Rupees 1,31,000. The renter's net demand amounted to Rupees 1,58,752, of which Rupees 1,48,260 were collected, leaving a balance of Rupees 10,492 at the close of the fasli. The outlay by renters on irrigation works was Rupees 6,355.

The figures below show the state of cultivation in these estates :—

	Fasli 1287.	Fasli 1288.
Sugar-cane ...	ACRES. 540	ACRES. 700
Paddy ...	13,165	21,880
Indigo ...	1,680	2,728
Cotton ...	795	750
Other crops ...	8,785	9,772
Total ...	24,965	35,830

Revenue
adminis-
tration of the
Bhadrachalam
and Rekapalle
taluks in the
Godavari
district.

These taluks form a part of the Godavari district, and all statistical information regarding them has been included in the figures relating to that district. There is very little ryotwari land in these taluks, and the land revenue derived consists of the following items :—

	RS.
Peshcush of zamindari estates ...	16,097
Rent of Government villages ...	583
Miscellaneous items ...	4,188
	21,468
Abkari ...	6,036
Stamps ...	2,265
Total ...	29,769

Civil suits.

A statement is subjoined showing the amount of costs awarded to Government in suits brought against officers of Government, that recovered, and the balance due :—

Districts.	Amount of costs awarded.			Amount recovered or adjusted.			Balance.
	Balance at the beginning of the fasli.	Amount awarded within the fasli.	Total.	Amount actually recovered.	Amount written off.	Total.	
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Ganjam ...	...	136 11 0	136 11 0	...	...	...	136 11 0
Vizagapatam ...	4 15 8	165 8 0	170 7 8	...	...	...	170 7 8
Godavari ...	256 7 7	326 4 4	582 11 11	355 0 7	68 3 1	423 3 8	159 8 3
Kistna ...	417 12 7	86 8 1	504 4 8	77 10 10	44 12 6	122 7 4	381 13 4
Nellore ...	...	13 8 0	13 8 0	12 9 0	...	12 9 0	0 15 0
Cuddapah ...	259 10 6	...	259 10 6	...	...	...	259 10 6
Bellary ...	34 0 0	...	34 0 0	...	...	...	34 0 0
Kurnool ...	...	...	...	...	...	...	...
Madras ...	...	...	...	...	...	...	...
Chingleput ...	* 757 2 1	266 9 1	1,023 11 2	233 7 4	...	233 7 4	790 3 10
North Arcot ...	96 9 3	38 3 9	134 13 0	5 2 6	18 0 0	23 2 6	111 10 6
South Arcot ...	* 656 13 4	206 15 6	863 12 10	188 13 7	...	188 13 7	674 15 3
Tanjore ...	3,073 7 9	198 14 4	3,272 6 1	416 4 2	...	416 4 2	2,856 1 11
Trichinopoly ...	49 5 8	163 3 0	212 8 8	50 0 6	...	50 0 6	162 8 2
Madura ...	* 1,000 13 1	200 15 11	1,201 13 0	226 9 8	...	226 9 8	975 3 4
Tinnevely ...	* 2,760 5 2	251 3 0	3,711 8 2	286 9 8	...	286 9 8	3,424 14 6
Coimbatore ...	2,393 15 7	18 9 0	2,412 8 7	...	...	...	2,412 8 7
Nilgiris ...	...	...	...	...	...	...	...
Salem ...	...	...	...	...	...	...	...
South Canara ...	688 12 3	176 6 2	865 2 5	36 4 1	...	36 4 1	829 14 4
Malabar ...	17 14 0	...	17 14 0	...	...	...	17 14 0
Total ...	* 12,463 0 6	2,949 7 2	15,417 7 8	1,888 7 11	130 15 7	2,019 7 6	13,398 0 2

* The difference between these figures and those entered in the report for Fasli 1287 is due to the rectification of mistakes.

SURVEYS.

The total outlay during the official year 1879-80 amounted to Rupees 6,64,710, or Rupees 62,840 less than the estimate. The failure to utilize the whole of the budget grant was due to the reduction in expenditure ordered in G.O., No. 2,134, of the 3rd November 1879.

The subjoined statement shows the outturn of work for the year under the various processes of survey as compared with that of each of the two preceding years :—

Nature of work.	Outturn of 1877-78.	Outturn of 1878-79.	Outturn of 1879-80.
<i>Revenue Survey.</i>	SQ. MLS.	SQ. MLS.	SQ. MLS.
Boundary demarcated ...	2,766'43	2,255'20	3,602'12
Fields do. ...	576'91	934'36	998'23
Boundary surveyed ...	4,414'36	3,011'70	4,160'63
Fields do. ...	946'34	1,023'93	957'16
Minor circuits traversed ...	NO.	NO.	NO.
	5,173	4,734	4,866
Fields plotted ...	SQ. MLS.	SQ. MLS.	SQ. MLS.
Area detailed ...	1,228'49	1,159'07	1,461'93
Area ready for settlement ...	1,418'00	1,210'78	2,787'65
Maps sent to Central Office ...	1,822'54	1,794'26	2,907'02
	2,043'57	3,720'02	3,634'43
<i>Topographical Survey.</i>			
Triangulated ...	...	540'00	3,446'00
Computed ...	150'00	...	824'00
Surveyed 4-inch scale ...	75'31	52'43	164'91
Do. 2 do. ...	3,191'80	2,006'91	1,503'63
<i>Publication.</i>			
Published 16 and 8 inch scales ...	3,604'72	3,580'66	3,719'80
Do. smaller scales ...	23,942'00	23,682'00	19,132'00
Maps, printed copies ...	NO.	NO.	NO.
	144,903	149,555	95,351
Total expenditure ...	RS. 6,28,800	RS. 6,75,825	RS. 6,64,279

Rates or cost of work per unit of area. In the subjoined statement the rates per square mile at which work under various processes is now being executed are shown for certain taluks under survey by each of the five parties, so far as obtained:—

Processes.	No. I Party, Collegal.	No. II Party, Alur.	No. III Party, Palmaner.	No. IV Party, Melur and Dindigul.	No. V Party, Tindivanam.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
I. Boundary demarcation...	11 1 7	9 13 0	...	21 15 9	10 0 3
II. Field demarcation	5 8 2	16 3 1	...	32 7 1	18 13 6
XII-A. Officer's Supervision	45 13 11	17 12 10	...	45 1 7	23 10 6
XIII-A. Petty do.	6 11 5	5 6 10	...	32 12 3	14 9 10
XIV-A. Contingencies	5 3 8	15 13 9	...	36 1 4	14 9 10
	1 6 1	3 4 7	...	16 0 0	2 12 9
Total (I) Demarcation	29 14 11	50 9 3	...	139 4 5	60 14 2
III. Boundary Survey	16 12 5	12 13 8	...	21 1 2	11 13 2
IV. Field Measurement	6 2 6	16 7 4	...	29 8 1	17 5 7
V. Traverse worked	47 1 5	17 10 0	...	2 13 10	21 13 10
VI. Field area computed	1 2 11	1 3 0	...	2 5 9	3 0 8
VII. Boundary plotted	1 7 9	2 11 10	...	2 13 9	2 8 5
VIII. Fields do.	5 9 2	2 12 2	...	1 3 6	3 4 11
IX. Tested	0 10 3	0 11 5	...	6 1 11	0 9 8
X. Detailed	1 13 10	3 12 10	...	7 7 5	4 3 7
XI. Finished	6 14 1	4 2 2	...	4 0 3	6 0 0
XII-B. Officer's supervision	0 14 4	4 4 2	...	4 14 6	1 7 8
XIII-B. Petty do.	3 3 10	4 6 7	...	...	2 1 8
XIV-B. Contingencies	8 0 6	8 8 9	...	...	8 3 2
	0 12 0	0 8 4	...	...	1 0 7
	11 2 6	14 14 7	...	...	23 13 6
	13 10 6	31 4 2	...	...	26 8 11
	3 4 2	6 9 1	...	...	4 14 11
Total (II) Survey	65 13 8	103 13 2	...	...	105 9 10

N.B.—The figures in italic type represent the rates based on the area measured in fields in each village, and the plain figures those calculated on the areas of the villages including waste.

Results of comparison of rates in Survey Parties. In the case of Collegal taluk, which is exceptional, the only rates suitable for comparison are those based on the areas measured in fields. The rate obtained for demarcation in the Melur taluk is unusually high. The demarcation and survey of Alur and Tindivanam taluks progressed at rates implying a total cost of Rupees 154 and 166 respectively, the difference occurring chiefly in the item of Officer's supervision.

Rates in the Central Office. The rates obtained in the Central Office for the publication of maps are as under:—

Description of Maps.	Unit.	Publication.	General charges at 33 per cent.	Total cost.
		RS. A. P.	RS. A. P.	RS. A. P.
Village Maps on the 16 inches to a mile	1 sq. mile.	3 7 4	1 2 3	4 9 7
Village Maps on the 8 inches to a mile	Do.	3 6 7	1 2 0	4 8 7
Village Maps (Agraharam) on a scale of 4 inches to a mile	Do.	1 1 8	0 5 10	1 7 6
Coffee Estates and Waste Land Maps on a scale of 16 inches to a mile (Litho.)	1 acre.	0 2 1	0 0 8	0 2 9
Coffee Estates and Waste Land Maps on a scale of 16 inches to a mile (Photo-Litho.)	Do.	0 1 9	0 0 7	0 2 4
Taluk Maps on a scale of 1 inch to a mile	1 sq. mile.	1 5 6	0 7 1	1 12 7
Miscellaneous Maps	1 sq. of 100 sq. inches.	61 5 10	20 4 0	81 9 10

A comparison of these figures with those given in page 43 of the Administration Report for 1878-79 shows that there has been during the year under review a considerable reduction in the cost of the publication of maps of all descriptions, except those of coffee estates, the increase in the cost of which is due to the extremely small area operated upon.

The total strength of the department as it stood on the 1st April 1879 and 1st April 1880 respectively is contrasted below:—

	1st April 1879.	1st April 1880.
Superintendent	1	1
Deputy Superintendents	5	5
Assistant do.	11	10
Civil Assistants	2	2
Sub-Assistants or Inspectors	14	12
Head Surveyors	66	60
Deputy and Detail Surveyors or Sub-Inspectors	224	144
Field Surveyors, Amins or Field Gumastahs	342	320
Measurers	858	681
Office Managers and Sub-Assistants	6	5
Accountants	31	19
Computers	180	144
Draughtsmen	358	275
Record-keepers	46	46
Clerks	82	70
Store-keepers	12	11
Duffadars, Head Peons or Peons	169	134
Mutchies, &c.	87	65
Hospital Assistants	5	4
Printers, Pressmen, &c.	73	46
Office Servants	5	5
Total	2,567	2,049

Variations in the strength of establishment.

The decrease is due to the discharge of men on reduction of establishment under the orders of Government.

Survey operations have up to the present date been extended into 18 districts of the Madras Presidency with an aggregate area for survey estimated at 115,788 square miles, viz., Ganjam, Godavari, Kistna, Kurnool, Bellary, Cuddapah, Nellore, Chingleput, Madras, North Arcot, South Arcot, Salem, Coimbatore, Nilgiri, Trichinopoly, Madura, Tinnevely, Malabar District (Wynaad only). Of this area it is assumed that 57,955 square miles will be surveyed for revenue purposes on a scale of 16 inches to a mile and the remainder (57,833) with a view to the preparation of topographical maps on smaller scales. Up to the end of the year under review the cadastral or revenue survey had been completed for a total of 49,007 square miles and the topographical or smaller scale survey for an area of 44,073 square miles, leaving a balance of 8,948 square miles for Revenue and 18,749 square miles for Topographical Survey. Field detachments were employed during the year in 11 districts, viz., Ganjam, Cuddapah, Bellary, North Arcot, South Arcot, Coimbatore, Nilgiri, Malabar, Salem, Madura, and Tinnevely.

The traverse work of the Revenue Survey was during the year connected with 36 stations of the Trigonometrical Survey, and the

Tests of accuracy.

comparison of distances shows a mean error in traversing of 4.46 feet per mile. The recomputation of the usual percentage of field areas in the Central Office has continued to prove the accuracy of the computations in district offices.

REVENUE SETTLEMENT.

Survey operations.

The operations of the Revenue Settlement Department during the official year 1879-80 extended to 6 districts. In Cuddapah the registers of the Pullampet and Pulivendla taluks were printed and classification of the red soils of the sub-division taluks was revised. A scheme for the settlement of these taluks was forwarded to the Board for orders. In North Arcot the classification of the Walajapet and Arcot taluks was completed and data for the preparation of an estimate for the settlement of the district were collected. In Coimbatore the settlement of the Palladam, Erode, Coimbatore, and Dharampuram taluks was completed and the registers of the Bhavani, Satyamangalam, Palladam, and Erode taluks were printed. In Ganjam the registers of the Chicacole taluk and of the Telugu villages of the Berhampore taluk were printed and those of the Oriya villages of the latter taluk were prepared in manuscript. The settlement of the Goomsur taluk has so far advanced that it will be completed in June. In Chingleput the registers of the remaining villages of the Conjeeveram taluk were printed and Inam excess accounts were prepared and forwarded to the Collector. In Tinnevely also inam excess accounts were prepared and forwarded to the Collector.

Cost.

The subjoined statement furnishes the outturn of work and the cost for each district during the official year 1879-80 :—

Items.	Kurnool.	Cuddapah.	Nellore.	North Arcot.	Salem.	Coimbatore.	Chingleput.	Ganjam.	Tinnevely.	Bellary.	Kistna.	Total.
Village registers printed	...	131	...	...	...	646	201	263	...	...	...	1,241
Village registers despatched to	...	...	...	...	...	1,542	3,780	...	...	...	...	6,864
Collectors. { Bound	432	1,110	...	...	...	6,168	15,120	...	...	...	...	27,456
Collectors. { Unbound	1,728	4,440	...	...	...	...	...	...	...	...	...	...
Village maps despatched to	...	...	...	...	...	...	...	...	...	...	...	...
Collectors, &c. { Mounted	461	359	20	5	1,476	783	457	124	351	...	...	4,036
Collectors, &c. { Unmounted	247	6	4	...	453	2	232	87	273	...	...	1,309
Taluks settled	...	...	...	...	...	4	...	...	...	...	...	4
Taluks in which settlement is in progress	...	...	...	...	...	1	...	1	...	...	...	2
Estimates of financial results sent to Board	...	1	...	...	...	...	...	...	...	...	...	1
Classification in square miles	...	...	...	491	...	...	...	65	...	...	...	556
Number of kyles	...	...	...	45	...	...	...	...	...	...	...	45
Taluks for which a revised scheme for the revision of village establishment submitted to the Board	...	...	...	...	...	...	...	...	...	...	11	11
Cost in rupees for settlement	1,308	53,541	64	50,179	474	1,43,839	14,510	58,431	1,306	4	...	3,23,716

The following statement shows the outlay incurred in each district from the commencement of operations till the end of the year 1879-80 :—

Items.	Districts.	Outlay		
		Up to 1878-79.	In 1879-80.	Total.
Completed	Godavari	Rs. 3,13,169	...	Rs. 3,13,169
	Kistna	6,05,079	...	6,05,079
	Nellore	5,78,000	64	5,78,124
	Trichinopoly	3,68,418	...	3,68,418
	Salem	6,01,851	474	6,02,325
	Chingleput	4,19,176	14,510	4,33,686
	Tinnevely	7,04,694	1,306	7,06,000
	Kurnool	5,58,152	1,363	5,59,520
	Cuddapah	10,28,032	58,541	10,86,573
	South Arcot	32,876	...	32,876
In progress	Coimbatore	4,86,879	1,43,839	6,30,718
	Madura	13,959	...	13,959
	North Arcot	2,74,652	50,179	3,24,831
	Ganjam	2,14,822	58,431	2,73,253
	Wynad	1,16,686	...	1,16,686
	Bellary	3,008	4	3,012
Total		63,19,513	3,23,716	66,43,229

The results of the settlement for Fasli 1288 in those districts and Results. parts of districts in which revised rates have been introduced were that in Kurnool, Cuddapah, Salem, Nellore, Tinnevely, and Coimbatore there was a decrease on the demand of the previous fasli; but for the whole twelve districts settled there was an increase of Rupees 26,323 over the demand of the previous fasli, and of Rupees 15,68,193 over that of the year preceding the settlement.

The following statement furnishes the usual particulars :—

Districts.	Portions of districts.	Demand previous to introduction of new settlement.	Demand of		Difference	
			Fasli 1287.	Fasli 1288.	Between columns 4 and 5.	Between columns 3 and 5.
1	2	3	4	5	6	7
Godavari	...	Rs. 20,54,721	Rs. 25,76,886	Rs. 26,28,284	+ 51,398	+ 5,73,563
Kistna	Masulipatam	5,79,350	9,10,164	9,19,909	+ 9,805	+ 3,40,619
	Guntur	24,24,992	27,12,284	27,77,679	+ 65,395	+ 3,52,687
	Total	30,04,342	36,22,448	36,97,648	+ 75,200	+ 6,93,306
South Arcot	Chidambaram	5,20,605	5,25,717	5,32,724	+ 7,007	+ 12,119
Trichinopoly	...	16,19,405	14,71,242	14,80,255	+ 9,013	+ 1,39,150
Kurnool	Proper	7,29,464	6,75,319	6,67,315	- 8,004	- 62,149
	Pattikonda	1,98,991	1,98,014	1,95,509	- 2,445	- 3,423
	Koilkuntha	1,99,986	2,07,505	2,10,772	+ 3,267	+ 10,786
	Cumbum and Markapur	1,88,357	1,97,570	1,93,937	+ 1,367	+ 10,580
	Total	13,16,798	12,78,408	12,72,593	- 5,815	- 44,205
Cuddapah	Three taluks (Cuddapah, &c.)	5,91,446	5,96,756	5,97,754	+ 998	+ 3,308
	Sidhout	96,434	93,237	93,235	- 5,002	- 3,199
	Badvel	97,106	1,17,143	1,07,503	- 9,645	+ 10,397
	Total	7,87,986	8,12,141	7,98,492	- 13,649	+ 10,506

Districts.	Portions of districts.	Demand previous to introduction of new settlement.	Demand of		Difference	
			Fasli 1287.	Fasli 1288.	Between columns 4 and 5.	Between columns 3 and 5.
1	2	3	4	5	6	7
Salem		RS. 18,26,265	RS. 18,18,609	RS. 17,99,062	— 19,637	— 27,203
Nellore	Principal Division	11,67,881	14,15,732	13,47,970	— 67,762	+ 180,089
	Sub-Division	5,81,610	6,28,781	6,20,614	— 8,167	+ 39,094
	Total	17,49,491	20,44,513	19,68,584	— 75,929	+ 2,19,093
Tinnevely	Southern five taluks	16,93,199	17,84,625	17,83,588	— 1,037	+ 90,389
	Northern four do.	8,17,828	8,95,176	8,82,853	— 12,323	+ 65,025
	Total	25,11,027	26,79,801	26,66,441	— 13,360	+ 1,55,414
Chingleput		13,57,612	14,27,340	14,28,257	+ 1,017	+ 70,645
Ganjam	Chicacole Taluk	2,00,374	2,01,055	2,20,559	+ 19,504	+ 20,185
Coimbatore	Bhavani and Palladam	5,05,139	5,37,485	5,29,059	— 8,426	+ 23,920
	Grand Total	1,74,53,765	1,89,95,635	1,90,21,958	+ 26,323	+15,68,193

INAM COMMISSION.

The services of the Special Deputy Collector appointed in the official year 1878-79 to carry out the enfranchisement of village service inams in the Kistna district were on the completion of the work in that district transferred in the year under report for similar work to Nellore and then to Chingleput. He had not finished the work in the Chingleput district when the official year expired. The number of cases inquired into and settled by him in the Nellore district was 5,015, involving an area of 53,703 acres, assessed at Rupees 99,246.

The number of title-deeds issued by the Inam Commissioner during the year and the extent and value of the inams concerned are shown in the following statement :—

Particulars.	Number of title-deeds issued.	Total extent.	Assessment.	Former jodi.		New quit-rent on inams enfranchised payable to Government.	Quit-rent not agreed to by inamdar whose inams have consequently been left unenfranchised.	Total quit-rent payable to Government (columns 5 and 7).	Quit-rent redeemed.	Cost of the establishment.
				Payable to Government.	Payable to Zamindar.					
1	2	3	4	5	6	7	8	9	10	11
Devadayam	8	ACS. 190	RS. 338	RS. 81	RS.	RS.	RS.	RS. 81	RS.	RS.
Dharmadayam	4	5	5	...	...	...	...	...	...	...
Dasabandham	...	...	...	...	...	...	...	...	...	...
Police Inams enfranchised	13	100	267	133	...	66	...	199	...	9072
Personal	38	2,240	4,991	1,555	11	1,041	...	2,596	20	...
Village Service	3,915	82,368	1,07,253	13,447	...	58,035	...	71,432	...	...
Total	3,978	84,903	1,12,854	15,216	11	59,142	...	74,358	20	9,072

Of the title-deeds issued 3,908 refer to the village service inams in the Kistna district settled by the Special Deputy Collector, and 7 to similar inams in the Tinnevely district settled by the Collector of the district. Of the remaining 63 title-deeds 22 refer to cases of inamdars who had neglected to enfranchise their inams at the first settlement and who subsequently availed themselves of the special terms and concession granted by Government in their Orders dated 10th September 1875, No. 1,344, and 3rd September 1877, No. 2,632. The extent of these inams was 2,071 acres and the assessment Rupees 4,557.

The particulars of inam work done from the commencement of operations and the cost of the Commission to the end of 1879-80 are shown in the subjoined statement :—

Particulars.	Total number of inams.	Area.	Assessment.	Old jodi payable to Government.	Quit-rent newly charged.	Cost.
From the commencement up to the 30th June 1866	367,427	ACS. 5,977,305	RS. 90,90,881	RS. 8,42,765	RS. 10,62,767	RS. 13,45,019
From 1st July 1866 to 31st March 1878	39,530	277,022	7,93,324	57,337	1,84,747	...
1878-79	47	1,252	1,671	58	354	...
1879-80	3,978	84,903	1,12,854	15,216	59,142	...
Total	410,982	6,340,482	99,98,730	9,15,376	13,07,010	13,45,019

The total number of cases dealt with is 410,982, involving an area of 6,340,482 acres, assessed at Rupees 99,98,730. The additional quit-rent charged is Rupees 13,07,010, of which Rupees 4,04,649 is the quit-rent on village service inams. In addition to the above, inams bearing an assessment of Rupees 1,26,051 have been fully assessed. The percentage of the additional annual revenue on the cost incurred is 106.5.

COURT OF WARDS.

The following review relates to the fasli year 1288, or to the period from the 30th June 1878 to the 30th June 1879.

The number of estates under management at the end of Fasli 1287 was 36; of these, three (Sálur in Vizagapatam, Chundi in Nellore, and Othappanaikahur in Madura) were made over to their proprietors, while four estates were newly taken up; so that the total number under the Court's superintendence at the end of Fasli 1288 was 37.

At the time the Sálur Estate came under the Court's control there was no balance in hand and it was encumbered by debt. In the course of the ten years during which it was under management debts were

paid off amounting to upwards of a lakh and a quarter of rupees and a balance of upwards of Rupees 18,000 was handed over to the proprietor when the Court withdrew. Chundi and Othappanaikanur were also in a prosperous condition when they were delivered to their proprietors.

Season:

The season of the year under review may, on the whole, be said to have been more favourable than that of Fasli 1287 except in the estates of Madura and Tinnevely and in the Peramur Estate in Trichinopoly.

Collections of the current demand.

The collections made during the year were in excess of those of Fasli 1287, as shown below. They amounted to 75 per cent. within the year and about 10 per cent. subsequently up to the date of Collectors' reports:—

	Current Demand.	Collections.			Percentage of the Collections within the Fasli to Demand.	Percentage of Total Collections to Demand.
		Within the Fasli.	Subsequent to Date of Collectors' Reports.	Total.		
	RS.	RS.	RS.	RS.		
Fasli 1287	23,45,403	19,80,487	3,88,732	23,69,219	69.6	83.3
" 1288	26,20,591	19,75,593	2,52,724	22,28,322	75.4	85.0

Of the balances a sum of Rupees 5,059 has for sufficient reasons been ordered to be written off.

The total demand on account of arrears amounted to Rupees 14,41,303, of which Rupees 6,08,606 were collected within the year and Rupees 1,13,561 subsequently; of the remainder a sum of Rupees 3,20,487 has been ordered to be struck off the accounts, leaving an outstanding balance of Rupees 3,98,649.

Total demand, current and arrears.

The following statement shows the demand, collection, and balance, both current and arrears:—

	Demand, Current and Arrears.	Collections and Remissions up to Date of Collectors' Reports.	Balance.	
			Amount ordered to be written off.	Remainder.
	RS.	RS.	RS.	RS.
Fasli 1287	43,04,035	31,15,830	82,853	11,05,352
" 1288	40,61,894	29,50,489	3,25,546	7,85,850

Receipts and charges.

The subjoined statement exhibits the total receipts and charges of each estate for Fasli 1288 as compared with those of the preceding year:—

Districts.	Estates.	Receipts.			Charges.			Percentage of Charges to Receipts.	
		Fasli 1287.	Fasli 1288.	Percentage of Increase or Decrease.	Fasli 1287.	Fasli 1288.	Percentage of Increase or Decrease.	Fasli 1287.	Fasli 1288.
		RS.	RS.		RS.	RS.			
Ganjam	Parlakimedi	4,57,964	5,20,070	+ 13.7	4,43,637	4,68,006	+ 5.1	96.8	89.5
	Jalantra	30,293	49,327	+ 62.8	49,707	42,761	- 14.0	164.1	86.7
	Seerghur	18,514	28,482	+ 55.5	19,744	22,747	+ 15.2	107.7	70.9
	Chinna Kimeri	63,621	90,834	+ 42.8	58,416	50,758	- 13.1	91.8	55.9
	Uralam	...	42,309	...	...	22,282	...	...	52.8
	Rewada	5,186	7,255	+ 40.1	5,421	6,376	+ 17.6	104.5	87.8
	Salur	1,00,251	1,11,675	+ 11.4	1,31,462	97,035	- 26.2	131.1	86.9
Vizagapatam	Merangi	51,979	50,713	- 2.4	43,082	38,520	- 10.6	82.7	76.0
	Chemudu	10,049	...	...	6,273	...	...	82.4	...
	Pondur Mallaveram	4,489	3,582	- 20.2	2,225	4,845	+ 117.8	48.7	135.3
	Madugula	5,153	33,501	+ 646.4	1,033	38,777	+ 3,480.5	21.0	100.7
	Cheelikada Jagannathapuram	...	45,917	...	...	38,901	...	...	84.7
	Siripuram	...	1,600	...	...	83	...	...	5.2
	Nallamallepadu	910	...	...	723	...	...	79.4	...
Godavari	Kapalaswarapuram	41,797	37,360	- 10.6	27,413	35,767	+ 30.5	65.5	95.7
	cum Kesanakurru	76,148	76,691	+ .7	32,437	36,437	+ 12.3	42.6	47.5
Kistna	Gopalpur	12,276	9,703	- 21.0	17,533	8,249	- 53.1	143.1	85.0
	Vasireddi Estate	7,07,893	7,20,306	+ 1.8	4,31,746	5,52,674	+ 27.4	64.0	76.7
Nellore	Nuzvid	66,920	55,856	- 16.5	64,889	47,729	- 26.4	97.01	85.5
	Chundi	5,540	6,280	+ 13.0	6,025	5,837	- 3.1	108.6	73.8
Chingleput	Soorangiri	5,559	4,582	- 18.2	1,732	5,337	+ 209.5	18.6	116.5
	Chitecherla	16,567	30,100	+ 81.4	16,530	35,448	+ 114.4	89.6	117.8
Cuddapah	Naragunti	12,512	14,842	+ 18.6	10,373	13,433	+ 29.5	82.9	90.8
	North Arcot	4,752	5,400	+ 13.6	3,472	3,006	- 13.7	73.1	56.8
Tanjore	Vettangudi	10,463	11,732	+ 12.1	8,328	8,081	- 3.0	79.1	68.9
	Mannargudi	5,88,700	6,86,415	+ 16.6	5,57,951	6,88,090	+ 21.9	94.7	100.2
Trichinopoly	Peramur	69,600	80,167	+ 15.2	80,612	58,653	- 27.2	115.7	78.2
	Ramnad	52,534	50,782	- 3.3	42,087	37,770	- 10.3	78.2	74.4
Madura	Bodinayakanur	5,805	14,195	+ 144.5	10,336	14,105	+ 36.5	178.1	93.4
	Gantamanayakanur	8,249	14,175	+ 71.8	8,717	9,487	+ 8.8	105.6	66.9
Tinnevely	Othappanaikanur	6,543	9,418	+ 43.9	6,834	9,993	+ 46.2	104.6	106.1
	Sunderapatchiapuram	8,983	3,405	- 62.1	3,833	5,538	+ 44.6	42.3	162.6
Tinnevely	Singampati	15,022	33,657	+ 12.4	21,878	28,647	+ 28.2	70.3	70.3
	Urka Zamindari	38,994	61,722	+ 58.3	23,156	33,794	+ 46.0	74.3	62.9
Coimbatore	Urka Partible Property	2,336	2,808	+ 20.2	1,833	627	- 66.9	64.4	22.3
	Etaiyapuram	3,19,141	...	...	3,60,004	...	...	112.9	...
Salem	Samatur and Kottampati	9,361	...	...	11,907	...	...	126.6	...
	Poravipalaiyam	...	11,202	...	...	9,072	...	...	81.0
South Canara	Yerumaipati and Pallyapolliem	4,809	22,936	+ 376.9	8,006	24,840	+ 210.3	166.6	108.3
	Brahmavar Sarvatham Row's Estate	5,433	4,657	- 14.3	6,051	3,944	- 34.8	111.4	84.7
Malabar	Kananji Streenevasa Row's Estate	2,689	1,767	- 34.3	3,946	1,505	- 61.9	146.7	85.2
	Kavalpara	38,823	52,758	+ 35.9	36,638	33,635	- 8.2	94.9	63.3
	Mangara	7,316	9,902	+ 35.3	1,106	8,474	+ 666.2	15.1	85.6
Total		29,57,591	30,22,573	...	26,35,371	25,47,534	...	...	...

On the whole, the receipts (Rupees 30,22,573) of Fasli 1288 exceeded those of the former year by upwards of half a lakh of rupees, and the charges were Rupees 88,000 less.

A statement is annexed below to show the expenditure on works in Public each estate in Fasli 1288 compared with that of Fasli 1287, and the ratio of expenditure on agricultural works to the revenue derived from wet lands.

[illegible]

During the year under review upwards of a lakh and half of rupees were expended on agricultural works and about half a lakh on buildings and roads. Thus the total expenditure under these heads amounted to a little over two lakhs or about Rupees 15,000 in excess of the previous year's outlay, Ramnad alone accounting for more than half of this sum. The estates which stood next in order in point of expenditure are Parlákimedi and Názvid, they spending about Rupees 33,000 and 17,000 respectively. The expenditure in all the remaining estates amounted to Rupees 30,000.

The following statement shows the amount to the credit of each Balances in estate at the beginning of Fasli 1288 as compared with that at its hand.

Districts.	Estates.	Balance.			
		At the beginning of Faslî 1288.	At the end of Faslî 1288.		
			In Government Paper.	In Cash.	Total.
		RS.	RS.	RS.	RS.
Ganjam	Parlakimedi	22,88,713	21,82,300	1,60,987	23,43,287
	Jalantra	1,00,234	98,000	17,800	1,15,800
	Seerghur	13,132	...	18,867	18,867
	Chinna Kimeri	19,971	...	60,047	60,047
	Uralm	1,05,169	...	2,15,096	2,15,096
Vizagapatam	Rewada	3,623	2,700	1,812	4,512
	Salur	4,023	...	18,663	18,663
	Merangi	1,01,534	92,900	20,827	1,13,727
	Pondur Mallaveram	2,264	...	1,001	3,709
	Madugula	4,075	...	7,016	7,016
	Chedikada Jagannathapuram	...	...	1,517	1,517
	Siripuram	...	...	...	...
Godavari	Kapalaswarapuram cum Kesana-kurru	50,453	37,400	14,646	52,046
	Gopalpur	1,54,034	1,26,100	68,188	1,94,288
Kistna	Vassireddi Estate	4,688	...	6,142	6,142
	Nuzvid	7,62,864	1,54,300	7,76,196	9,30,496
Nellore	Chundi	61,296	53,000	16,423	69,423
Cuddapah	Chitecherla	4,532	...	3,777	3,777
	Naragunti	10,695	...	5,347	5,347
North Arcot	Soorangiri	544	...	1,926	1,926
Chingleput	Vettangudi	3,650	...	4,999	4,999
Tanjore	Mannargudi	3,064	...	5,398	5,398
	Peramur	31,277	28,900	6,028	34,928
Trichinopoly	Ramnad	2,03,391	3,030	198,686	2,01,716
	Bodinayakanur	2,14,915	2,10,100	26,329	2,36,429
	Gantamanayakanur	1,40,257	1,22,300	30,969	1,53,269
	Othappanayakanur	3,575	2,000	1,665	3,665
	Sundiyur	757	...	5,445	5,445
Tinnevelly	Maniyacht	7,855	5,000	7,280	7,280
	Singampati	6,907	...	16,897	16,897
	Sundersatchiapuram	8,664	...	6,531	6,531
	Urkad Zamindari	45,793	36,000	32,721	68,721
	Do. Partible Estate	31,350	28,800	5,231	34,031
Coimbatore	Poravipalaiyam	...	...	2,130	2,130
Salem	Yerumaiyoti and Pallyapolliem	1,907	...	3	3
South Canara	Brahmavar Sarvothama Row's Estate	1,609	...	2,412	2,412
	Kananji Streenevasa Row's Estate.	3,303	2,742	913	3,655
Malabar	Kavalpara	7,383	...	26,506	26,506
	Mangara	6,209	...	7,637	7,637
Total		45,13,390	31,85,572	18,02,857	49,88,429

The transactions of the year closed with a profit of 4½ lakhs of rupees. The estates which chiefly contributed to this result are Núzvid, Parlákimedi, Chinna Kimedi, and Gopálpur. Out of the profit made during the year and the cash balances already in hand

with the Collectors and the Court of Wards the Court purchased Government Promissory Notes to the value of Rupees 10,36,700.

Debts.

The debts due by and to each estate at the end of the year were as under:—

Estates.	Debts due by the estate.			Debts due to the estate.		
	Demand.	Amount paid.	Balance.	Demand.	Amount paid including that written off.	Balance.
	RS.	RS.	RS.	RS.	RS.	RS.
Chinna Kimeri ...	...	...	...	2,501	...	2,501
Rewada ...	...	...	...	3,269	180	3,089
Salur ...	77,357	18,130	59,227	21,236	6,499	14,737
Merangi ...	1,967	1,679	288	100	...	100
Pondur Mallaveram ...	29,937	29,513	424	4,428	345	4,083
Madugula ...	33,906	20,337	13,569	2,126	...	2,126
Chedikada Jagannathapuram ...	19,676	...	19,676	...	...	...
Siripuram ...	...	...	...	...	...	...
Kapalaswarapuram cum ...	...	...	...	120	12	108
Kesanakurru ...	...	...	...	24,490	2,924	21,566
Gopalpur ...	2,794	...	2,794	...	...	...
Vassireddi Estate ...	12,578	5,264	7,314	1,02,255	20,707	1,41,548
Nuzvid ...	...	...	...	2,744	2,506	238
Chundi ...	1,755	1,345	410	...	79	8,960
Chitecherla ...	...	...	...	9,048	2,855	16,975
Soorangiri ...	1,46,502	14,265	1,32,237	19,830	126	1,580
Vettangudi ...	9,406	1,315	8,151	1,706	582	90
Mannargudi ...	...	...	...	672	...	2,015
Peramur ...	15,39,108	1,30,465	14,08,643	2,015	...	11,318
Ramnad ...	...	...	...	11,328	10	13,917
Othappanaikanur ...	...	...	...	15,037	1,120	...
Sundersapatchiapuram ...	4,638	...	4,638	10	10	...
Urka Zamindari ...	22,240	1,662	20,578	17,945	598	17,347
Poravipalaiyam ...	...	...	...	...	...	...
Yerumaipati and Palayapoliem ...	6,806	...	6,806	759	79	680
Brahmavar ...	702	664	38	84	49	35
Kannaji Streenevasa Row's Estate ...	442	442	...	3,483	2,750	733
Kavalpara ...	11,274	11,274	...	1,087	...	1,087
Mangara ...	6,619	5,272	1,347	521	30	491
Total ...	19,27,877	2,41,627	16,86,250	3,06,794	41,461	2,65,333

The aggregate liabilities of the above estates amounted therefore at the beginning of the year to Rupees 19,27,877; of this sum Rupees 2,41,627 were paid off within the year, leaving a balance of Rupees 16,86,250 at its close. Nearly the whole of this amount was due by Ramnad (14,08,000), Vettangudi (1,32,000), and Salur (60,000).

Education.

During the year under review there were forty-two minors receiving instruction, forty males and two females (minors of Kavalpara and Kapalaswarapuram estates). With the exception of the Singampati minor the conduct of all has been satisfactory. It was found necessary to remove one of the minors in South Canara from Udupi to Mangalore so that he might be more directly under the Collector's eye. This change has done him good, and he has since improved both in his conduct and education. As regards the educational progress made by the other minors it may be said that on the whole the result was encouraging. Nearly two-thirds of them have made creditable progress during the year.

The receipts and charges of Chattrams (rest-houses) and Devastanams (shrines) attached to certain estates are given below:—

Estates:	Balance at the beginning of the year.	Receipts.	Total.	Charges.	Balance at the close of the year.
	RS.	RS.	RS.	RS.	RS.
<i>Chattrams.</i>					
Vettangudi ...	188	24	212	3	209
Peramur ...	494	695	1,189	537	652
Ramnad ...	27,506	24,380	51,946	23,706	28,240
<i>Devastanams.</i>					
Ramnad ...	15,339	85,778	1,01,117	77,868	23,249
Nuzvid ...	5,683	7,923	13,606	7,823	5,783

There are three important timber-producing forests in the Parlakimedi estate, viz., Gumma, Gyba, and Jeranghi, besides some small firewood and bamboo jungles. Kumeri cultivation, i.e., cultivation of lands after burning down the trees, &c., standing thereon, prevails largely in spite of frequent attempts to suppress it. Some correspondence regarding Forest Conservancy has lately taken place between the Collector and the Court, but without any satisfactory result. Arrangements have been made for plantations in the plains being conserved by the village officers.

In the despatch from the Secretary of State, embodied in G.O., dated 4th October 1879, No. 2,014, information was required regarding the general prosperity or otherwise of the Zamindari ryots. This Government Order was communicated to Collectors in November following, so that they had not had sufficient time to furnish the required information in their reports for Fasli 1288. The Collector of Kistna, however, gives the information. He says that the Nuzvid ryots are divided into two classes, those dwelling in the delta and those living in the upland taluks, and that the former are prosperous while the latter are impoverished by a succession of adverse seasons.

CHAPTER III.

PROTECTION.

LEGISLATION.

During the official year 1879-80 the Honorable Mir Humayun Jah Bahadur and the Honorable Raja Rao Gangadhara Rama Rao, Raja of Pittapuram, were reappointed Additional Members of Council on the expiry of their two years' tenure of office.

The Acts passed, their object and character, and the date on which they were sanctioned, will be found in detail in a statement in the Appendix among the statistics of Protection.

Ten Bills were pending at the end of the year; of these 7 were brought forward by Government and 3 by the Honorable J. G. Coleman, and 2 draft Bills have been submitted to the Government of India.

POLICE.

Strength of
force.

The strength of the constabulary on the 31st March 1880 (the end of the official year 1879-80, to which this review relates) was as follows :—

Inspector-General and Supervising Staff (3 Deputy Inspectors-General and 1 Assistant Inspector-General) ...	5
Commissioner and Deputy Commissioners, Madras City	3
District Superintendents	20
Assistant Superintendents	20
Inspectors	407
Sub-Inspectors	90
Constabulary of all ranks	24,454
Office Establishments and other servants (not Police Officers)	726
Village Police	358
Total	26,081

The following statement shows the distribution and cost :—

	Number.	Cost.
Rural Constabulary including Village Police.	20,757	RS. 33,17,542
Madras City Police	1,183	2,21,774
Total	21,945	35,39,316
<i>State Services.</i>		
Revenue, Salt Preventive Establishment	2,614	2,33,130
Do. Land Custom Guards	209	23,026
Jail Guards	1,313	1,99,093
Total	4,136	4,55,244
Grand Total	26,081	39,94,560

The principal heads of charge were—

	RS.
Pay and Allowances	34,15,211
Clothing and Accoutrements	3,06,776
Miscellaneous	2,61,304
Village Police	11,179
Total	39,94,560

This sum is made up as follows :—

	RS.
Ordinary Provincial Charges	36,99,454
Imperial, Salt and Land Customs	2,56,156
Do. Service of Processes	39,950
Total	39,94,560

The proportion of Police to population (exclusive of the force employed in State services) was 1 to 1,473. In towns the proportion was 1 to 542 and in rural parts 1 to 1,617. The general proportion of Police to area was 1 to 5 square miles.

The average cost of a Policeman was Rupees 157½ or 2½ annas per head of the population. There were 191 Policemen employed by banks, public companies, and private individuals at a cost of Rupees 21,062 paid by the employers. The cost of the Madras City Marine Police exceeded the receipts by Rupees 9,304.

The conduct of the force has improved as compared with 1878. Dismissals fell from 820 to 618 and the number fined from 6,249 to 5,541, but in spite of this the amount of fines levied was larger.

3,885 men were enlisted during the year including the extra force Enlistments and casualties for the Rampa disturbance.

The following list shows the casualties in the force :—

Pensioned	378
On gratuity	106
Resigned	830
Dismissed	618
Discharged	1,635
Deserted	143
Died	394
Total	4,104

The casualties in 1878 amounted to 5,316. The number of desertions in both years was exactly the same, viz., 143.

Police officers convicted. 319 Police officers were convicted of offences by Magistrates and 11 by Sessions Courts. Of these 36 were Head Constables. No Inspectors were convicted. The total was 330 against 428 in the preceding year. The chief offences were for negligent escape (61), hurt (26), theft (31), assault (35), extortion (14), wrongful confinement for extorting property (18); 60 men were convicted under the Police Act.

Rewards. 285 Police officers were rewarded by promotion and 419 by money rewards.

State of education. The following statements show the state of education in the force according to grades and ranges. 66·2 per cent. can read and write against 65·6 per cent. in the previous year :—

Education of the Force on the 31st December 1879 according to Grades.

Rank.	Can read and write.	Cannot read and write.	Passed General Test.	
			Previous years.	1879.
Inspectors ...	432	...	115	...
Sub-Inspectors ...	90	...	47	...
Head Constables ...	2,881	113	37	2
Constables ...	12,627	8,062	2	1
Total ...	16,030	8,175	201	3

State of Education according to Ranges.

Ranges.	Total force.	Can read and write.	Percentage.	Passed General Test.	
				Previous years.	1879.
Madras Town ...	1,202	817	76·3	5	...
Northern Range ...	5,866	3,169	54	34	3
Central do. ...	7,954	4,474	56·2	70	1
Southern do. ...	9,183	7,471	81·4	92	...
Total ...	24,205	16,030	66·2	201	3

Instruction. 44 Police officers passed the Inspector's Test and 1,251 Head Constables and Constables passed the prescribed test of their rank against 842 in 1878. Altogether 15·2 per cent. of the force were instructed as against 11·9 last year.

Convicts guarded. 14,112 convicts were guarded in Central and District Jails by 1,313 Policemen at a cost of Rupees 1,99,087. 18,679 convicts were guarded in 301 Subsidiary Jails against 24,825 convicts in 1878.

* Includes 1 Marine Superintendent, 23 Serjeants, and 2 Writers.

The following statement shows the escapes and re-captures for the past 2 years. The figures vary little :—

Escapes and re-captures.	From jails.	From sub-jails.	From other custody.	Total.
Escapes in 1879 ...	28	85	467	580
Re-captures ...	21	59	350	436
Difference ...	7	26	111	144
Escapes in 1878 ...	29	96	559	684
Re-captures ...	23	83	433	539
Difference ...	6	13	126	145

The following statement gives an abstract of the hutting and building operations during 1879. The total amount expended was Rupees 24,947 :—

Ranges.	Huts.		Station-houses.		Hospital.		Miscellaneous works.		Total.
	No. constructed.	Cost.	No. constructed.	Cost.	No. constructed.	Cost.	No. constructed.	Cost.	
		RS.		RS.		RS.		RS.	RS.
Madras Town ...	...	...	1	635	...	...	1	200	885
Northern Range ...	9	1,000	4	1,237	...	...	6	2,267	4,554
Central Range ...	42	3,475	11	4,201	...	...	6	3,712	11,388
Southern do. ...	16	3,572	8	2,312	...	...	6	1,736	8,120
Total ...	67	8,047	24	8,985	...	...	19	7,915	24,947

The following statements show the number of processes served by the Police in 1879. The number of warrants and summonses has decreased, though not so much as might have been expected considering the great decrease of crime. The number of processes in petty cases has very slightly decreased :—

Years.	Processes served by the Police.				Total processes in petty cases.		
	Total warrants.		Total summonses.		No. of processes.	No. of persons.	Proportion to population.
	Processes.	Persons.	Processes.	Persons.			
1876 ...	41,024	41,560	441,540	441,678	334,635	328,627	95
1877 ...	55,031	55,161	394,339	395,490	280,390	273,489	114
1878 ...	52,276	52,637	393,182	393,438	279,793	272,798	115
1879 ...	47,292	47,517	386,444	387,136	276,043	268,480	116

The following table shows the number of persons who died violent or unnatural deaths in 1879. There were only 15,007 such deaths against 20,490 in 1878 and 24,604 in 1877. The difference lies chiefly under the heads of suicide and accidental deaths :—

Causes.	Males.		Females.		Total.		Grand Total.
	Adults.	Children.	Adults.	Children.	Males.	Females.	
1. Murder ...	145	63	75	45	208	120	328
2. Culpable homicide ...	82	21	46	6	103	52	155
3. Justifiable do. ...	2	1	1	2	3	3	6
4. Suicides ...	873	42	1,513	53	915	1,566	2,481
5. Found dead "causes unknown" ...	161	15	160	11	176	171	347
6. Drinking ...	24	2	...	...	25	...	25
7. Neglect or want ...	23	...	22	1	23	23	46
8. Exposure ...	36	1	15	4	57	19	56
9. Other causes ...	923	51	304	40	974	344	1,318
10. Accidental deaths ...	2,979	2,358	2,992	1,915	5,337	4,907	10,244
Total ...	5,248	2,554	5,123	2,077	7,802	7,205	15,007

The great majority under the head of accidental deaths are due to drowning. Only 293 persons are returned as killed by wild beasts and 842 by snake-bite.

Fires.

The number of fires reported in 1879 was 6,031. 28,436 houses were burnt. The value of property lost was Rupees 7,85,836. 143 lives were lost.

Known depredators and suspected persons.

The subjoined figures give the numbers of known depredators and suspected persons on the Police registers for the past two years :—

	1878.	1879.
Known depredators ...	18,147	19,060
Suspected persons ...	6,791	5,558
Receivers ...	937	954
Wandering gangs ...	20,880	19,267

Old offenders re-convicted.

2,966 old offenders were re-convicted and sentenced to enhanced punishment against 4,675 in 1878.

The crime for the year will now be reviewed so far as Police action bears thereon.

Cognizable crime.

The following table shows the comparative results in all cognizable offences under the Penal Code and Special Laws for 1878 and 1879. The number of cognizable offences under the Penal Code fell from 72,637 in 1878 to 46,942 in 1879. The influence of more favorable seasons, with fewer mouths to be fed, has had its effect. The ratio of detection has fallen from 53·6 to 46·1 per cent. In time of famine crime is committed more recklessly. 35,854 persons were convicted against 65,048 in 1878. The proportion of convictions to arrests is also slightly lower than in the preceding year. Offences under Special and Local Laws have fallen from 25,474 in 1878 to 18,765 in 1879. The ratio of detection and conviction in this class of cases has slightly improved :—

	Cases.			Persons.			Property.		
	Reported.	Detected.	Percentage.	Arrested.	Convicted.	Percentage.	Lost.	Recovered.	Percentage.
Cognizable offences under Indian Penal Code in 1879 ...	46,942	21,635	46·1	61,294	35,854	58·5	Rs. 13,22,015	Rs. 2,74,131	20·7
Do. do. do. 1878 ...	72,637	38,921	53·6	99,301	65,048	65·5	18,31,752	4,49,991	24·6
Decrease ...	25,695	17,286	7·5	38,007	19,194	7	5,09,737	1,75,860	3·9
Offences under Special & Local Laws, 1879 ...	18,765	17,483	93·2	24,582	22,906	93·2	511	621	...
Do. do. do. 1878 ...	25,474	23,645	92·8	32,215	29,588	91·8	979	807	82·4
Decrease ...	6,709	6,261	4 rise.	7,633	6,682	1·4 rise.	468	186	...
Nuisances under Indian Penal Code and Special and Local Laws in 1879 ...	26,051	24,101	92·5	33,430	30,243	90·5	...	...	...
Do. do. do. 1878 ...	21,454	19,591	91·3	29,721	26,580	89·4	...	...	...
Increase ...	4,597	4,510	1·2	3,709	3,663	1·1	...	...	...

The following table shows the results in cognizable offences under the Penal Code and Special and Local Laws by ranges :—

	• Abstract of all Offences.								
	Cases.			Persons.			Property.		
	Reported.	Detected.	Percentage.	Arrested.	Convicted.	Percentage.	Lost.	Recovered.	Percentage.
Madras Town ...	2,158	1,536	71·2	2,377	1,847	77·7	Rs. 50,785	Rs. 18,957	37·3
Northern Range ...	11,897	4,993	42	15,596	8,509	54·6	3,84,825	70,405	18·3
Central do. ...	16,468	7,424	45·1	22,692	12,602	55·5	4,14,055	83,764	20·2
Southern do. ...	16,419	7,682	46·8	22,629	12,896	57	4,72,350	1,01,005	21·4
Total ...	46,942	21,635	46·1	61,294	35,854	58·5	13,22,015	2,74,131	20·7
Special and Local Laws. Nuisances under I. P. C. and Special and Local Laws. ...	18,765	17,483	93·2	24,582	22,906	93·2	511	621	...
Grand Total Offences against I. P. C. and Special and Local Laws. ...	91,758	63,219	68·9	119,306	89,003	74·6	13,22,526	2,74,752	20·8

There has been a decrease of crime in all ranges, but it is more marked in the Central and Southern Ranges. The general average of property recovered was 20·7 per cent.

3,781 non-cognizable cases were inquired into by the Police under orders from the Magistrates against 1,952 in 1878. Non-cognizable cases.

There were 295 murders in 1879 against 403 in the previous year. Murders. and 538 in 1877. The murderers committed suicide in 36 cases. Out of the balance of 259 cases, 116 (44·8 per cent.) were detected. 209 persons were convicted in these cases, being 37 per cent. of the persons arrested.

Dacoities.

The following statement shows that there were 432 dacoities in 1879 against 639 in the preceding year. In 1877 there were 1,695 cases. In 1875 there were only 229 cases. This peculiarly atrocious phase of crime was being steadily repressed when famine came and the wave of dacoity once more swept over the country :—

Districts.	1878.	1879.	Increase.	Decrease.
Bellary	120	76	...	44
Godavari	13	59	46	...
Madura	69	51	...	18
Vizagapatam	3	35	32	...
Tanjore	27	30	3	...
Tinnevely	33	30	...	3
North Arcot	35	29	...	6
South Arcot	35	20	...	15
Coimbatore	46	19	...	27
Trichinopoly	24	17	...	7
Salem	62	16	...	46
Cuddapah	33	12	...	21
Kurnool	26	10	...	16
Chingleput	23	9	...	14
Kistna	10	8	...	2
Ganjam	7	5	...	2
Nellore	7	2	...	5
Malabar	6	2	...	4
Jeypore	...	1	1	...
South Canara	2	1	...	1
Madras Town	...	...	...	...
Nilgiri	3	...	...	3
Total	639	432	82	239

The increase of dacoities in Vizagapatam and Godavari was due to the Rampa disturbance. The decrease is most marked in North Arcot, Salem, Bellary, Coimbatore, and Cuddapah.

Particulars as to dacoities.

The following statement shows that there were 151 cases of house dacoity, 91 dacoities in fields, and 190 dacoities on highways; 24.1 per cent. of all dacoities were detected, and 30.9 per cent. of persons arrested were convicted. These detective results show a slight falling off from the preceding year. Highway dacoities were most frequent in Bellary (66 cases) and Madura (29 cases). The roads are very unsafe in Bellary, as will be seen also under the head of "robberies" :—

		Cases.			Persons.				Property.		
		Reported.	Detected.	Percentage.	Concerned.	Arrested.	Convicted.	Percentage.	Lost.	Recovered.	Percentage.
In houses, &c.,	1879	151	35	23.2	8,493	560	222	39.6	Rs. 80,000	Rs. 1,530	1.9
Do.	1878	188	63	33.5	3,396	1,113	372	33.4	92,539	8,111	8.8
In fields, &c.,	1879	91	19	20.9	1,214	327	97	29.7	9,677	903	9.4
Do.	1878	186	83	44.6	2,156	847	378	44.0	13,107	3,478	26.5
On highways, &c.,	1879	190	50	26.3	2,661	693	169	24.4	27,707	3,524	12.7
Do.	1878	265	77	29.1	3,432	1,070	313	29.3	42,231	3,536	8.4
Total 1879		432	104	24.1	12,368	1,580	489	30.9	1,17,384	5,959	5.1
Compare 1878		639	223	34.9	8,984	3,030	1,063	35.1	1,47,877	15,125	10.2

Out of 432 dacoities 98 were committed by wandering criminal classes, such as Lambadis, Koravers, Yerukalas, &c. Firearms were

used in 99 cases and steel weapons in 89 cases. 14 persons were killed by dacoits and 4 dacoits were slain in the committal of dacoity. In house dacoities there was a large increase in Godavari and Vizagapatam, due to the unsettled state of those districts during the Rampa troubles; but omitting these special cases (which amount to 71), there was a very satisfactory decrease in this crime.

Treating robberies in the same manner as dacoities the following Robberies results are obtained. There is a large decrease of 411 cases against the year 1878 :—

No.	Districts.	1878.	1879.	Increase.	Decrease.
1	Bellary	145	67	...	78
2	North Arcot	97	50	...	47
3	Madura	57	48	...	9
4	Kurnool	69	38	...	31
5	Salem	68	36	...	32
6	Coimbatore	65	29	...	36
7	Kistna	33	28	...	5
8	Malabar	21	25	4	...
9	Cuddapah	70	24	...	46
10	South Arcot	31	20	...	11
11	Tinnevely	36	19	...	17
12	Vizagapatam	30	18	...	12
13	Godavari	19	18	...	1
14	Chingleput	23	18	...	5
15	Nellore	54	14	...	40
16	Tanjore	8	10	2	...
17	Madras Town	19	7	...	12
18	Trichinopoly	22	6	...	16
19	Nilgiri	11	6	...	6
20	Ganjam	13	5	...	10
21	Jeypore	4	...	...	1
22	South Canara	5	3	...	2
	Total	900	489	6	417

The following table gives the classification of robberies with comparative detection for 2 years :—

Robberies.		Cases.			Persons.				Property.		
		Reported.	Detected.	Percentage.	Concerned.	Arrested.	Convicted.	Percentage.	Lost.	Recovered.	Percentage.
In houses, &c.,	1879	60	21	35	164	87	37	42.5	Rs. 1,678	Rs. 293	17.5
Do.	1878	89	24	27	219	86	33	38.4	17,241	713	4.1
In fields, &c.,	1879	248	105	42.3	637	358	195	54.3	8,411	1,285	15.2
Do.	1878	504	236	46.8	1,181	675	428	63.4	13,391	3,742	27.9
On highways, &c.,	1879	181	69	38.1	507	226	130	57.5	6,976	842	12.1
Do.	1878	307	108	35.2	807	387	217	56.1	11,040	1,610	14.6
Total 1879		489	195	39.9	1,308	671	362	53.9	17,095	2,420	14.2
Compare 1878		900	368	40.9	2,207	1,148	678	59	41,672	6,065	14.6

It will be observed that the ratios do not vary much from those of last year.

The following table shows the results of Police action in house-breaking cases in 1879. The general average of detection was 38.9 per cent. in cases and 68.3 per cent. in persons. These results in a

most difficult class of crime may be favorably compared with those in other provinces or in England and Wales:—

Range.	Cases.			Persons.			Property.		
	Reported.	Detected.	Percentage.	Arrested.	Convicted.	Percentage.	Lost.	Recovered.	Percentage.
Madras Town	207	130	62·8	204	163	79·9	Rs. 17,184	Rs. 6,839	40·1
Northern Range	2,393	830	34·7	1,773	1,279	72·1	1,73,936	22,661	13
Central do.	2,963	1,275	43·5	2,703	1,877	69·4	2,12,978	28,971	13·6
Southern do.	2,903	1,048	36·1	2,332	1,468	62·9	2,18,201	32,766	15
Total	8,436	3,283	38·9	7,012	4,787	68·3	6,22,299	91,297	14·7
Compare 1878	14,217	6,891	48·5	13,779	10,091	73·2	7,04,695	1,31,587	18·7

This statement shows that in Madras, where a regular Municipal Police is maintained, 62·8 per cent. of cases were detected, 79·9 per cent. of persons arrested were convicted, and 40·1 per cent. of property lost was recovered. These results are very good.

The following statement shows the results of Police action in the detection of the graver offences against property. 38·3 per cent. of all such cases were detected:—

Ranges.	1879.		
	Reported.	Detected.	Percentage.
Madras Town	214	136	63·6
Northern Range	2,571	869	33·8
Central do.	3,322	1,404	42·3
Southern do.	3,250	1,173	36·1
Total	9,357	3,582	38·3

Cattle thefts and poisoning. 4,377 cases of cattle theft were reported against 10,289 cases in 1878. The crime was most prevalent in Madura (757 cases) and Coimbatore (537 cases). 46·6 per cent. were detected and 48 per cent. of property lost was recovered. There were 133 cases of cattle poisoning against 174 in 1878. This crime is most prevalent in Bellary.

Revenue Laws. The following statement gives the offences against Revenue Laws in 1879. There were 8,924 such offences against 5,154 in 1878. Offences under the Abkari Act have increased from 2,196 to 2,915 and offences under the Salt Laws from 2,958 to 6,009. 84·3 per cent. of cases reported were brought to conviction. The Salt Police have been increased in numbers, and greater stimulus has been applied to their efforts:—

Ranges.	Cases.			Persons.		
	Reported.	Detected.	Percentage.	Arrested.	Convicted.	Percentage.
Madras Town	4	4	100	6	6	100
Northern Range	5,030	1,751	34·8	4,919	4,092	83·3
Central Range	2,397	2,089	87·2	4,370	3,684	84·3
Southern Range	4,493	3,681	81·9	6,214	5,108	82·3
Total	8,924	7,525	84·3	15,509	12,890	83·1
Compare 1878	5,154	4,139	80·3	10,334	8,318	80·5

5,666 cases were referred by Magistrates to the Police for inquiry under Sections 110 and 146, C.C.P.; of these 3,730 were struck off as false. The largest number of cases so referred was 903 in Malabar. Only 2 cases were referred in Salem. This wide difference of practice is remarkable. 11,782 cases were referred by the Police to Magistrates for orders under Sections 110, 117, C.C.P. Of these 11,328 were struck off as false. 1,844 cases prosecuted by the Police were thrown out by the Courts as false upon trial.

Range and district inspection were on the whole efficiently carried out, except that in the northern range this work was affected by the Rampa disturbances. The hill stations in Vizagapatam and Godavari were, however, for the same reason very frequently visited. 2 officers resigned during the year and 1 died; 18 were absent on furlough, of whom 14 had obtained medical certificates. Occasionally Deputy Inspectors-General had to hold districts in addition to their own work.

Colonel Drever, c.s.i., acted as Inspector-General for Colonel C. S. Hearn during the first part of the year under report and was in the Godavari District from June to September 1879. When the latter officer had returned from furlough and assumed charge he visited that and other northern districts from December 1879 to April 1880.

PUBLIC CHARITIES.

It appears from the Monegar Choultry accounts that the receipts from all sources aggregated Rupees 24,938-9-6. The actual disbursements during the calendar year 1879 amounted to Rupees 24,146-1-2, leaving a balance of Rupees 792-8-4, in favor of the institution.

	RS.	A.	P.
Ebation from Government	9,878	14	11
Interest on capital invested	3,777	13	3
Subscriptions and donations collected during the year	4,263	2	10
Sundry receipts	476	4	9
Balance at the end of last year	6,542	5	9
Total	24,938	9	6

The average daily number of paupers in the Dépôt Choultry, of patients in the Native Infirmary, and of children in the Foundling Asylum, maintained during the year was altogether 316. In 1878 it was 472, the decrease per diem being 56. The expenses, exclusive of establishment and extra charges, were Rupees 13,350-4-8, making the average cost of each pauper in the Dépôt Choultry 1 anna and $7\frac{1}{4}$ pies, each patient in the Native Infirmary 2 annas and $4\frac{1}{4}$ pies, and each child in the Foundling Asylum 1 anna and $\frac{1}{4}$ pie. The total expenses compared with the preceding year are less by Rupees 5,244-11-7. This is accounted for by the dietary in the Infirmary being remodelled and a smaller number of diets being supplied. The charge for establishment was Rupees 4,417-10-11, while in 1878 it was Rupees 5,292-8-0; the decrease is attributable to the reductions that the Executive Committee were compelled to make under this head with a view to bring the expenditure within the available income and to meet a deficit of Rupees 3,051. The charge for contingencies, including repairs, &c., was Rupees 4,967-14-1, while in 1878 it was Rupees 5,392-5-5, the decrease being Rupees 424-7-4. The daily average number of in-door paupers maintained during the year in the Raja of Venkatagiri's Choultry was 41, costing Rupees 1,647-7-10 in the year, and the cost of establishment and contingencies was Rupees 1,079-12-5, while the cost of the out-door paupers amounted to Rupees 1,301-11-3. The receipts during the year amounted to Rupees 4,172-0-8. The institution has been satisfactorily managed during the year under review.

Triplicane
Langarkhana.

In the official year 1879-80 2,895 paupers, or 58 in excess of the number in 1878-79, received relief. Of this number 74 were inmates of the institution against 82 of the preceding year, and 2,821 were out-door paupers. The receipts of the institution, including a balance brought over of Rupees 1,164-12-6, aggregated Rupees 5,984-12-6, the charges Rupees 4,890-7-6, leaving a balance of Rupees 1,094-5-0. Compared with 1878-79 the receipts were better by Rupees 127-10-8, while the charges were less by Rupees 210-11-0. The balance, as shown in last year's Report, was Rupees 756, but that brought over is Rupees 1,164. Whence the excess of Rupees 408 was derived has been left unexplained. On the whole the management of the Langarkhana continues satisfactory.

REWARDS.

General.

The total amount expended in rewards during the official year 1879-80 was Rupees 8,355-9-9 against Rupees 8,045-3-4 of the previous year. The District Magistrates disbursed Rupees 5,586-1-9, the Inspector-General of Police Rupees 2,444-8-0, the Inspector-General of Jails Rupees 325. No rewards were given in the Nilgiris, Chingleput, or Coimbatore.

In South Canara a reward of Rupees 20 was given to two fishermen for saving the lives of 14 of the crew of the native craft *Jagadevi* which was wrecked off the coast of Uppala. In North Arcot Rupees 48-6-0 were disbursed to a ryot for bravery in arresting one of a gang of robbers in spite of injuries received from the band. In Tanjore Rupees 20 were disbursed to a watchman in the shape of a bangle for rescuing a woman from drowning in a tank. In Madura Rupees 190 were disbursed to a Mr. C. A. Bartels, an Inspector of Police, and certain boatmen for saving the lives of 12 fishermen and boys found on the keel of a boat which had been capsized by a waterspout four days before. Rupees 50 were also disbursed in this district for the apprehension of a criminal engaged in a torch-light dacoity. A gold bangle of the value of Rupees 100 was in Bellary presented to a Curnam for killing the leader of a gang of 60 or 70 dacoits that collected to attack certain travellers proceeding to a festival. Three other persons were also presented with bangles of the value of Rupees 20 each for following up and arresting certain dacoits. In Godavari a sum of Rupees 2,527-11-9 was expended in rewards, exclusively in connection with the Rampa disturbances, of which, for the capture of the leaders Anial Reddi and Jangam Pulikanta Sambiah, rewards of Rupees 500 each were disbursed. In Tinnevely Rupees 1,500 were distributed in rewards in connection with the capture of a proclaimed dacoit.

The rewards awarded by the Inspector-General of Jails were exclusively for the recapture of escaped convicts, and of the rewards, amounting to Rupees 520, shown in the return from the Inspector-General of Police as sanctioned by Government, Inspectors Salady Naidu and LeTang received Rupees 200 each for services rendered in connection with the Rampa disturbances.

SULPHUR LICENSES.

During the calendar year 1879, 143 licenses (of which 15 were new) were issued or were in force for the sale of 474 tons of sulphur, the actual sales amounting to 181 tons. The figures for the previous year were 140 licenses for 398 tons, with an actual sale of 174 tons. The largest sales were by wholesale to retail-dealers, who on an average disposed of about 1 ton a-piece. The stock-in-trade of each licensed vendor (including wholesale-dealers) averaged 2 tons, while the average licensed for each was $3\frac{1}{2}$ tons. The uses to which the sulphur sold was applied were, as usual, for making gunpowder and fire-works, for medicinal purposes, and for bleaching ginger. Inspections were for the most part duly made, and the results were generally satisfactory. They were, in the large majority of cases, made by the superior officers

referred to in G.Os., No. 776 of 8th May 1869, and No. 1,710 of 27th October 1873. The instructions contained therein are, however, now enlarged by Rule 11 of the Arms Act Notification. The Government of India have therein empowered any Magistrate or Police Officer not below the rank of Inspector to enter and inspect the premises of dealers in sulphur, as well as of those in arms and ammunition.

ARMS ACT.

The following is a statement showing the number of licenses issued by District Magistrates and by the Commissioner of Police, Madras, during the year ending 31st December 1879, under Act XI of 1878 :—

Districts.	Number of licenses to transport arms, ammunition, or military stores in British India.	Number of licenses to import arms, &c., by sea.	Number of licenses to export arms, &c., by sea.	Number of licenses to export arms, &c., beyond the limits of British India.	Number of licenses to manufacture, convert or sell or keep arms, ammunition, and military stores.	Number of licenses to keep and sell arms, ammunition, and military stores.	Number of licenses to possess arms or ammunition and to go armed for purposes of sport, protection or display.	Number of licenses to go armed on a journey.	Number of licenses to possess fire-arms, &c., in a district not disarmed.	Number of licenses for the possession of arms &c., for the destruction of wild beasts.	Total.
Ganjam	...	...	...	...	8	3	23	4	...	...	43
Vizagapatam	...	1	...	...	3	8	6	...	...	...	20
Godavari	...	...	...	...	1	3	3	...	...	...	31
Kistna	...	...	...	...	7	9	120	...	...	...	141
Nellore	...	...	...	...	...	5	20	...	...	...	25
Cuddapah	...	...	...	...	...	6	14	...	...	...	25
Kurnool	...	...	...	...	1	1	1	...	...	...	6
Bellary	...	...	...	...	...	11	673	...	1	...	689
Madras Town	103	74	1	60	12	31	59	38	...	...	368
Chingleput	...	...	...	...	5	1	33	1	...	...	39
North Arcot	...	...	...	...	5	3	3	...	3	...	15
South Arcot	9	...	...	...	12	1	44	1	...	...	57
Salem	...	...	...	...	1	7	8	...	...	1	17
Coimbatore	...	...	...	...	39	8	260	...	...	23	330
Nilgiris	...	...	...	...	...	2	8	6	...	91	110
Malabar	14	12	...	2	4	30	14	1	...	...	78
South Canara	...	...	...	...	10	11	90	2	...	202	316
Trichinopoly	...	...	...	...	...	10	87	3	...	...	100
Tanjore	2	11	...	...	1	...	49	2	...	...	65
Madura	...	...	...	...	7	10	23	...	...	...	40
Tinnevely	...	...	...	...	1	9	46	...	...	1	57
Total	130	98	1	62	97	182	1,588	87	6	321	2,572

The provisions of the new Arms Act have been put in force in this Presidency, but so far as will be seen from the above statement, with very little uniformity. In Kurnool especially its provisions appear to have been neglected.

CRIME AND OFFENCES.

The following comparative statement shows the total number of offences reported during the calendar year 1879, of persons arrested and disposed of, and the amount of property lost and recovered :—

	Under	Cases.										Persons.				Property.			
		Offences reported.	Cases struck off as false after trial.	Balance of offences actually committed.	Convicted.	Not convicted.	Percentage of cases convicted to trial.	Went by default.	Total compelled to appear.	Released without trial, went by default, pending trial, &c.	Actually put on trial.	Convicted.	Acquitted.	Percentage of persons convicted to trial.	Percentage of persons convicted to trial minus pending trial and went by default.	Lost.	Recovered.	Percentage.	
Penal Code	...	102,407	1,646	100,761	36,321	0,633	79.1	21,420	197,940	101,370	93,653	62,205	31,368	66.5	43.1	15,01,873	3,35,960	22.4	
Special Laws	...	88,377	710	87,668	63,738	4,905	93.2	11,953	117,911	18,128	99,783	89,538	10,245	89.7	87.6	3,153	2,984	94.5	
Total	...	190,784	2,356	188,410	100,059	14,538	87.8	33,382	315,851	122,504	193,346	151,743	41,603	78.5	61.5	15,05,031	3,38,944	22.5	
Penal Code	...	130,091	1,938	128,153	63,821	10,633	83.5	22,769	237,762	109,337	128,424	92,351	36,073	71.9	50.7	10,50,041	4,73,063	24.3	
Special Laws	...	87,019	663	86,356	70,772	5,437	92.9	7,718	118,648	14,083	104,566	93,407	11,183	80.3	86.7	8,259	4,172	50.5	
Total	...	217,110	2,601	214,459	124,593	16,070	88.6	30,477	356,409	123,390	233,014	185,758	47,253	79.7	61.1	19,58,300	4,77,234	24.4	

Compare 1878.

Offences
under Penal
Code.

Offences under the Penal Code fell in 1878 to 130,091 from 157,679 in 1877, a decrease of 27,588. In 1879 the number fell to 102,407, showing a further decrease of 27,684 and standing below the figures of 1875, when 107,754 offences against the Penal Code were recorded. Thus the effect of famine upon this class of crime in the aggregate would seem to have passed away. 1,646 cases under the Penal Code were struck off as false after trial. 79.1 per cent. of cases tried resulted in conviction and 66.5 per cent. of persons tried were convicted. These results exhibit a slight falling off from those of the preceding year, and in 1877 results under these heads were superior to those of 1878. In time of famine crime is more recklessly committed and therefore more easy of detection. The amount of property lost has fallen from Rupees 19,50,041 in 1878 to Rupees 15,01,873 in 1879. The amount lost in 1875 was Rupees 11,76,573. 22.4 per cent. of property lost was recovered against 24.3 per cent. in 1878.

Offences
against
Special Laws.

According to the figures the aggregate of offences under Special Laws is not much affected by scarcity. In 1877 the number of such offences reported was 91,361. In 1878 the number fell to 87,019. In 1879 it has again slightly risen to 88,377. Offences against the Salt Laws have doubled, not, probably, because more offences have really been committed, but because the influence of a newly organised department under a Salt Commissioner and an increase to the Salt Police in some districts have greatly stimulated detection, particularly with regard to spontaneous salt. Offences against the Abkari Law have also increased under the operation of the Abkari Law Amendment Act, whereby both the powers and rewards of Police Officers have been enlarged. Offences against Municipal Acts and Police Act XXIV of 1859 (Section 48) have also considerably increased, showing greater activity on the part of the Police, while there has been (as might be expected) a great decrease of petty thefts tried by heads of villages. The ratio of conviction both of cases and persons has slightly improved. It always stands high under Special Laws. 93.2 per cent. of cases and 89.7 per cent. of persons were convicted.

Comparison
with previous
year.

The following comparative statement shows the increase or decrease under the different classes of cognizable and non-cognizable offences against the Penal Code. Serious offences against the person are slightly fewer, but the main decrease has naturally been under the heads of serious and minor offences against property. Under Special Laws a slight decrease of cognizable offences has been more than counterbalanced by an increase of non-cognizable offences.

Total
reported.

		Cases reported.		Increase.	Decrease.
		1879.	1878.		
<i>Penal Code.</i>					
Cognizable.	Class I. Offences against the State ...	1,590	1,846	...	256
	" II. Serious offences against the person ...	2,661	3,060	...	399
	" III. Do. person and property ...	11,344	18,466	...	7,122
	" IV. Minor offences against the person ...	9,128	9,642	...	514
	" V. Do. against property ...	35,716	54,612	...	18,896
	" VI. Other offences not specified above ...	1,171	1,051	120	...
	Miscellaneous	1,913	2,468	...	555
Total ...		63,523	91,145	...	27,622
Non-cognizable.	Class I. Offences against the State ...	5,190	5,197	...	7
	" II. Serious offences against the person ...	88	51	37	...
	" III. Do. against property ...	388	528	...	140
	" IV. Minor offences against the person ...	22,009	21,648	361	...
	" V. Do. against property ...	6,393	6,858	...	465
	" VI. Other offences not specified above ...	4,750	4,516	234	...
	Miscellaneous	66	148	...	82
Total ...		38,884	38,946	...	62
Total Penal Code ...		102,407	130,091	...	27,684
<i>Special Laws.</i>					
Cognizable		72,650	74,171	...	1,521
Non-cognizable		15,727	12,848	2,879	...
Total ...		88,377	87,019	1,358	...

The following statement gives the general statistics of cognizable and non-cognizable offences separately, both under the Penal Code and Special Laws, excluding cases found to be false on trial:—

Sub-division
into Cogniz-
able and
Non-cogniz-
able.

	Cases.										Persons.					Property.			
	Offences committed.	Tried.	Convicted.	Otherwisedisposed of.	Remaining under trial.	Struck off as false after trial.	Percentage of 3 on 2.	Percentage of 2 on 1.	Total compelled to appear.	Actually tried.	Convicted.	Aquitted.	Otherwise disposed of.	Remaining under trial.	Percentage of 11 on 10.	Percentage of 10 on 9-14.	Lost.	Recovered.	Percentage.
COGNIZABLE.																			
Class I. Offences against the State, &c.	1,663	881	779	351	69	27	88.4	60.4	8,632	4,140	3,151	989	4,019	502	76.1	60.7	RS. 285	RS. 218	77
" II. Serious offences against the person	2,007	1,542	1,289	553	82	54	83.6	59.1	4,880	2,745	2,016	729	1,950	185	73.4	58.5	6,545	1,546	23.8
" III. Serious offences against person and property or against property only.	11,241	4,551	4,205	991	142	103	92.4	40.5	14,891	8,536	6,032	1,004	5,318	537	81.2	61.0	7,80,472	1,05,443	18.4
" IV. Minor offences against the person	9,017	4,680	3,873	3,873	4	111	82.9	51.9	21,361	9,368	6,478	2,888	11,986	9	69.2	43.9	3	...	...
" V. Minor offences against property	35,184	10,866	14,498	7,962	379	582	86	48	59,725	31,175	23,512	7,003	27,407	1,143	75.4	53.2	6,00,104	1,82,803	30.2
" VI. Other offences not specified above	1,151	902	755	113	6	20	83.7	78.4	2,655	2,154	1,494	680	481	17	69.4	81.7	...	...	60
Miscellaneous	1,903	311	285	106	11	10	91.6	16.3	770	457	377	89	282	31	82.5	61.8	...	...	...
Total	62,616	23,733	25,084	13,962	683	907	86.4	47.5	112,444	68,573	49,960	14,613	51,446	2,424	76.1	53.2	14,02,412	2,90,073	20.7
NON-COGNIZABLE.																			
Class I. Offences against the State, &c.	5,107	3,070	2,971	847	104	83	74.8	77.7	8,764	0,292	4,519	1,773	2,273	100	71.8	73.5	2,643	1,074	40.6
" II. Serious offences against the person	83	26	14	20	3	...	53.8	29.5	109	53	25	28	53	3	47.2	50	...	...	...
" III. Serious offences against property	386	108	56	225	20	2	51.9	23	1,083	279	184	145	764	40	48	20.7	84.7	103	10.2
" IV. Minor offences against the person	21,541	6,657	3,508	14,923	...	468	54	30.9	50,081	10,063	5,842	10,251	33,988	...	36.3	32.1	...	...	...
" V. Minor offences against property	6,223	2,395	1,481	3,616	64	105	61.8	38.5	15,344	5,818	2,504	3,314	9,430	96	43	38.2	95,855	44,619	46.8
" VI. Other offences not specified above	4,730	2,060	2,478	1,651	21	20	83.2	63	9,982	0,377	5,182	1,225	3,553	50	88	61.2	116	1	9
Miscellaneous	65	45	39	16	3	1	86.7	69.2	133	78	69	9	51	4	88	60.5	...	...	...
Total	38,145	10,181	10,637	21,297	215	730	65.7	42.4	85,496	34,000	18,245	16,745	50,114	392	52.1	41.1	99,401	45,887	46.1

SPECIAL AND LOCAL LAWS.

	No. of cases reported.	Cases struck off as false after trial.	Balance of offences actually committed.	Total persons compelled to appear.	Number.	Percentage of 6 to 4.	Number.	Percentage of 8 to 6.	Number.	Percentage of 10 to 4.	Number.	Percentage of 12 to 5.
Cognizable	61,252	57,541	10,465	32	463	93.9	92,579	71,945	7,087	13,471	85.4	1,447
Non-cognizable	12,451	11,197	2,754	12	235	89.7	20,751	17,563	3,153	4,556	82	1,537
Total	73,703	68,738	13,249	44	719	93.2	99,763	89,538	10,245	18,027	84.7	2,984

It will be seen from the above statement that out of 62,616 cognizable cases actually committed 47.5 per cent. were brought to trial, and of cases brought to trial 86.4 per cent. resulted in conviction. 53.2 per cent. of persons compelled to appear were brought to trial, and of persons actually tried 75.1 per cent. were convicted, which equals the English average. The results in non-cognizable cases were much worse. Only 65.7 per cent. of cases and 52.1 per cent. of persons brought to trial were convicted.

The following table shows the offences under Revenue Laws, both Special and cognizable and non-cognizable, with the result of detective operations Local Laws. as compared with the two previous years :—

	No. of cases reported.		Cases struck off as false after trial.	Balance of offences actually committed.	Total persons compelled to appear.	Brought to trial.				Convicted and punished.			
	Cases.	Persons.				Cases.		Persons.					
						Number.	Percentage of 6 to 4.	Number.	Percentage of 8 to 5.				
1	2	3	4	5	6	7	8	9	10	11	12	13	
Offences against Salt Laws, Regulations I of 1803, XVII of 1840, VII of 1852, VI of 1871, and II of 1873	6,035	76	6,009	11,432	5,768	96	11,067	96.8	5,456	90.8	10,152	83.8	
Offences against Abkari Act XIX of 1852 (Madras Town)	4	...	4	6	4	100	6	100	4	100	6	100	
Offences against Abkari Act III of 1864	3,005	94	2,911	4,071	2,377	81.7	3,579	87.9	2,065	70.9	2,732	67.1	
Offences against Stamp and Registration Acts XVIII of 1869 and III of 1877	58	2	56	120	54	96.4	105	87.5	51	91.1	91	75.8	
Offences against Consolidated Customs Act VIII of 1878	1	1	...	1	...	...	1	100	...	...	...	...	
Total	9,153	173	8,980	15,630	8,203	91.3	14,758	94.4	7,576	84.4	12,981	83.1	
Compare 1878	5,356	143	5,213	10,480	4,557	87.4	9,594	91.5	4,188	80.3	8,419	80.3	
Do. 1877	4,361	109	4,252	8,744	3,775	88.8	8,125	92.9	3,384	79.6	6,838	78.2	

The number of offences has more than doubled since 1877. In 1875 there were only 3,577 offences recorded. The total number of offences in the year under review was 9,153. Offences against Salt Laws have doubled and offences under the Abkari Act III of 1864 have increased from 2,266 in 1878 to 3,005 in 1879. Detective results have also improved and stand very high.

The following table shows the number of offences against Sanitation dealt with in 1879 :—

	Cases.		Persons.	
	Offences actually committed.	Convicted.	Persons actually tried.	Convicted.
Municipal Acts X of 1865, III of 1871, and V of 1878 ...	17,181	13,793	17,250	15,324
Municipal Act IX of 1867 (Madras Town) ...	7,664	916	997	916
Police Act XXIV of 1859 ...	21,465	20,235	26,959	25,068
Total ...	46,310	34,944	45,206	41,308
Compare 1878 ...	38,720	31,330	43,120	38,817

There were 7,664 offences under Municipal Act IX of 1867 (Madras Town) against 5,034 in 1878, and 21,465 cases under the Police Act XXIV of 1859 against 16,591 cases in the previous year. On the whole, therefore, there has been an increase of activity in prosecuting offences against sanitation.

There were 93 cases under the Arms Act, in which 89 persons were convicted in 66 cases. Only 9 cases were brought forward under the Contagious Diseases Act; 8 females were convicted in 8 cases. Under the Military Cantonment Act there were 888 cases. 1,212 persons were convicted in 824 cases; of these persons 439 were females, 9 were male juveniles, and 1 was a female juvenile; and under the Railway Act there were 884 cases. 877 persons were convicted in 757 cases. 30 female and 34 male juveniles were among the convicted.

The following comparative table shows the total number of cases tried by Magistrates of different classes during the past four years:—

Summary
jurisdiction
of Magis-
trates.

Grades of Magistrates.	1879.										1878.										1877.										1876.									
	Persons.					Cases.	Persons.					Cases.	Persons.					Cases.	Persons.					Cases.	Persons.					Cases.										
	Convicted.		Percentage.	Tried.			Convicted.	Percentage.	Tried.		Convicted.		Percentage.	Tried.		Convicted.	Percentage.		Tried.		Convicted.	Percentage.																		
	Tried.	Convicted.		Tried.	Convicted.				Tried.	Convicted.				Tried.	Convicted.				Tried.	Convicted.			Tried.		Convicted.	Tried.	Convicted.	Tried.	Convicted.											
0	2	3	4	5	6	7	8	9	Percentage.	Cases.	10	11	12	13	14	15	16	17	Percentage.																					
1	2	3	4	5	6	7	8	9	Percentage.	Cases.	10	11	12	13	14	15	16	17	Percentage.																					
PENAL CODE.																																								
With 1st class powers	8,188	13,141	8,837	672	11,877	18,808	13,678	795	17,455	31,418	24,430	778	9,331	16,395	10,074	614																								
With 2nd do.	80,908	64,954	44,075	679	45,055	90,772	67,421	743	54,554	111,901	80,135	797	23,738	72,136	43,071	624																								
With 3rd do.	5,040	11,320	6,827	603	5,503	12,887	7,981	619	9,274	21,304	14,088	661	9,744	25,015	13,906	555																								
Total ...	44,143	89,415	59,739	669	62,435	122,527	89,080	727	81,283	164,633	127,653	775	48,803	113,576	69,017	608																								
SPECIAL AND LOCAL LAWS.																																								
With 1st class powers	22,500	27,218	23,765	947	20,063	32,800	20,093	913	31,376	37,934	35,215	928	16,322	21,214	19,622	925																								
With 2nd do.	20,547	41,884	36,898	881	23,991	35,587	31,105	874	18,568	28,560	24,564	86	17,008	26,767	22,489	84																								
With 3rd do.	11,417	14,928	12,990	87	11,156	15,323	13,274	860	9,704	14,765	12,656	837	13,646	1,903	16,229	854																								
Total ...	63,473	84,030	76,653	90	62,110	83,710	74,337	898	59,648	81,263	72,435	891	47,006	66,984	59,340	371																								
Add— Heads of Villages																																								
Grand Total Special and Local Laws ...	73,716	99,760	89,519	897	76,203	104,576	93,397	893	79,447	111,166	100,121	90	62,702	91,293	79,146	867																								

There has been a progressive decrease since 1877 in the total number of cases tried under the Penal Code. 44,143 cases were tried in 1879 against 62,435 in 1878 and 81,283 in 1877. In 1875, before scarcity commenced, the number of cases tried was 44,699, so that the former level has again been reached. The percentage of persons convicted to tried has decreased. It stands at 66.9, which is lower than that of the two previous years. In 1875, however, the percentage was only 59.1. Under Special and Local Laws the total number of cases tried shows a progressive increase during the past four years. 90 per cent. of persons tried under these laws were convicted.

High and District Courts.

The following table shows the work performed by the High Court of Madras and the District Sessions Courts in cases committed to them for trial :—

	Subordinate Judges				District Courts.				High Court.				Total.			
	Persons.				Persons.				Persons.				Persons.			
	Cases.	Tried.	Convicted.	Percentage.	Cases.	Tried.	Convicted.	Percentage.	Cases.	Tried.	Convicted.	Percentage.	Cases.	Tried.	Convicted.	Percentage.
Under Penal Code	...	...	...	...	1,696	4,049	2,389	59	75	99	77	77.8	1,771	4,148	2,466	59.5
Do. Special and Local Laws	...	...	...	...	12	18	15	83.3	5	5	4	80	17	23	19	82.6
Total ...	...	...	...	...	1,708	4,067	2,404	59.1	80	104	81	77.9	1,788	4,171	2,485	59.6
Compare 1878	...	...	...	...	1,965	5,800	3,188	55	92	111	93	83.8	2,057	5,911	3,281	55.5
Do. 1877	...	...	...	...	2,776	12,872	7,308	56.8	67	94	74	78.7	2,845	12,968	7,384	56.9
Do. 1876	...	...	...	...	1,761	6,258	3,562	56.9	79	100	78	78	1,846	6,405	3,678	57.4

The subjoined table shows the number and description of cases dealt with by Courts of superior jurisdiction and the powers of the Magistrates by whom the cases were committed :—

Class of Offences.	In Subordinate Judges Courts.	In District Courts.	In High Court.	Total.	No. of Cases committed by Magistrates of		
					1st Class.	2nd Class.	3rd Class.
PENAL CODE.							
<i>Cognizable.</i>							
I.—Offences against the State, public tranquillity, safety and justice	...	31	5	36	9	26	2
II.—Serious offences against the person	...	43	18	481	35	394	52
III.—Serious offences against person and property, or against property only.	...	517	6	523	44	443	36
IV.—Minor offences against the person	...	36	2	38	2	31	5
V.—Minor offences against property	...	317	29	346	41	264	41
VI.—Other offences not specified above	...	4	...	4	2	2	...
Miscellaneous	...	21	3	24	6	17	1
Total	...	1,389	63	1,452	139	1,177	136

Class of Offences.	In Subordinate Judges Courts.	In District Courts.	In High Court.	Total.	No. of Cases committed by Magistrates of		
					1st Class.	2nd Class.	3rd Class.
<i>Non-Cognizable.</i>							
I.—Offences against the State, public tranquillity, safety and justice ...	...	215	2	217	48	152	16
II.—Serious offences against the person ...	...	26	...	26	2	24	...
III.—Serious offences against property ...	...	2	...	2	...	2	...
IV.—Minor offences against the person ...	...	1	1	2	1	...	1
V.—Minor offences against property ...	...	37	3	40	12	26	2
VI.—Other offences not specified above ...	...	21	4	25	12	11	2
Miscellaneous ...	...	5	2	7	2	5	...
Total ...	...	307	12	319	77	220	21
<i>SPECIAL AND LOCAL LAWS.</i>							
Cognizable ...	...	1	...	1	...	1	...
Non-cognizable ...	...	11	5	16	8	6	2
Total ...	...	12	5	17	8	7	2
Grand Total ...	...	1,708	80	1,788	216	1,397	157

216 cases under the Penal Code were committed for trial by Magistrates of the first class, 1,397 cases by Magistrates of the second class, and 157 by Magistrates of the third class. The proportions are much the same as in the preceding year.

The following table shows the number of cases tried by heads of villages in 1879 :—

Offences.	2	3	4	5	Brought to trial.				Convicted and punished.			
					Cases.		Persons.		Cases.		Persons.	
					Number.	Percentage of 6 to 4.	Number.	Percentage of 8 to 5.	Number.	Percentage of 10 to 4.	Number.	Percentage of 12 to 5.
1					6	7	8	9	10	11	12	13
Theft	...	...	...	...	...	...	...	...	...	...	...	...
Assault	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	...	...	...	...	...	...	...	...
Compare 1878	...	...	...	...	...	...	...	...	...	...	...	...
Do. 1877	...	...	...	...	...	...	...	...	...	...	...	...
Do. 1876	...	...	...	...	...	...	...	...	...	...	...	...

There has been a great decrease of cases since 1877. Even in 1875, before scarcity commenced, the number of thefts was 7,409 against 6,306 in the year under review.

The following table shows the total number of persons of both sexes of sexes, adults and juveniles, convicted under the Penal Code and Special Laws :—

	Adults.		Juveniles.		Total.
	Males.	Females.	Males.	Females.	
Penal Code, cognizable offences	39,371	2,948	1,491	150	43,960
Do. non-cognizable do.	17,075	1,034	122	14	18,245
Special Laws, cognizable do.	66,625	4,357	289	74	71,945
Do. non-cognizable do.	12,702	4,675	140	76	17,593
Total	135,773	13,614	2,042	314	151,743

62,205 persons were convicted under the Penal Code against 92,351 in the previous year. In 1875 the number of persons convicted under the Penal Code was 63,422, or very nearly the same as in the year under review. Out of 62,205 persons convicted in 1879, 3,982 were females, 1,613 were male juveniles, and 164 were female juveniles. Under Special Laws 89,538 persons were convicted against 93,407 in the previous year. Of the persons convicted 9,632 were females, 429 were male juveniles, and 150 were female juveniles.

2,966 old offenders (included in the above figures) were sentenced to enhanced punishment under Section 75, Indian Penal Code. Of these, as in last year, the largest number was sentenced in the town of Madras and in the Vizagapatam District.

The statement (B; Judicial, Criminal, No. 4) printed in the appendix to this volume shows the disposal by the various Criminal Courts of the persons arrested or compelled to appear during the calendar year 1879.

24,283 persons were dealt with by Honorary Magistrates against 19,805 in the previous year. 4,513 were discharged without trial, and of the remainder 16,800 (69.2 per cent.) were convicted. The proportion of criminal work taken by Bench Magistrates is increasing. Chief Magistrates of districts disposed of only 429 persons out of 315,508, the total dealt with by all magisterial tribunals. Out of this total of 315,508 persons 119,449 were discharged without trial, and of the remainder 149,258 (47.3 per cent.) were convicted. 4,387 persons were disposed of by High and Sessions Courts, of whom 37 were discharged without trial and 2,485 (56.6 per cent.) were convicted. The average duration of each case under trial was 10 days before Subordinate Magistrates, 12 days before full-power Magistrates, and 4 days before Chief Magistrates of districts.

Punishments. 86 persons were sentenced to death by the High and Sessions Courts, 129 to transportation for life, and 319 to transportation for a term. The figures vary little from the preceding year, in which 90 persons were capitally sentenced and 431 were transported. 5,615 persons were whipped in lieu of other punishment and 993 in addition to other punishment. 16,321 persons were punished by whipping in 1878. A large majority of the sentences of imprisonment were for

periods not exceeding 6 months. Only 60 persons were sentenced by the higher Courts to imprisonment exceeding 7 years. 99,810 persons were fined. The aggregate amount of fines inflicted was Rupees 10,46,629 (against Rupees 5,84,084 in 1878), but the amount realised was only Rupees 3,19,290, which is a little less than in the preceding year. Only 30.5 per cent. of the amount levied was realised in 1879 against 54.9 per cent. in 1878.

Out of 43,960 convicted offenders only 1,154 belonged to wandering castes, &c., while 4,516 belonged to local criminal castes. These latter have, however, as might be expected, contributed largely to the crime of dacoity, for out of 767 convicted dacoits 444 belonged to local or wandering criminal castes, of whom 256 were local and 188 wandering. Only 20 Europeans and 60 East Indians were convicted of cognizable offences under the Penal Code in 1879.

VAGRANCY.

The following are the numbers of admissions and discharges at the Government Workhouse during the year 1879:—

Admitted during the year	92
Remaining in the Workhouse at the close of the last year. ...	11
Total	103

Details.

Discharged on obtaining employment under Section XV ...	21
Removed from British India under Section XVI (to England 10, Australia 29)	39
Removed under Section III and Section XXIV	6
Others who have left the Workhouse not included in the above (died 1, absconded 2, sent to friends 4, transferred to Bidden Home 4, Lunatic Asylum 2)	13
Remaining in the Workhouse at the close of the year ...	24
Total	103

The following table gives nationalities and previous occupations:—

Nationalities of vagrants during the year.		Previous occupation of inmates.	
Australians	6	Sailors	10
Europeans	63	Soldiers	1
Others	8	Grooms	3
Other classes of British-born subjects	11	Clerks	9
Americans	4	Railway-men	27
		Tradesmen	8
		Laborers	15
		No occupation	5
		Other professional occupations	14
Total	92	Total	92

The cost of working the Government Workhouse amounted in all to Rupees 20,829-10-10, of which sum Rupees 13,472-2-0 were spent on the removal of vagrants from India under Sections 8 and 16 of the Acts and Rupees 2,583-9-4 on clothing and rations. The other items of charge were :—

	RS.	A.	P.
Establishment	2,235	0	0
Contingencies and miscellaneous	1,173	1	0
Shipping men	459	0	0
Female's and children's allowances	514	15	6
Clothing and passages for men sent to friends	391	15	0

CRIMINAL JUSTICE.

This notice refers to the calendar year 1879.

High Court, Original jurisdiction. To the High Court 91 persons as against 137 in 1878 were committed for trial. Of these 58 were convicted and 28 acquitted after trial, and 5 were discharged without trial or convicted on plea of guilty.

High Court, appeals. In criminal appeals to the High Court there was a decrease of 28½ per cent. on the number for 1878, but as the number of convictions by Sessions Courts fell in the same proportion, the ratio between convictions and appeals is maintained. This feature was observed last year also.

The number of criminal appellants in 1879 was 1,094 as compared with 1,450 in 1878, and the appeals of 1,017 were disposed of as follows :—

Rejected under Section 278 of the Code of Criminal Procedure	579
On perusal of records { Sentence confirmed	260
Do. modified	106
Do. reversed	72
Total	1,017

Appeals against acquittal. Three appeals were preferred under Section 272 of the Criminal Procedure Code by the Government Pleader on behalf of Government against judgments of acquittal. In one the judgment of acquittal was set aside and a new trial ordered. In another a conviction was recorded and sentence passed. The appeal in the remaining case was rejected.

Jury disagreement. Four cases were referred by Courts of Session under Section 263 of the Criminal Procedure Code. In three of these cases affecting 11 persons the High Court set aside the verdict of the jury, and in the remaining case the verdict was upheld.

Confirmation of sentences of death. As a Court of Reference the High Court disposed of 73 cases referred by Courts of Session under Section 287 of the Criminal

Procedure Code for confirmation of sentences of death passed on 90 persons with the following result :—

Sentence { Confirmed	75
{ Reversed	6
{ Commuted to life-transportation	8
Committed suicide during the pendency of reference	1
Total	90

As a Court of Revision the High Court disposed of 168 cases Revision of reported for orders by Subordinate Courts under Section 296 of the Criminal Procedure Code and affecting 403 persons, with the following result :—

Conviction or order of the Lower Court quashed	278
Sentence or order modified	52
Interference declined	73
Total	403

In the exercise of its powers of revision under Sections 294 and 297 of the Criminal Procedure Code the High Court also disposed of applications from 91 persons, and calendars relating to 1,764 sessions trials and to 13,593 trials by first-class Magistrates, and appeal statements relating to 431 appeals heard by Sessions Courts and to 2,778 appeals heard by first-class Magistrates, with the following result :—

Number of persons in whose cases conviction or order of the Lower Court was quashed	36
Do. do. sentence or order was modified	32
Total	68

The following statement shows the number of persons convicted by the criminal courts of each district in this Presidency, and the number of persons who appealed :—

Districts.	Number of persons convicted by the Sub-Magistracy.	Number of persons who appealed to the District or Divisional Magistrates.	Number of persons convicted by the District and District Magistrates.	Number of persons who appealed to the Sessions Courts.	Number of persons convicted by the Sessions Courts.	Number of persons who appealed to the High Court.
Arcot, North	3,685	210	311	33	144	47
Arcot, South	4,240	253	427	40	107	66
Bellary	8,014	153	720	22	177	116
Canara, South	1,963	248	107	13	40	17
Chingleput	6,080	212	1,481	40	116	13
Coimbatore	3,962	199	99	12	111	34
Cuddapah	3,233	135	189	29	52	11
Ganjam	5,554	205	272	5	80	28
Ganjam Agency	...	15	...	4	8	...
Godavari	4,233	374	214	34	80	24

Districts.	Number of persons convicted by the Sub-Magistracy.	Number of persons who appealed to the District or Divisional Magistrates.	Number of persons convicted by the Divisional and District Magistrates.	Number of persons who appealed to the Sessions Courts.	Number of persons convicted by the Sessions Courts.	Number of persons who appealed to the High Court.
Kistna	5,881	236	190	32	68	21
Kurnool	3,400	144	216	15	67	3
Madura	7,486	457	551	163	207	144
Malabar, North	8,018	187	1,015	15	62	40
Malabar, South	3,056	431	177	51	111	10
Nellore	335	149	147	14	106	2
Nilgiris	6	6	1,471	22	2	...
Salem	3,139	223	939	12	177	27
Tanjore, North	7,757	283	380	20	107	66
Tanjore, South	3,679	381	381	31	105	63
Tinnevely	6,677	676	984	40	239	165
Trichinopoly	6,677	180	414	44	76	52
Vizagapatam	6,926	98	184	15	46	25
Vizagapatam Agency		13		9	77	
Total ...	98,218	5,478	10,341	715	2,325	974
Compare 1878	117,223	5,229	12,455	672	3,251	1,365
" 1877	142,713	5,467	10,161	1,225	7,506	1,953

Diminution
of convictions.

The number of persons convicted by the Subordinate and District or Divisional Magistracy is less by 19,005 and 2,114 respectively than the number convicted in 1878, and less by 54,495 and 9,820 respectively than the number convicted in 1877. The number of persons convicted by the Sessions Courts in 1879 was 2,325 as against 3,251 in 1878. This marked diminution is one indication that the influence of the famine as a factor in criminal statistics is disappearing. The enormous increase of crime and conviction during and for some time after the famine disturbed all the proportions ordinarily observable in these statistics. Crime against property increased greatly, convictions were more than proportionately numerous, and appeals were disproportionately fewer. For the four years preceding the famine appeals were in the average of 9·4 per cent. to convictions. During the famine years they fell to 5·19. In the year of review they have reached 5·7. This abnormal variation is most marked in District Courts. Thus, omitting appeals to the High Court, the figures are :—

Before famine ... 35,023 appeals to 372,471 convictions, or 9·4 per cent.
During famine ... 20,644 do. to 398,120 do. or 5·1 do.
After famine ... 6,193 do. to 108,559 do. or 5·8 do.

In the Courts subordinate to the High Court appeals were preferred by 6,193 persons, which shows an increase of 292 on the number in 1878.

General
result of
appeals.

Appeals from 6,633 persons were on the files for disposal. The appeals from 6,186 persons were disposed of as follows :—

Result of appeals.	Number.	Percentage.
Appeals rejected ...	749	12·11
On perusal of records. { Sentence confirmed ...	2,571	41·56
Do. modified ...	580	9·37
Do. reversed ...	2,006	32·43
Otherwise disposed of ...	280	4·53
Total ...	6,186	100·00

In the six districts in which the system of trial by jury has been partially introduced 828 persons were tried by jury. Of these 431 were convicted, 312 were acquitted, and 85 were discharged without trial or convicted on plea of guilty. In 4 cases, the Judges having differed from the jury, references were made to the High Court under the provisions of Section 263 of the Criminal Procedure Code; the result has been stated above.

In trials before the Sessions Courts with the aid of assessors the Judges agreed with the assessors in the case of 2,114 persons and differed from them in the case of 418 persons; in the case of 164 persons the Judges agreed with one assessor only; 582 persons were discharged without trial or convicted on plea of guilty.

The reports on the working of the Whipping Act continue to be watched by the Court, and orders were re-issued in the year under review to secure the immediate submission to the Court of calendars in which persons convicted were sentenced to whipping in addition to any other punishment.

PRISONS.

The total number of prisoners of all classes in confinement in the several jails of this Presidency other than subsidiary jails during the calendar year 1879 was 42,847 against 62,057 in 1878; transfers are deducted from these figures. The daily average number was 15,377·16 against 21,389·77 in 1878, showing a decrease of 6,012·61 as compared with the preceding year. The number of male convicts admitted under fresh sentences during 1879 was 17,680 against 30,335 in the preceding year, and the number of female convicts admitted was 2,341 against 3,867. The daily average number of convicts was 14,961·54 against 20,885·56. At the commencement of the year there were 19,021 convicts in the various central and district jails; 20,021 were imprisoned during the year against 34,202 in the preceding year; 27,108 were released or otherwise disposed of, leaving 11,934 convicts in prison on the last day of the year, or 7,087 less than that at the close of the year 1878. The following table shows the particulars :—

Daily average number of Prisoners of all classes.

Classes of prisoners.	1879.			1878.			1877.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Convicts ...	14,341.87	619.67	14,961.54	20,006.26	879.30	20,885.56	18,992.72	755.92	19,748.64
Under trial ...	231.08	12.15	243.23	302.79	13.58	316.37	720.93	16.50	737.43
Civil ...	153.14	4.46	157.60	139.97	6.13	146.10	120.59	4.01	124.60
Security ...	24.22	.82	25.04	23.05	2.82	25.87	46.97	.12	47.09
Insane ...	7.42	1.16	8.58	6.14	1.90	8.04	10.12	2.93	13.05
State ...	1.17	...	1.17	7.83	...	7.83	8.09	...	8.09
Total ...	14,738.90	638.26	15,377.16	20,486.04	903.73	21,389.77	19,899.42	779.48	20,678.90

Religion, age, and previous occupation. Out of 11,934 convicts remaining in prison on the last day of the year 73.30 per cent. were Hindus, 8.20 per cent. Mahomedans, 14.63 per cent. Pariahs, Chucklers, &c., 1.84 per cent. Budhists and Jains, and 2.03 per cent. Christians. These proportions do not differ much from those of former years. The bulk of the convicts, as in former years, consisted of persons in the prime of working life, 73.65 per cent. being between the ages of 16 and 40 years; whilst those under 16 averaged only 1.43, those over 60 1.91, and those between 40 and 60 years 23.01 per cent. For these statistics "age" is defined to mean the probable age of the convict on the last day of the year.

Age.	Number remaining 31st December 1879.			
	Males.	Females.	Total.	Percentage to total number.
Under 16 years of age ...	151	20	171	1.43
Between 16 and 40 years ...	8,471	318	8,789	73.65
Do. 40 and 60 years ...	2,639	107	2,746	23.01
Above 60 years ...	219	9	228	1.91
Total ...	11,480	454	11,934	...

Of 11,480 male convicts remaining in prison on the last day of the year 4,926 were laborers and persons engaged in agriculture, and 3,334 miscellaneous persons not otherwise classed, these classes forming nearly 72 per cent. of the male prison population at the close of the year 1879. With respect to the female convicts the majority or 45.60 per cent. are returned as married, the proportions of those unmarried, widows, and prostitutes being respectively 9.91, 35.02, and 9.47 per cent.

Numbers according to nature and length of sentences. Of the 11,934 convicts remaining in jail at the close of the year 1879 33.25 per cent. were for periods not exceeding 1 year, 12.50 per cent. for periods between 1 and 2 years, 26.29 per cent. for periods between 2 and 5 years, 18.08 per cent. for periods between 5 and 10 years, and nearly 10 per cent. for periods above 10 years, inclusive of the numbers sentenced to transportation and to capital punishment. 115 prisoners were undergoing sentences of simple imprisonment, 440 were

under sentence of whipping in addition to imprisonment, 286 were undergoing imprisonment in default of fines imposed, and the remainder, viz., 11,093, or nearly 93 per cent., were under sentences of rigorous imprisonment only.

Numbers according to nature and length of sentences.		Number remaining 31st December 1879.		
		Males.	Females.	Total.
A	Not exceeding 1 month ...	98	13	111
B	Above one and not exceeding 3 months ...	824	84	908
C	Above 3 and not exceeding 6 months ...	1,641	100	1,741
D	Above 6 do. 1 year ...	1,152	56	1,208
E	Above 1 year do. 2 years ...	1,427	64	1,491
F	Above 2 years do. 5 do. ...	3,951	83	4,034
G	Above 5 years do. 10 do. ...	2,131	26	2,157
H	Exceeding 10 years ...	133	...	133
I	Sentenced to transportation beyond seas for life ...	306	20	326
J	Do. do. for a term ...	646	3	649
	Sentenced to death ...	11	...	11
Total ...		11,480	454	11,934
Nature of imprisonment.				
A	Simple imprisonment ...	94	21	115
B	Rigorous imprisonment ...	10,669	424	11,093
C	Whipping in addition to imprisonment ...	440	...	440
D	Imprisonment in default of any fine imposed ...	277	9	286
Total ...		11,480	454	11,934

4,105 re-convicted prisoners were admitted in 1879 against 6,087 in 1878.

19 convicts escaped during the year, viz., 9 from inside the jails and 10 from gangs working outside the prison walls. Of this number 14 were recaptured, leaving 5 still at large at the close of the year. Rupees 305 were paid as rewards to captors. Out of 51 convicts who escaped during the previous 10 years and remained uncaptured at the close of the year 1878 only 5 were recaptured during the year 1879, leaving 46 still at large on the 31st December 1879.

The total number of offences and punishments against prison discipline during the year 1879 was 7,089 in the case of males and 238 in that of females, as compared with 9,201 and 340 respectively during the year 1878. The ratio of punishments per cent. to the daily average strength was 49.42 in the case of males and 38.40 in that of females. The corresponding figures in 1878 were 45.99 and 38.66 respectively.

Of the total number of offences 2,373 were committed in the six central jails, 1,061 in the Presidency town jail, and 3,893 in the district jails, being at the rates of 32.38, 14.48, and 53.06 per cent. respectively. In 1878 the corresponding figures were 37.02, 17.51, and 45.45 per cent. respectively. The proportion of offences to the daily average strength was 39.74 per cent. in the central jails, 139.45

per cent. in the Presidency town jails, and 47.29 per cent. in the district jails.

The number of floggings was 2,254, of which 498 were inflicted in the six central jails, 343 in the Presidency town jail, and 1,413 in the 28 district jails. The percentage to the daily average strength was 8.63 in the central jails, 49.88 in the Presidency town jail, and 17.91 in the district jails. Taken with regard to the number of prisoners passing through the jails during the year the rates were 5.58 per cent. in the central jails, 10.95 per cent. in the Presidency town jail, and 5.12 per cent. in the district jails. The total number of punishments was 7,327, being 2,214 less than that during the preceding year.

Education.

Under existing orders all the inmates of a jail are to be placed under instruction. The difficulties of attempting to educate the mass of prisoners have been pointed out in former Reports, and it has been suggested to limit instruction to adults under 30 years of age whose sentence is over twelve months. All central jails are supplied with a small library of books of amusement and instruction in the vernacular languages for the use of the prisoners. Of the total number of convicts admitted into jail during the year 3,165 were able to read and write in varying degrees of efficiency, whilst those remaining, viz., 16,856 or upwards of 84 per cent., were entirely ignorant. In 1878 the corresponding figures were 4,086 and 30,116, or upwards of 88 per cent. respectively.

Foreign convicts.

At the close of the year 1879 there were 244 foreign convicts in this Presidency, of whom 216 were under sentences of transportation for life, and 28 were term transportation convicts. They were imprisoned in the central jails at Rajahmundry, Vellore, Salem, Trichinopoly, Cannanore and Coimbatore, and in the Penitentiary at Madras. During the past year the Government of India were asked to suspend the deportation of Burmese convicts from British Burmah to Madras, owing to the overcrowded state of the jails in this Presidency. The average cost of a Madras native convict during 1879 was Rupees 82-2-7 and that of a foreign convict Rupees 109-0-5. In 1878 the corresponding figures were Rupees 77-15-6 and Rupees 99-12-2 respectively. As regards the higher rate for the maintenance of this class of convicts compared with the natives of this Presidency experience has shown that special diet and clothing, suitable to their habits, are necessary for their health. No portion of these charges is defrayed by the Government of British Burmah.

Employment of women.

The total number of women imprisoned during the year 1879 was 3,265, being 1,707 less than in 1878. Their occupations were similar to those of previous years; they were employed in sweeping, pounding, grinding and sifting grain, in picking wool and coir, in weaving and

spinning wool, in preparing thread, spinning cotton, sewing jail clothing, knitting, basket-making, and in other suitable intramural labor. With a few exceptions the behaviour of the general body of female convicts was good.

There were 11 State prisoners in confinement during the year, State viz., 1 at the district jail at Berhampore, 1 in the central jail at Rajahmundry, 1 in the district jail at Nellore, 1 in the central jail at Salem, and 7 in the district jail at Calicut. Of the latter, 6 were released on security and 1 was transferred to the central jail at Salem.

Out of 144 insane prisoners 55 were transferred to lunatic asylums, Lunatics. 7 were sent for trial on recovery, 53 were released, 1 escaped, 1 died, leaving 23 males and 4 females under observation on the 31st December 1879. Of these, 59 males and 1 female were criminal lunatics; the remaining 18 males and 3 females were confined under the provisions of the Lunacy Act.

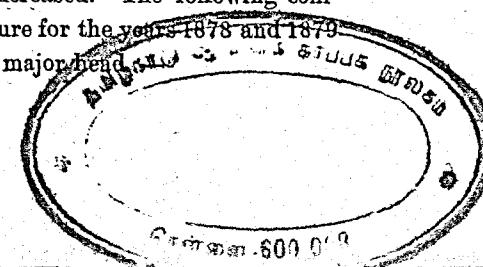
The remission system is reported to have worked satisfactorily in nearly all jails, and the conduct of the convict servants has been pronounced generally good.

The number of convicted juveniles under 16 years of age imprisoned during 1879 was 763, of whom 591 were boys and 172 girls. Of these 208 boys and 50 girls had been in jail before. Out of 258 re-convicted young criminals 177 were committed to the provincial jails and 81 to the Penitentiary at Madras, viz.:—

	Provincial jails.	Penitentiary.
Second convictions	129	27
Third do.	30	20
Fourth do.	17	8
Fifth do.	1	5
Sixth do.	...	2

The percentage of re-convictions amongst juveniles, taking all jails together, was 35.19 per cent. in the case of boys and 29.07 in that of girls. The percentages in the mofussil jails for boys and girls were 28.15 and 29.94 per cent., and in the Penitentiary at Madras it was 57.85 for boys only.

The total expenditure (excluding subsidiary jails) was Rupees 12,63,127, showing a net decrease of Rupees 4,23,531 compared with the expenditure of 1878, of which sum more than 75 per cent. was due to the comparative cheapness of provisions and to the smaller number of rations issued; the remainder of the saving being in clothing and bedding and in cost of guards and fixed establishments. Hospital charges and contingencies, however, increased. The following comparative statement exhibits the expenditure for the years 1878 and 1879 and the increase or decrease under each major head.



Heads of expenditure.	1878.	1879.	Increase.	Decrease.
	RS.	RS.	RS.	RS.
Rations	10,28,289	7,06,335	...	3,21,954
Fixed establishment	2,30,203	2,18,916	...	11,287
Police guards	3,04,644	2,04,207	...	1,00,437
Hospital charges	14,150	22,448	8,298	...
Clothing and bedding	51,757	36,216	...	15,541
Contingencies	57,615	75,005	17,390	...
Total ...	16,86,658	12,63,127	...	4,23,531

The expenditure incurred at the provincial jails, exclusive of the European prison at Ootacamund, was Rupees 11,56,395 the cost at the Madras Penitentiary, where Europeans and Natives are confined, was Rupees 91,293, and at the European prison at Ootacamund the expenditure was Rupees 15,439. The average cost per head in the provincial jails was Rupees 79-4-9, and at the Penitentiary Rupees 87-5-6 exclusive of Rupees 23,948, the charges incurred on account of passage &c. of transportation convicts to and from Port Blair. The Penitentiary at Madras receives from the provincial jails all convicts for deportation to the Andamans and those returning from the penal settlement to this country; transportation charges are therefore debited against the Penitentiary for convenience of account. If these charges are included, the average cost per head in the Presidency jail will be raised to Rupees 118-6-6.

Rations. The cost of rations was Rupees 7,06,335 or Rupees 47-1-11 per head, being a decrease of Rupees 3,21,954 or Rupees 1-13-7 compared with the cost of the previous year.

Fixed establishment. The expenditure under this head during the year amounted to Rupees 2,18,916 against Rupees 2,30,203 in the preceding year, the decrease being due to the discharge of the temporary establishment at camp jails.

Police guards. There has been a decrease under this head owing to the reduction of guards for the camp and temporary jails. The total cost under this head was Rupees 2,04,207, or Rupees 13-4-6 per head of average strength.

Hospital charges. The amount expended on account of these charges was Rupees 22,448, or Rupees 1-7-4 per head of average strength and Rupees 31-4-11 per head of average number sick. The total expenditure was more than that of the previous year by Rupees 8,298, notwithstanding the decreased number of prisoners. This large increase is mainly attributable to the extra diets and hospital comforts issued to sick prisoners.

Clothing and bedding. The cost of clothing and bedding, inclusive of the European prison at Ootacamund, was Rupees 36,216, or Rupees 2-6-8 per head of average strength, being less than that of the preceding year by Rupees 15,541.

The average cost per head at the European prison at Ootacamund was Rupees 30-8-0.

Under this heading are included batta and subsistence allowance to Contingencies. discharged prisoners, lighting of the jails and jail hospitals (when not included in the contract rate), purchase and repair of chains, fetters, tools and implements; repair and purchase of prison furniture and carts, charges incurred for executions, transportation and transfer of prisoners, telegraph charges, subsistence allowance to prisoners' children, rewards for the recapture of escaped convicts, and sundry petty charges. The total cost for the year 1879 was Rupees 75,005 against Rupees 57,615 last year.

The total amount expended under all the heads noticed above was Total cost. Rupees 12,63,127, or Rupees 82-2-7 per head of average strength, showing a total decrease of Rupees 4,23,531 against the expenditure of the preceding year; but the average cost per head represents an increase of Rupees 3-9-2, owing to the average number of prisoners maintained during the year 1879 being less than the number for 1878 by 6,088.

The following comparative statement shows the total cost and cost per head for the last five years :—

Years.	Total cost.	Cost per head of average strength
	RS.	RS. A. P.
1875	7,65,451	77 11 11
1876	8,49,240	77 11 10
1877	19,52,831	94 5 0
1878	16,86,658	78 9 5
1879	12,63,127	82 2 7

The cost per head of average strength in guarding and maintaining the prisoners in the various central and district jails in this Presidency (excluding the cost of building new jails, additions, alterations or repairs) compared with the expenditure on the same account in each of the ten preceding years is shown below.

Total cost per head of average strength.

1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.
RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
81 13 0	79 13 0	77 5 0	79 19 0	77 12 0	77 12 0	94 5 0	78 9 0	82 3 0

The number of prisoners engaged in the manufactories, including those employed in preparing articles for use or consumption in jails, was 4,876; the proportion of convicts employed on manufactures was 25·12 per cent. of convicts.

per cent. of the average number of prisoners sentenced to labor exclusive of convict officers. Only 15.66 per cent. worked as prison servants, whereas the ratio in 1878 was 23.00 per cent. In some jails the percentages of convict servants and prison officers considerably exceeded the proportions employed in other jails; these differences are probably owing to incorrect classification. Of the total number of prisoners fit for labor 914 were employed on building and repairing prison buildings, 996 in the jail gardens, and 1,656 by the Public Works Department or by Municipalities and Local Fund Boards. The amount realized in cash and the value adjusted by book entry on this account was Rupees 16,997.

Manufactures. The total credits as the result of the employment of convicts in the several central and district jails for the year 1879 amounted to Rupees 6,13,792 and the total debits to Rupees 5,32,136, leaving a balance of Rupees 81,656 to credit. The following is the detail of the results:—

	RS.		RS.
Cash in hand at the end of 1878	14,247	Cash in hand at the end of 1879	8,185
Manufactured articles at the end of 1878	1,77,110	Manufactured articles at the end of 1879	1,51,131
Raw materials at the end of 1878	63,681	Raw materials at the end of 1879	68,027
Amount of outstanding bills due by the jail at the end of 1878	6,364	Amount of outstanding bills due by the jail at the end of 1879	4,094
Amount of outstanding bills due to the jail at the end of 1878	38,188	Amount of outstanding bills due to the jail at the end of 1879	36,783
Plant and machinery at the end of 1878	18,527	Plant and machinery at the end of 1879	18,667
Amount drawn from the Treasury during 1879	2,14,019	Amount paid into the Treasury by cash and invoices during 1879	3,26,899
Total debits	5,32,136	Total credits	6,13,792
		Excess of credits or profits	81,656

Considerable progress continues to be made in the manufactory branches of the central jails at Vellore and Coimbatore; the profits in the former jail amounted to Rupees 24,344 and in the latter to Rupees 14,529. A commencement has been made of tent-making in these jails, and some very good tents have been turned out at reasonable prices.

Diet.

Very great care has been given to prison dietary, and the introduction of the present general scale, prepared in communication with the Sanitary Commissioner and sanctioned by Government in June 1879, in which dry grain is substituted for rice in subsidiary and district jails and greatly preponderates over rice in central jails, has been attended with marked success, the health of the prisoners, their weight, and general appearance having greatly improved. It may be affirmed that although this diet is exceedingly wholesome in character and sufficient in quantity, it is recognized as being a rough coarse food, and nothing savoring of indulgence enters into its composition.

Although there was an improvement in the health of the general body of prisoners and the mortality in jails was not so high as in the years 1877 and 1878, it was still distressingly great, especially in the famine-stricken districts, and illustrates in a remarkable manner how seriously the vitality of the poorer classes of the population has been affected by the long continued scarcity and dearness of food. The total number of deaths during the year was 866 against 2,688 during the preceding year; the death-rate of all classes of prisoners in jail, exclusive of subsidiary jails, was 56.3 per mille of the daily average strength against 125.6 per mille in 1878.

The following statement exhibits the chief form of sickness and mortality amongst the class of convicts only:—

Diseases.	Admissions.	Deaths.
Small-pox	14	2
Intermittent fever	3,454	33
Remittent and continued fever	235	8
Cholera	60	22
Scrofula and phthisis pulmonalis	59	19
Anæmia and general debility	639	138
Respiratory diseases	421	70
Dysentery and diarrhoea	2,083	314
Ulcers and boils	1,539	65
Accidents	467	10
Suicides	3	2
Other diseases	4,543	166
Total	13,517	849

The ratios of admissions and deaths as regards those diseases which were the most fatal amongst convicts only were as follows:—

Diseases.	Number of		Percentage to daily average strength.	
	Admissions.	Deaths.	Admissions.	Deaths.
Dysentery and diarrhoea	2,083	314	14.54	2.04
Anæmia and general debility	639	138	4.08	.89
Diseases of the respiratory system	421	70	2.73	.45
Ulcers and boils	1,539	65	10.20	.42
Fevers	3,689	41	23.49	.26
Cholera	60	22	.38	.14
Total	8,431	650	54.82	4.22

Sickness and mortality were heaviest in the early months of the year, and were probably the result of the famine. April, on the whole, was the least unhealthy month, the number of deaths being 49. Cholera was prevalent in the Vizagapatam and Rajahmundry jails during the months of January, February, and March, and resulted fatally in 22 cases. Cholera appeared in an epidemic form in the Vizagapatam jail on the 26th February, and the last case occurred on the 8th March; 58 cases were admitted, and of them 20 died. Of those admitted 30 were hill men, 12 of whom died, and 28 were low country men, of whom 8

died, thus verifying previous experience. Of its origin nothing can be stated which throws any light upon the matter. The disease was epidemic in several parts of the district at the time, and was possibly brought in by a fresh arrival. In the district jail at Bellary and at the Salem central jail the greatest number of deaths was in the month of January.

The mortality in each jail during the years 1879 and 1878 from all causes, all classes of prisoners included, is exhibited in the following comparative statement:—

Jails.	1879.			1878.		
	Daily average strength.	Deaths.	Percentage of deaths to strength.	Daily average strength.	Deaths.	Percentage of deaths to strength.
Guindy	77'46	...	...	72'61	1	1'37
Tranquebar	180'97	...	...	153'28	9	5'87
Cochin	76	...	...	3'93	...	...
European Prison	29'54	...	...	24'57	...	...
Debtors' Prison, Madras.	18'91	...	...	21'91	1	4'56
Guntur	193'99	1	51	236'41	6	2'09
Vellore Central	1,072'92	9	83	1,117'09	12	1'07
Chingleput	265'79	3	1'12	347'49	7	2'01
Penitentiary	770'92	10	1'29	836'25	17	2'03
Russelkonda	146'03	2	1'36	165'47	7	4'23
Ootacamund District	132'32	2	1'51	140'95	17	11'33
Masulipatam	135'25	3	2'21	138'95	1	71
Cuddalore	631'66	15	2'37	1,108'77	84	7'57
Rajahmundry District	246'36	6	2'43	274'15	9	3'28
Mangalore	179'87	5	2'77	212'93	18	8'45
Vellore Camp	458'31	13	2'83	658'66	20	3'03
Cannanore Central	736'09	23	3'12	839'85	54	6'42
Tinnevely	374'32	12	3'20	485'86	13	2'67
Trichinopoly Central	1,222'50	40	3'27	1,149'30	50	4'35
Trichinopoly Camp	548'77	19	3'46	677'83	63	9'29
Tanjore	215'88	9	4'16	244'00	20	8'19
Coimbatore Central	1,251'41	61	4'87	1,398'03	164	11'73
Nellore	568'75	25	4'91	1,031'11	66	6'40
Tellicherry	100'50	5	4'97	124'26	11	8'85
Calicut	214'77	11	5'12	267'61	39	14'57
Chittoor	219'94	12	5'45	531'78	100	18'80
Rajahmundry Central	967'73	59	6'09	1,192'60	26	2'18
Madura	725'39	48	6'61	1,165'40	282	24'19
Berhampore	221'32	29	7'68	337'65	56	16'58
Salem Central	742'75	77	10'36	1,688'41	362	21'44
Bellary	1,048'17	113	10'78	1,837'52	513	27'91
Cuddapah	232'77	27	11'59	618'04	81	15'63
Trichinopoly District	207'65	25	12'04	265'35	37	13'94
Coimbatore District	196'87	27	13'74	463'07	180	38'87
Palghat Fort	275'87	38	13'77	340'94	41	12'02
Kurnool	475'05	70	14'73	721'21	249	34'52
Vizagapatam	349'35	79	22'61	537'44	72	13'39
Total	15,377'16	806	5'63	21,389'77	2,688	12'56

In 5 jails and in the debtors' prison at Madras there were no deaths. In 19 jails the percentage of deaths to average strength was under 5 per cent. In 5 jails the death-rate was between 5 and 10 per cent., in 7 jails it was between 10 and 15 per cent., whilst in the district jail at Vizagapatam the death-rate was as high as 22'61 per cent.

The subject of mortality in jails is further noticed in Chapter VI.

Subsidiary
jails.

The following table shows the subsidiary prison accommodation and the daily average number of persons in confinement during the year 1879:—

Districts.	No. of subsidiary jails.	Number the jails will hold.			Average daily number of prisoners in the jails.		
		Males.	Females.	Total.	Males.	Females.	Total.
Ganjam	16	173	114	287	84'49	23'66	108'15
Vizagapatam	20	194	147	341	123'01	18'63	141'64
Godavari	20	118	69	187	58'18	14'13	72'31
Kistna	21	159	82	241	84'91	28'23	113'14
Nellore	16	154	79	233	65'27	12'81	78'08
Kurnool	12	127	72	199	76'07	14'29	90'36
Bellary	12	123	53	176	40'94	7'99	48'93
Cuddapah	12	151	49	200	51'59	4'86	56'45
North Arcot	19	273	109	382	64'40	8'76	73'16
Salem	16	241	118	359	65'92	7'50	73'42
Chingleput	13	305	146	451	64'98	12'59	77'57
South Arcot	18	272	106	379	76'90	15'08	91'98
Tanjore	15	260	110	370	98'04	17'02	115'06
Trichinopoly	10	171	51	222	45'85	7'28	53'13
Madura	17	301	104	405	136'91	41'85	178'76
Tinnevely	17	151	52	203	79'10	16'35	95'45
Malabar	23	178	127	305	68'61	6'92	75'53
South Canara	9	126	50	176	34'03	8'81	42'84
Coimbatore	16	183	84	267	76'66	9'57	86'23
Nilgiris	3	12	12	24	3'78	...	4'56
Total	305	3,673	1,734	5,407	1,419'64	277'11	1,696'75

The total subsidiary prison accommodation in this Presidency was for 5,407 prisoners, viz., 3,673 males and 1,734 females, showing a decrease of 24 males and 15 females compared with the numbers given in the return for the year 1878. This difference is partly owing to the abolition of three jails and to the capacity of certain other jails not having been correctly calculated. With rare exceptions suitable buildings are now provided for subsidiary jails. The new buildings are thoroughly ventilated, and provide for the separation of the sexes.

Out of a daily average of 1,156'65 subsidiary jail convicts sentenced to labor during the year, 979'07 were fit for labor; the rest were ineffective either on account of sickness, old age, or some bodily infirmity. Of the number fit for labor 150'03 were employed in cooking, 55'20 in pounding and sifting grain, 169'35 on jail gardens, 353'43 in sweeping and scavenging, 26'68 in stone breaking, 48'01 in road-work, deepening channels, &c., 13'37 in picking coir, and 163'00 on light work.

The health of the prisoners confined in subsidiary jails has been good compared with that during the year 1878. The total number of deaths was 32 against 159 in the preceding year, being 127 less than that during 1878. Only one of them was due to cholera. The death-rate was 18'8 per mille out of a daily average strength of 1,696'75 against 2,611'37 during 1878.

CIVIL JUSTICE.

High Court,
Original
jurisdiction.

On the Original Side of the High Court 526 new suits were instituted during the calendar year 1879. Of these 520 were ordinary, 5 were testamentary and intestate suits, and 1 was a maritime suit. There were also filed during the year 126 uncontested petitions for probate and letters of administration, 4 petitions regarding the custody and guardianship of infants and lunatics, 6 claims to attached property, and 124 petitions (16 less than in 1878 and 20 more than in 1877) for the benefit of the Act for the Relief of Insolvent Debtors. The total number of suits instituted was greater than that in the previous year by 10 and less than that in 1877 by 35. There was, however, a marked increase in the number of suits of some important classes, *e.g.*, suits "on contract" and "for inheritance." In those two classes alone there is an increase of 70 cases. In partnership and real property there is a decrease of 67.

The following table shows the more important variations :—

Class of suits.	1878.	1879.	Increase.	Decrease.
Suits for money due on contracts	263	289	26	...
Suits to compel specific performance of contracts.	3	12	9	...
Suits to set aside contracts and obligations on account of fraud, mistake, or accident	2	14	12	...
Claims to inheritance	3	26	23	...
Suits for, or relating to, real property	170	115	...	55
Suits to settle partnership and other accounts ...	18	6	...	12

37 petitions were filed for leave to sue *in formâ pauperis*, making with the 14 which stood over from 1878, a total of 51; of these 22 were admitted and are included in the number of suits above mentioned, 21 were rejected, and 8 remained undisposed of at the end of the year. Of the 80 "suits relating to mortgage of immovable property" included in the number of suits above mentioned, 34 were for sums above 1,000 rupees and 46 for sums below Rupees 1,000, of which 20 were below 500 rupees. Of the 34 suits above 1,000 rupees in value, 21 were for sums below 2,500 rupees, 6 below 5,000, 3 below 10,000, 2 between 10,000 and 20,000, 1 between 20,000 and 30,000, and 1 over 30,000. Of the 387 suits pending at the end of 1879, 55 were ready for final disposal, but had not yet come on for hearing. The number of arrears is undoubtedly large, but it should be stated that a comparison between the arrears on the file of the High Court and those on the files of the subordinate courts would be misleading, as the circumstances of litigation differ greatly. The suits are not of the same nature; the parties in Madras are, to a great extent, non-residents, and the processes are served not by the High Court but by the Sheriff. In order, however, to get rid of their arrears as

far as possible, the High Court resolved to order that all suits pending above one year should be brought forward; and in every instance in which the plaintiff failed to prove that within the preceding year he had used due diligence to effect service, the suit was dismissed. It is hoped that by this and other measures the arrears will in due course be cleared off.

The value of the subject matter of suits instituted during the year aggregates Rupees 31,40,000. The receipts from Court fees amounted to Rupees 1,36,994 as against Rupees 1,04,363 in 1878. Of this sum Rupees 62,212 were paid on account of probate and administration *ad valorem* duties.

In the High Court 132 appeals from first decrees and 666 appeals from appellate decrees were filed in 1879 as compared with 110 appeals and 706 second appeals filed in 1878. High Court,
Appellate
jurisdiction.

The total number of appeals on the files for disposal was 212 appeals, and 902 second appeals. Of these 107 appeals from decrees and 632 appeals from appellate decrees were disposed of in the following manner :—

Result of appeals.	Appeals.	Appeals from appellate decrees.
Dismissed for default, withdrawn, or compromised.	3	25
Uncontested { Confirmed	4	63
Uncontested { Modified or reversed	8	18
Contested { Confirmed	70	413
Contested { Modified or reversed	22	113
Total ...	107	632

At the end of the year 105 appeals and 270 second appeals were pending. Of this number 4 appeals and 17 second appeals were ready for hearing on the 31st December 1879.

17 appeals from a single Judge sitting on the Original Side of the Court were disposed of during the year as follows :—

Dismissed for default	2
Withdrawn	1
Confirmed	8
Reversed	5
Modified	1
Total ...	17

Under the head of miscellaneous work (Civil) the High Court disposed of 95 appeals from orders of the subordinate courts, 303 applications, 2 matrimonial cases referred under Section 17 of the Indian Divorce Act, 22 references under Section 617 of the Code of Civil Procedure, 2 references from the Board of Revenue under the Stamp Miscellaneous
work.

Act, 1 reference under Regulation XV of 1816, and 1 reference under Regulation V of 1804.

The 303 applications disposed of were of the following nature :—31 for review of judgments, 56 for admission of appeals presented out of time, 3 for amendment of High Court decrees, 6 for admission of appeals to the Privy Council, 10 for leave to appeal *in forma pauperis*, 11 for security from appellants for respondents' costs, 13 for stay of execution of decrees under appeal, 11 for transfer of suits, 50 for admitting on record the heirs and legal representatives of deceased parties, 38 under Section 622 of the Code of Civil Procedure, and 74 miscellaneous.

During the year of review, in order to bring the procedure into accord with the codes, all applications for the entertainment of appeals in cases for revision were brought before a Judge of the Court for admission. This duty had heretofore been discharged by the Registrar. Rules were also passed for the disposal of certain classes of cases by a single Judge, who has a discretionary power to transfer any cases he may think fit to a Bench of two Judges. This power has been generally exercised in all cases of intricacy, or in cases which raise important questions of law, or which are of unusual public importance. The average pendency of regular appeals was 245 days, and of second appeals 185 days.

The value of property involved in the appeals and second appeals instituted during the year aggregates Rupees 15,75,000. The receipts from Court fees amounted to Rupees 64,935-7-0. Of this Rupees 1,910 were levied on account of process fees, Rupees 57,610-11-0 on account of *ad valorem* duties on appeals and second appeals, and Rupees 5,414-12-0 on account of miscellaneous fees.

The following statement gives particulars of results of appeals to Her Majesty's Privy Council for the year 1879 :—

Pending at the beginning of the year.	Admitted during the year.			Total for disposal.	Disposed of during the year.						Pending at the end of the year.		
	By the High Court.	By the Privy Council.	Total.		Confirmed.	Modified.	Reversed.	Remanded.	Dismissed for default, withdrawn, or compromised.	Total.	In the Privy Council.	In the High Court under preparation.	Total.
10	6	...	6	16	3	...	1	2	...	6	4	4	10

Lower Courts, Original jurisdiction.

The following statement shows in detail in what proportion the aggregate litigation instituted during the year was distributed among the several classes of courts in the provinces :—

Class of courts.	Ordinary suits.	Percent-age.	Small Causes.	Percent-age.	Total.
Village Munsifs	45,176	36.38	...	...	45,176
Revenue Courts	5,164	4.23	...	...	5,164
District Munsifs	70,844	58.00	83,141	86.51	153,985
Subordinate Judges	626	.51	12,000	12.49	12,626
Cantonment Small Cause Court Judges	...	...	961	1.00	961
District Judges	339	.28	...	...	339
Total	122,149	100.000	96,102	100.000	218,251
Compare 1878	114,510	...	88,095	...	202,605
Do. 1877	109,556	...	80,173	...	189,729

It will be seen that the total number of suits instituted during 1879 was 218,251, or greater than in any of the nine preceding years. There is an increase of $7\frac{3}{4}$ per cent. on the figure for 1878, and of 15 per cent. on that for 1877. Of the increase of 15,646 on the number of suits instituted in 1878, 7,639 were in ordinary suits and 8,007 in Small Causes; and this increase is general to all classes of courts, except the Mofussil Small Cause Courts.

The number of suits instituted in the Revenue Courts was 5,164 or 763 more than in the preceding year. These figures show some rebound, but they are still considerably ($12\frac{1}{2}$ per cent.) below the average of the four years immediately preceding 1878.

The number of suits instituted, classified according to the nature of the subject-matter, is shown in the following table :—

Class of suits.	Number.	Percent-age.
On contract { On written promise ...	89,055	40.80
On contract { On unwritten promise ...	44,923	20.58
On contract { Other suits ...	25,366	11.62
For rent ...	10,235	4.69
For recovery of personal property ...	4,771	2.19
Relating to real property ...	33,471	15.34
Revenue suits ...	6,769	3.10
Other suits ...	3,661	1.68
Total	218,251	100.000

Below is shown the number of suits disposed of classified according to their value. The proportion in the several classes tallies very closely with that observed last year.

Value of suits.	Number.	Percent-age.
Below Rupees 100 ...	179,205	81.77
Do. do. 500 ...	32,645	14.89
Do. do. 1,000 ...	3,620	1.65
Do. do. 10,000 ...	2,225	1.05
Above Rupees 10,000 ...	120	.05
Not capable of being valued ...	1,275	.59
Total	219,160	100.00

The value of the subject-matter of original suits disposed of in 1879 aggregates Rupees 2,35,50,000 as compared with Rupees

2,38,80,040 in 1878, Rupees 2,57,60,000 in 1877, and Rupees 2,12,60,000 in 1876.

The accompanying table shows the number of suits for disposal and the number disposed of in the several classes of courts during the year :—

Class of Courts.	For disposal.		Disposed of.		Percentage of cases disposed of to cases for disposal.	
	Ordinary suits.	Small Causes.	Ordinary suits.	Small Causes.	Ordinary suits.	Small Causes.
Village Munsifs	52,410	...	45,929	...	87.63	...
Revenue Courts	6,680	...	4,692	...	70.23	...
District Munsifs	92,944	91,255	70,731	83,427	76.10	91.45
Subordinate Judges	1,166	14,297	775	12,320	66.46	86.17
Cantonment Small Cause Court Judges	...	1,018	...	970	...	95.23
District Judges	637	15	301	15	47.25	100.00
Total ...	153,837	106,585	122,428	96,772	79.58	90.75

The ratio here shown (47.25) in the disposal of ordinary suits by District Judges, though slightly greater than that (46.65) of 1878, still contrasts unfavorably with that (53.64) of 1877. This ratio of 1879 is higher than that of any of the preceding years excepting 1877, and in all other respects this table shows improvement—more work and a larger proportion done. It is to be noted, however, that these calculations are based upon the figures in the prescribed statement B 8 (Civil), the form of which is somewhat misleading. The total of all suits on the files of the District Judges was 637, but of these 163 were transferred, so that the real number for disposal was 474; 301 of these were heard and concluded. This puts the work of these courts in a more favorable and a juster light, showing that only 26½ per cent. of suits were pending. Treating the figures for the previous year from the same point of view, it is found that the true number for trial was 378, of which 209 were disposed of, leaving an arrear of 34½ per cent.; this shows an improvement of considerable importance.

The number of suits on the files for disposal was 260,422, that of suits actually disposed of during the year was 219,160, which is greater than the average of the eight previous years by 10,368.

The following table gives the general result of these suits :—

Result of suits.		Number.	Percentage.
Uncontested	Dismissed for default or compromised	71,833	45.92
	Decreed for plaintiff	80,093	51.16
	Do. for defendant	4,573	2.92
	Total	156,567	100.00
Contested	Decreed for plaintiff	47,676	76.16
	Decreed for defendant	14,917	23.84
	Total	62,693	100.00—100.00

It was noticed in the Report for 1878 that the uncontested cases in that year as compared with 1877 had increased by nearly 3 per cent. Those of 1879 as compared with 1878 have increased by 2 per cent. In the last few preceding years the ratio of contested to uncontested suits has been as follows :—

1 : 2.22 in 1874; 1 : 2.08 in 1875; 1 : 2.22 in 1876; 1 : 2.00 in 1877; 1 : 2.27 in 1878; 1 : 2.50 in 1879.

Of 147,264 suits decreed 127,774 or 86½ per cent. were for plaintiff.

The following statement gives the number of old and new suits (excluding those in Village Munsifs' Courts and Revenue Courts) pending at the end of 1879 as compared with those of previous years :—

Year.	Upwards of a year.	Upwards of 4 months.
1874	2,178	8,103
1875	1,047	6,614
1876	712	6,584
1877	926	5,126
1878	433	4,644
1879	308	5,376

It is due to the Courts of First Instance to point out that probably many, if not the majority, of suits pending for more than one year are cases which have been remanded by Courts of Appeal for new trial. This table is satisfactory, showing as it does that, with a large increase of work, there is only a small increase of arrear, and that this arrear is more and more confined to new cases.

In the Courts subordinate to the High Court the number of appeals preferred was 6,399, which is greater than the number filed in 1878, but less than the number filed in any of the years from 1872 to 1877, as will be seen from the following figures :—

1872	...	7,003
1873	...	6,506
1874	...	6,901
1875	...	6,872
1876	...	7,364
1877	...	6,734
1878	...	6,327
1879	...	6,399

The total number of appeals on the files for disposal was 11,334. Of these 6,040 appeals were disposed of in the following manner :—

Result of appeals.	Number.	Percentage.
Dismissed for default, withdrawn or compromised	472	7.81
Decrees of the Lower Court	Confirmed	3,458
	Modified	771
	Reversed	1,339
Total	6,040	100.00

The following statement shows the quantity of appellate work done by each class of Courts :—

Class of Courts.	Number.	Percentage.
Subordinate Judges	2,146	35.53
District Judges	3,894	64.47
Total ...	6,040	100.00

The number of appeals pending at the end of 1879 was 3,495. Of these 216 only were more than 12 months old. The following figures show the proportion of appeals pending at the end of each year since 1875 to the number of appeals on the files for disposal (excluding those transferred) during the year :—

Year.	Number of appeals on the files for disposal, excluding those transferred.	Pending at the end of the year.	Percentage.
1875	11,971	4,844	40.46
1876	11,717	4,381	37.39
1877	11,114	3,472	31.24
1878	9,798	3,140	32.05
1879	9,535	3,495	36.65

Process Service fees.

The Process Service Fund shows an increase in the year under review.

Year.	Receipts.	Expenditure.	Remarks.
	RS. A. P.	RS. A. P.	RS. A. P.
1875	7,38,256 0 6	6,43,638 10 0	+ 94,617 6 6
1876	7,62,840 4 11	6,50,316 11 9	+ 1,12,523 9 2
1877	6,52,902 9 0	6,92,953 7 1	- 40,050 14 1
1878	7,22,981 10 2	6,50,621 11 9	+ 72,359 14 5
1879	7,88,071 4 1	6,28,994 14 1	+ 1,59,076 6 0

Coercive processes in execution.

The following table shows the number of coercive processes issued during the past six years :—

Year.	Imprisonment of person.	Movable property.		Immovable property.	
		Attached.	Sold.	Attached.	Sold.
1874	26,817	28,682	7,504	24,666	13,995
1875	20,851	25,111	6,201	22,794	13,661
1876	16,007	25,078	5,821	22,694	13,970
1877	12,069	20,967	4,609	20,577	12,003
1878	12,703	24,353	5,118	20,873	12,706
1879	12,366	26,549	5,153	23,050	14,113

The returns do not afford information in how many cases the judgment-debtor actually underwent imprisonment; but the Procedure Code Amendment Act has considerably shortened the periods for

which debtors can be detained in the jail, and has afforded them the means of avoiding imprisonment by declaring themselves insolvent.

The following table shows the number of probates and letters of Probates administration and certificates issued in the High Court of Judicature at Madras from 1st January to 31st December 1879 :—

Value of assets of estate.	Number of probates or letters of administration with will annexed.	Amount of Court fees paid.	Number of letters of administration without will annexed.	Amount of Court fees paid.	Number of certificates under Act XXVII of 1869.	Amount of stamp duty paid.	Number of probates, letters of administration, and certificates.	Total. Amount of Court fees and stamp duty paid.	Number of letters of administration cancelled and fresh letters issued in lieu of the original.
From Rs. 1,000 to Rs. 5,000.	22	RS. A. P. 412 2 0	25	RS. A. P. 174 11 0	...	RS. A. P. 2,006 11 6	47	RS. A. P. 2,533 8 6	...
" 5,000 " 10,000.	16	386 12 0	12	87 12 0	...	4,082 0 0	28	4,557 1 0	...
" 10,000 " 50,000.	25	617 11 0	6	43 14 0	...	12,873 11 0	31	13,535 4 0	...
" 50,000 " 1,00,000.	3	68 10 0	1	6 11 0	...	4,863 4 0	3	4,938 9 0	...
Above Rs. 1,00,000 ...	6	421 2 0	...	...	...	37,950 0 0	6	38,371 2 0	...
Total...	71	1,906 5 0	44	313 0 0	...	61,776 3 6	115	63,995 8 6	...

The following table shows the number of probates and letters of administration and certificates issued by the Subordinate Courts in the Presidency of Madras during the year 1879 :—

Declared value of assets of estate.	Number of probates or letters of administration with will annexed.	Amount of Court fees paid in rupees.	Number of letters of administration without will annexed.	Amount of Court fees paid in rupees.	Number of certificates under Act XXVII of 1869.	Amount of Court fees paid in rupees.	Number of probates, letters, and certificates.	Total. Amount of Court fees and stamp duty paid in rupees.	Number of letters of administration cancelled and fresh letters issued in lieu of the original.
From Rs. 1,000 to Rs. 5,000.	7	RS. 510	8	RS. 1,978	178	RS. 8,841	193	RS. 11,329	...
" 5,000 " 10,000.	4	584	2	283	19	2,694	25	3,560	...
" 10,000 " 50,000.	2	1,014	1	946	15	5,507	18	7,467	...
" 50,000 " 1,00,000.	1	1,400	...	...	1	1,200	2	2,600	...
Above Rs. 1,00,000 ...	...	...	...	...	1	5,323	1	5,323	...
Total ...	14	3,508	11	3,206	214	23,670	239	30,234	...

The number of suits instituted during the year was 25,648, being Madras Court of Small Causes. 1,626 less than in the preceding year. The receipts on account of fees, &c., amounted to Rupees 1,08,768-11-10, and the expenses of the Court to Rupees 78,968-10-3, leaving a balance to the credit of Government of Rupees 29,800-1-7 against Rupees 38,079-13-9 in 1878. Out of a total of 28,919 suits 26,145 were disposed of, and only 2,774 suits were pending on the 1st January 1880.

There were 14 cases filed under Chapter XXXIX of Act X of 1877 (summary procedure on Bills of Exchange). Of this number 7 cases

were decided in favor of plaintiffs, 4 were compromised, and 3 remained undisposed of owing to summonses not being served on defendants. There were 132 applications for distress-warrants made during the year, of which 25 were either withdrawn or refused, and out of the remaining 107 applications 1 was compromised before distraint and 34 after distraint. On 33 warrants the debtors paid money into Court. There were 19 sales, which realised Rupees 572-6-0, and 20 warrants were returned unexecuted. There were 69 commissions sent to this Court to examine witnesses in reference to cases instituted in the Mofussil Courts, 52 of which were executed, and 90 witnesses were examined under them. 17 commissions were returned unexecuted. In addition to the above, 1,399 processes were sent from the Mofussil Courts for service on persons residing within the jurisdiction of this Court; 905 processes were served and the remainder unserved. 211 interpleader suits were filed during the year. In 157 cases the claim was wholly or partly allowed, and in 37 cases the claim was disallowed. The remaining 17 cases are still pending.

General.

Judges of
the High
Court.

The Honorable Sir Walter Morgan, Knight, resigned the office of Chief Justice of the High Court on the 1st February 1879. The Honorable Mr. Justice Innes officiated as Chief Justice until the 7th February, when the Honorable C. A. Turner assumed charge. During the absence of the Honorable the Chief Justice from 12th July to 7th September on public duty at Simla the Honorable Mr. Justice Innes again acted. The Honorable Mr. Justice Kindersley, who was on 15 months' leave on medical certificate from 5th August 1878, resumed his seat as a Judge of the High Court on the 7th November 1879.

Practitioners
of the High
Court.

In the course of the year 3 advocates, 7 vakils, and 2 attorneys were enrolled in the High Court.

Trial by
jury.

In the Proceedings of Government reviewing the Administration Report of the High Court for the year 1877 the Government, while noting with satisfaction the success that had attended the system of trial by jury of offences against property in five districts of the Presidency, requested the High Court to ascertain and report the opinions of the remaining Sessions Judges as to the propriety of extending the measure. On the recommendation of the High Court Government extended it to the districts of South Canara, Madura, and the Nilgiris.

Act III of
1863
(Madras).

In March 1879 the High Court suggested that Madras Act III of 1863 be repealed, and the Government of India moved to make express provision in the Court Fees' Act for cases to which it was originally intended that Act III of 1863 should apply. The Government observed that the Act was, in effect, though not expressly, repealed by the Court

Fees' Act, and directed that the fees for the service of processes under Act XIII of 1859 be regulated by the scale of fees framed by the High Court under Section 20 of the Court Fees' Act, and that the service of processes under Act XIII of 1859 be effected, wherever practicable, by the process-servers attached to the offices of Collectors and their subordinate officers instead of by the Police. All that remained to be done was to repeal the Act, and to this end His Grace the Governor in Council directed that steps be at once taken in the Legislative Department.

In April 1879 the High Court, at the instance of the District Judge of Tinnevely, recommended to Government that the Subordinate Judge of Tinnevely be invested with the jurisdiction of a Judge of a Court of Small Causes for the trial of suits cognizable by such Courts up to Rupees 500 throughout the district of Tinnevely, except in the taluks of Srivilliputtur and Vilatikulam and the Otapidaram division of the Otapidaram Taluk, and that the District Munsifs in the Tinnevely District should exercise Small Cause jurisdiction up to Rupees 50. This was sanctioned with effect from 12th May 1879.

At the commencement of the year there were altogether 12 Subordinate Courts. On the 1st April, however, the Small Cause Courts of Kumbakonam, Madura, Cuddalore, and Cochin, and the Subordinate Courts of Chicacole, Tuticorin, and Salem were abolished, and new Subordinate Courts established in the place of the abolished Small Cause Courts with the addition of a District Munsif's Court at Vayitri in the Wynaad.

REGISTRATION.

The total registrations of the official year 1878-79 exceed those of the previous year by 7.5 per cent. and are the highest on record as shown below :—

Years.	Book I. instru- ments relating to immovable property.	Book IV, miscella- neous register.	Total.	Increase.	
				Number of registra- tions.	Rate per Cent.
1866-67	89,229	11,196	100,425	...	...
1867-68	97,172	11,759	108,931	8,506	8
1868-69	107,740	11,561	119,301	10,370	9
1869-70	121,955	12,008	133,963	14,662	12
1870-71	135,754	13,176	148,930	14,967	11
1871-72	142,950	11,331	154,281	5,351	4
1872-73	176,969	13,278	190,247	35,966	23
1873-74	193,790	12,713	206,503	16,256	9
1874-75	198,858	13,767	212,625	6,122	3
1875-76	218,552	13,710	232,262	24,637	11.5
1876-77	233,852	17,024	250,876	13,614	5.7
1877-78	271,165	17,894	289,059	38,183	15.2
1878-79	320,786	22,650	343,436	54,377	18.8
1879-80	345,328	24,007	369,335	25,899	7.5

With the exception of Malabar, South Canara, Madras, Kurnool, Bellary, and Ganjam, in which there is a falling off, every other district presents an increase over the registrations of the preceding year, the increase ranging so high as 64, 38, and 34 per cent.

Nature of instruments registered.

The different kinds of instruments registered, with the variations in each, are shown by the following figures :—

Nature of instruments registered.	1878-79.	1879-80.	Increase.	Decrease.
<i>Book I.</i>				
Instruments of gift	987	1,174	187	...
Do. of sale of Rs. 100 and upwards	59,607	58,950	...	657
Do. do. under Rupees 100	32,953	42,784	9,831	...
Do. of mortgage of Rupees 100 and upwards	99,879	102,438	2,559	...
Do. do. under Rupees 100	53,889	67,843	13,954	...
Perpetual leases	1,990	1,945	...	45
Leases exceeding one year compulsorily registered	32,782	27,439	...	5,343
Leases exceeding one year exempted from registration	7,493	8,356	863	...
Leases not exceeding one year	8,835	10,155	1,320	...
Awards of arbitration	23	34	11	...
Certified copies of decrees and orders of court	95	121	26	...
Other instruments	22,253	24,089	1,836	...
<i>Book IV.</i>				
Instruments of sale of movable property	998	852	...	146
Bonds	11,736	14,259	2,523	...
Other documents	9,916	8,896	...	1,020

The higher sales, that is those of the value of 100 rupees and upwards, exhibit a slight decline, which is perhaps a proof, so far as it goes, that the pressure on the better classes of landholders has somewhat diminished; but it will be seen that the minor sales and mortgages of all values, so far as they have been registered, are still very much in advance of the abnormal figures of the famine years. This may be accounted for by the increase in optional registrations under the operation of Section 50 of the Registration Act as explained in the last Report.

Perpetual leases show a decrease as compared with the previous year. The next most important class of leases are those for periods exceeding one year which are compulsorily registrable, and here there is a marked falling off, which is perhaps another proof of the depressed state of agriculture. The number of bonds registered in Book IV shows an increase of more than one-fifth. The falling off in other instruments is due to the absence this year of any abkari engagements, which were renewed and registered in considerable numbers in 1878-79.

Aggregate value of transactions registered.

The following statement compares the aggregate values of the transactions in Books I and IV between the last and previous years :—

Years.	Book I.		Book IV.		Total.		No value stated.	
							Book I.	Book IV.
1878-79	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	5,496	1,082
1879-80	8,69,33,223	2 7	1,85,40,332	0 6	10,54,73,555	3 1	1,448	962
	8,99,88,969	13 7	94,05,078	3 4	9,93,94,043	0 11	4,048	120
Difference	+30,55,746	11 0	-91,35,253	13 2	-60,79,507	2 2		

With increased registrations there is necessarily an increase in the value of the transactions registered; but while registrations in Book I have advanced by 7.6 per cent., the increase in value is only 3.5 per cent.—a fact which shows that optional registrations have expanded. The decline in the value of the registrations in Book IV is the result of the absence of fresh abkari engagements.

The aggregate value of nearly 900 lakhs appertaining to Book I may be thus distributed :—

	1878-79.	1879-80.
Value of lands transferred by gift	5	7½
Do. by sales of Rs. 100 and upwards	267	240½
Do. do. of less than 100 rupees	17½	21½
Do. encumbered with mortgages of more than 100 rupees	401	390
Do. do. less than 100 rupees	26	33½
Value of perpetual leases	48½	40½
Do. of other leases	48	40½
Do. of lands affected by decrees or orders of Court	103½	15½
Do. of lands affected by other documents		

Thus the value of property alienated by gift was 7½ lakhs, and that transferred by sales and encumbered with mortgages 271 and 423 lakhs. The value of leases was 41½ lakhs or 7½ lakhs less than in 1878-79. The Registrar of Godavari reports that the largest sale registered in his district was one of 25 villages for Rupees 1,66,525 purchased by the Zamindar of Pithapuram, and that a partition deed of the value of 3,22,000 rupees was also registered in his district during the year.

The following statement shows the total registrations distributed into compulsory and optional :—

Years.	Registrations in			Total optional registrations.	Ratio of optional to total registrations.
	Book I.		Book IV.		
	Compulsory.	Optional.	Optional.		
1878-79	207,873	112,913	22,650	135,563	39
1879-80	205,821	139,507	24,007	163,514	44

While compulsory registration has somewhat declined, the registration of instruments of the optional class in Book I has increased by more than 23 per cent. Since 1876-77 this item has nearly doubled itself, which is perhaps the most gratifying feature in registration in

this Presidency as showing how it is becoming popularised. Taking the entire optional registrations both in Book I and Book IV, they constitute 44 per cent. of the total registrations against 39 per cent. in 1878-79. This ratio has steadily increased year by year.

Wills and authorities to adopt. The operations connected with the registration of wills and authorities to adopt during the past two years are compared in the following statement:—

Operations.	1878-79.	1879-80.
Scaled covers deposited	14	10
Do. withdrawn	5	6
Do. opened	4	3
Do. removed to Courts	2	2
Wills presented open to Registrars	105	142
Do. Sub-Registrars	531	523
Authorities to adopt presented Registrars	2	2
Do. Sub-Registrars	15	12

Registrations on payment of fine. The number of cases in which instruments were admitted to registration on payment of a fine under Section 24 was 546 against 409 in 1878-79. The increase is due to the increase in the registrations of the year. On the other hand the number of defaults under Section 34 was very much less than in the previous year owing to the interpretation recently placed on that section, the effect of which is to extend the ordinary time for attendance from four to eight months.

Fine.	1878-79.	1879-80.
Under Section 24	409	546
Do. 34	1,250	703

Vide G.O., dated 4th June 1879, No. 1,305.

Refusal to register. There were 1,836 refusals to register during the year under report against 1,687, or 1 to every 202 registrations against 1 to 204 in the previous year. They are classified below with reference to the grounds on which they were made:—

Reasons for refusal.	1878-79.	1879-80.
I.—Absence of translation and true copy	4	2
II.—Unattested interlineations, blanks, erasures, or alterations	30	31
III.—Insufficient description of parcels	49	51
IV.—Absence of copies of maps or plans	1	1
V.—Presented after the prescribed period	29	44
VI.—Presented by persons having no right to present	28	25
VII.—Non-appearance of executing parties or their representatives, assigns, or agents within the prescribed period	333	237
VIII.—Identity of executing party not proved	24	30
IX.—Right of person appearing as representative, assign, or agent not proved	34	31
X.—Execution denied by the executing party or agent	288	299
XI.—Executing party a minor, idiot, or a lunatic	428	683
XII.—Execution denied by representative of deceased executant	29	31
XIII.—Death of executing party not proved	2	5
XIV.—Execution of will or authority to adopt not proved	2	2
XV.—Absence of seal or superscription on cover of wills	2	2
XVI.—Non-payment of fees or fines	141	89
XVII.—Returned to parties at their request	143	180
Miscellaneous, not falling under any of the heads specified above	118	93
Total	1,687	1,836

There were 293 appeals from refusals to register against 283 in the Appeals. previous year, 51 being of the ordinary class and 242 of the more important kind, involving in their disposal the exercise of the powers of a Civil Court. In the great majority of the cases, namely 234, the appeals proved successful and registration was directed, while in the remaining 59 they were rejected. The particulars are shown below:—

Appeals and their results.	1878-79.	1879-80.
Appeals to Registrars { from refusals made on grounds other than denial of execution	63	51
Do. { from refusals made on the ground of denial of execution	221	242
Appeals disposed of by orders directing registration	232	234
Do. do. by refusing to direct registration	51	59
Registration orders of District Courts	25	15

With 370,031 registrations there were only 39 instruments remaining uncopied into the registers at the close of the year. In 18 out of the 21 districts there was no arrear at all under this head.

The number of documents destroyed under Section 85 of the Registration Act and Rule 19 was 522 against 414 in the previous year. Of this number as many as 353 belonged to the districts of Malabar and South Canara; in the other districts the number was inconsiderable. The documents destroyed belonged chiefly to the years 1877 and 1878.

The number of documents registered and ready for delivery, but lying unclaimed, at the close of the year in the various Registration Offices was only 1,657 against 2,538, and this notwithstanding that the registrations of the year were 7.6 per cent. in advance of those of the previous year. On the whole the arrear under this head, due more perhaps to the neglect of the parties than to that of registering officers, was inappreciably small compared with the total registrations.

1,850 documents were impounded against 1,481 in the previous year. The number varied from 5 in the Nilgiris to 260 in Tanjore. Out of the total number sent to the Collectors, including the 548 pending from the preceding year, 364 or about one-seventh were returned as correctly stamped, while 1,262 or a little more than one-half were treated as insufficiently stamped. About 30 per cent. of the cases sent up were still pending disposal at the end of the year.

During the year under report there were 38 public and 6 private Prosecutions. prosecutions in 16 districts, besides 6 brought forward from the previous year. Convictions were obtained in 27 out of the 38 public prosecutions; in 9 cases the accused were discharged, and 2 cases were still pending at the close of the year. Of the prosecutions by private parties 3 proved successful and 3 broke down. The offences charged were, as usual, mostly making false statements and false personations

before registering officers, and altering the dates of documents in view to evading the payment of penalty for presentation after the prescribed time.

Changes, &c.

There were 271 sub-registry offices at the close of the year 1878-79. 9 of these have since been incorporated with the registry offices at the district head-quarters under Section 7 of the Indian Registration Act, and 9 have been abolished as separate offices. On the other hand 3 new offices have been created by the partition of the Tinnevely and Palghat sub-districts, and the restoration of the office at Tellicherry, so that the number of sub-registry offices on the 31st March last amounted to 263.

The process by which the Revenue Department is being relieved of the charge of registration continues, and no less than 36 sub-registry offices were taken over in the year.

Other changes which took place during the year were (1), the incorporation of the districts of Calicut and Tellicherry into one district, conterminous with the revenue district of Malabar; and (2), the entire separation of the Registration Department from that of the Revenue, so far as the District Registrars are concerned, by the appointment of Special Registrars throughout the Presidency in the place of the Treasury Deputy Collectors who were ex-officio Registrars.

Financial results.

The following statement gives the financial results of the year's administration as compared with the two previous years:—

Receipts.	1877-78.		1878-79.		1879-80.		Expenditure.	1877-78.		1878-79.		1879-80.	
	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.		Rs.	A. P.	Rs.	A. P.	Rs.	A. P.
<i>Collections.</i>							Salaries of Inspector-General, Registrars, and Special Sub-Registrars...	1,00,249 14 1	1,05,352 15 1	1,05,352 15 1	1,10,191 9 9	1,10,191 9 9	1,10,191 9 9
Ordinary registration fees	3,03,267	5 0	4,31,314	0 0	4,40,186	7 0	Commission paid to Special Registrars and to all Sub-Registrars...	76,271 2 11	88,001 5 7	88,001 5 7	93,351 13 1	93,351 13 1	93,351 13 1
Fees on sealed covers deposited, withdrawn, and opened	33	0 0	48	0 0	38	0 0	Commission paid to establishments of Special Registrars and of all Sub-Registrars...	99,136 6 4	1,00,549 5 11	1,00,549 5 11	1,04,532 4 11	1,04,532 4 11	1,04,532 4 11
Fees on authentication of powers of Attorney	1,954	0 0	2,211	8 0	2,180	0 0	Establishments of Inspector-General and of Registrars and of Special Sub-Registrars...	20,684 11 11	27,840 9 3	27,840 9 3	29,659 10 8	29,659 10 8	29,659 10 8
Fees on commissions issued	1,365	0 0	865	0 0	355	0 0	Contingent expenditure of Inspectors-General and of Registrar of Madras...	540 3 1	379 1 6	379 1 6	276 9 9	276 9 9	276 9 9
Do. attendances by person...	37,420	0 0	40,950	0 0	41,740	0 0	Contingent and stationery allowance of Mofussil Registrars...	605 13 11	821 2 7	821 2 7	1,869 6 4	1,869 6 4	1,869 6 4
Extra fees for registration by Registrars	3,680	0 0	4,870	0 0	5,015	0 0	Postage paid in cash or by service labels	3,408 14 0	2,831 8 9	2,831 8 9	2,196 0 4	2,196 0 4	2,196 0 4
Copying fees	9,181	1 6	10,777	2 6	10,995	15 0	Travelling bills of Inspector-General and of Registrars and of their establishments...	2,400 4 6	2,806 4 6	2,806 4 6	3,232 9 0	3,232 9 0	3,232 9 0
Fees on searches	11,280	8 0	13,677	8 0	14,332	4 0	Binding of registers and indexes	1,504 8 0	4,444 7 0	4,444 7 0	9,775 15 11	9,775 15 11	9,775 15 11
Do. memoranda of decrees under Section 22 of Act XX of 1866	67	0 0	71	0 0	37	0 0	Carriage of registers, indexes, and almirals	1,805 0 0	2,760 9 1	2,760 9 1	1,703 9 6	1,703 9 6	1,703 9 6
Fines for delays under Section 24 of Act XX of 1866	42	12 0	2,139	8 0	2,352	0 0	Refunds	1,904 15 1	2,681 12 8	2,681 12 8	2,594 6 10	2,594 6 10	2,594 6 10
Do. do. do.	3,445	12 0	5,142	8 0	2,424	3 0	House-rent for the offices of Inspector-General, Registrars of Madras, Vizagapatam, Godavari, Cuddapah, Bellary, North Arcot, and Malabar, and Sub-Registrars of Tirutani, Tiruvallur, Valur, Raman, Ramnad, Krishnagiri, Payoli, Narayanavaram, Tirupati, Arundangi, Palni, Chelvayur, Edavanna, Tiriala, Mannarghat, and Munkara	2,785 1 10	3,553 11 0	3,553 11 0	2,763 9 1	2,763 9 1	2,763 9 1
Do. on unclaimed documents	3,926	0 0	4,378	0 0	2,870	0 0	Miscellaneous	1,564 8 0	1,896 6 5	1,896 6 5	2,454 11 0	2,454 11 0	2,454 11 0
Sales of books and packing cases	164	2 9	1,258	10 2	553	11 5	Total cash expenditure	3,13,563 3 9	3,50,503 2 2	3,50,503 2 2	3,65,375 1 4	3,65,375 1 4	3,65,375 1 4
Miscellaneous	212	9 0	1,259	6 3	288	15 7	Not paid for in cash.	6,007 2 7	18,412 2 3	18,412 2 3	22,832 2 6	22,832 2 6	22,832 2 6
Total	4,42,533	14 3	5,19,662	8 11	5,23,348	8 0	Estimated value of paper for registers and indexes	375 4 0	64 2 8	64 2 8	577 8 0	577 8 0	577 8 0
Add amount of fees and fines collected on documents not yet admitted to registration...	10,085	15 0	11,031	11 0	10,955	11 0	Do. stationery and packing materials	113 4 9	106 0 3	106 0 3	116 14 0	116 14 0	116 14 0
Deduct amount of fees and fines collected on documents of which registration was completed during the year	4,52,679	13 3	5,29,634	3 11	5,34,304	3 0	Do. seals, stamps, and weighing machines made up at D.P.W. Workshops and of cloth supplied for peons' belts by the Clothing Department	31 5 9	438 4 0	438 4 0	554 8 5	554 8 5	554 8 5
Balance showing the actual collections of the year	6,908	10 0	8,327	13 0	7,993	7 0	Estimated value of printing and binding done at Government Press	3,859 6 0	7,900 4 11	7,900 4 11	5,436 12 6	5,436 12 6	5,436 12 6
	4,45,681	3 3	5,21,366	6 11	5,23,337	12 0	Amount debited for freight and value of Chubb's locks	5,439 6 8	175 8 10	175 8 10	182 6 7	182 6 7	182 6 7
							Do. buildings for Registration Offices	9,29,449 1 6	3,83,156 0 2	3,83,156 0 2	3,97,102 9 4	3,97,102 9 4	3,97,102 9 4
Total remittances to the Treasury	4,45,480	4 7	5,20,628	3 11	5,27,915	15 9	Total expenditure Surplus on the year	1,116,031 3 1	1,37,272 3 9	1,37,272 3 9	1,80,813 6 5	1,80,813 6 5	1,80,813 6 5

* Includes Rupees 1,153-3-10, being the unexpended balance of one per cent. contingent allowance.

It will be seen that the receipts under the head of ordinary registration fees are Rupees 8,872-1-0 in excess of those of the previous year, while those under the other heads which necessarily fluctuate are Rupees 4,186 less. The aggregate receipts under all heads amounted to Rupees 5,26,337-12-0 against Rupees 5,21,366-6-11. On the debit side of the account the charges have necessarily increased with the continued expansion of the department. The cash expenditure of the year has exceeded that of its predecessor by Rupees 14,871-15-2 or 4 per cent. The expenditure not paid for in cash is on the whole less than in the previous year by Rupees 925-6-0. The aggregate expenditure under all heads during the past year amounted to Rupees 3,97,102-9-4 against Rupees 3,83,156-0-2 in the preceding year, which leaves a surplus of Rupees 1,30,813-6-5. This expenditure is 75.4 per cent. on the receipts against 73.4 in 1878-79.

The increase is principally due to the substitution of Special Registrars throughout the Presidency already noticed.

Average
registration
fee.

The average registration fee charged during the year amounted to Rupee 1-3-0 against 1-4-1 in 1878-79, Rupee 1-4-4 in 1877-78, Rupee 1-4-5 in 1876-77, and Rupee 1-5-1 in 1875-76, which unmistakably shows how the registration of minor transactions is increasing from year to year.

REGISTRATION OF JOINT STOCK COMPANIES.

During the year 1879-80 14 companies were registered, having a nominal capital of Rupees 12,00,000, and a paid-up capital of Rupees 3,16,815. Of these 1 is at Conjeeveram in the Chingleput District, 1 at Coonoor, 2 at Ootacamund, 1 at Madura, and the remaining 9 in the town of Madras. 6 companies registered during the years 1873-74, 1875-76, and 1877-78 raised their capital by Rupees 5,79,163. 11 companies registered between the years 1864-65 and 1877-78, with a nominal capital of Rupees 19,10,780, wound up during the year.

The total number of companies registered and working on the 31st March 1880 was 88, of which number 70 were mutual loan companies, an increase of 3 over the preceding year; and the rest (18) were commercial companies, or 1 more than last year. Their total nominal capital was Rupees 1,66,97,557, and their paid-up capital Rupees 60,83,607. The fees for registration aggregated Rupees 2,015, falling short of the amount (Rupees 2,947) realized in 1878-79 by Rupees 932.

MILITARY.

The following table shows the strength of the British and Native Strength of Army in the Madras Presidency, as it stood on the 1st April 1879 and 1880.

	European.					Native.				
	Artillery.	Cavalry.	Infantry.	Sappers.	Total.	Artillery.	Cavalry.	Infantry.	Sappers.	Total.
1st April 1879...	2,774	936	7,257	34	11,051	402	1,484	27,371	1,280	30,537
Do. 1880...	2,563	930	7,237	51	10,781	304	1,507	27,545	1,284	30,730

The following review relates to the intervening period.

Movements of troops in 1879-80 were numerous, as in addition to the ordinary reliefs troops were furnished for service in Afghanistan, for and employment of garrison duty in the North-West and the Punjab, and for the suppression of disturbances in the Godavari and Vizagapatam Districts. Several subsidiary movements in the Presidency were also made in order to supply stations from which troops had been withdrawn to meet calls for service.

Four Field and 3 Garrison Batteries of Royal Artillery proceeded to Ordinary relief of England in ordinary relief, and were replaced by 4 Field and 4 troops. Garrison Batteries from England and Natal. 1 Field Battery (K Battery 1st Brigade) was converted into a Garrison Battery (No. 19 Battery 9th Brigade), causing a reduction of 1 Field Battery (withdrawn from Trichinopoly) and an addition of 2 Garrison Batteries, 1 of which replaced the Field Battery formerly at Thayetmyo, the other being allotted to Saint Thomas' Mount, but stationed temporarily in Fort Saint George. The troops moved in India and Burmah were 2 Field Batteries Royal Artillery, 2 Garrison Batteries Royal Artillery, 2 Regiments British Infantry, 1 Company "Queen's Own" Sappers and Miners, and 2 Regiments of Native Infantry. The following troops returned to the Presidency:—The B, E and K Companies "Queen's Own" Sappers and Miners from Afghanistan and the A Company from Bombay after instruction in submarine mining; also the 36th Regiment N.I. from Rawul Pindee. The 21st and 30th Regiments N.I., which went to Mooltan in 1878-79, were retained in the Lahore Division. They were employed on detachment and escort duty, and suffered much from fever and scurvy when at Vitakri and Chotiali. They were afterwards quartered at Mooltan and Dera Ghazi Khan. On the renewal of hostilities with Afghanistan more Madras troops were sent on service, viz., the A, C and I Companies "Queen's Own" Sappers and Miners and the 1st, 4th, and 15th Regiments

N.I., and in addition the following were moved up out of the Madras Command for garrison duty:—H.M.'s 33rd Regiment* from Kamptee to Lucknow, the 13th Regiment N.I. from Jubbulpore to Meer, the 27th Regiment N.I. from Bellary to Cawnpore, and subsequently to Morar, and a wing of the 3rd Regiment L.I. from Kamptee to Jubbulpore. The health of the troops employed in Afghanistan has been excellent. The Madras Presidency also furnished officers and men, as well as animals and attendants, for transport service and signalling apparatus for the campaign.

Shortly after the 39th Regiment N.I., which proceeded to Rampa in 1878-79, returned to Madras, disturbances broke out afresh, making it necessary to send troops again into the Godavari and adjoining districts as follows:—Detachment of His Grace the Governor's Body Guard from Madras, D and G Companies "Queen's Own" Sappers and Miners from Bangalore, 2 Companies 5th Regiment N.I. from Sir-oncha, the 10th Regiment N.I. from Madras, a wing of the 17th Regiment N.I. from Vizianagrum, a wing of the 29th Regiment N.I. from Vizagapatam, and a wing of the 39th Regiment N.I. again from Madras; also a squadron of the 2nd Hyderabad Contingent Cavalry from Hingolee, and a wing of the 3rd Hyderabad Contingent Infantry from Bolarum. The troops suffered severely from fever, and detachment after detachment was rendered inefficient in consequence.

The additional troops† sent to Burmah in 1878-79 remained there during 1879-80.

In consequence of the large demands for troops during 1879-80 and the previous year the garrisons in the Madras Presidency were much reduced in infantry, making duty severe and necessitating the employment of chowkeydars or watchmen whenever they could be substituted for military guards.

The Buckingham Canal was used for the movement of troops and families going to and returning from the Godavari District. The new chord line of railway from Dhond to Munmad was utilized, and saves troops a distance of 115 miles and the descent and ascent of two ghats. Rest-camps were established on this line.

Brown leather accoutrements were sanctioned in lieu of buff for native regiments. The arming of the Madras Cavalry with snider carbines was completed, and revolvers were authorized to be issued at the expense of the State to native officers of Infantry Corps. The 1st, 4th, and 15th Regiments on active service and the 21st and 30th Regiments in reserve were ordered to be augmented to 800 men each,

* This regiment was transferred to the Bengal Presidency in March 1880.

† 1 regiment British Infantry, 2 regiments Native Infantry, 1 company "Queen's Own" Sappers and Miners.

but this was not fully effected. 208 volunteers proceeded to the frontier for the 1st, 4th, and 15th Regiments N.I. and 1st Light Cavalry. The enlistment of Europeans in Native Infantry Bands was forbidden.

The standard height for recruits was reduced from 5 feet 6 inches to 5 feet 5 inches, and by another inch so long as the war pressure lasts. The following table exhibits the number and caste of recruits enlisted in the Native Army for the Cavalry, Infantry, and Sappers for 1879-80:—

	Cavalry.	Infantry.	Sappers.
Christians	3	162	21
Mussulmans	116	572	5
Brahmins and Rajputs	15	64	1
Mahrattas	37	19	1
Telingas or Gentoos	...	734	17
Tamil	...	300	14
Other Castes	...	202	70
Total Enlistment	171	2,053	129

The health of British troops in 1879-80 was in some respects less satisfactory than during the previous year. The death and invaliding rates per mille of strength show a decline of 3.30 and 2.84 respectively, but there was an increase of 90.70 in the ratio of admissions. The death and admission rates were 16.03 and 1480.06 per mille of strength against 19.33 and 1389.36 in 1878-79. This increase in admissions was chiefly due to the greater prevalence of malarial fevers, the number of cases of this class having been 1,102 in excess of that for the previous year. About 26 per cent. of the total mortality was due to diseases of the digestive organs. The invaliding rate was 45.39 per mille of strength against 48.23 in 1878-79, and somewhat in excess of the usual proportion. Venereal diseases caused much inefficiency. There were 39 cases of cholera and 26 deaths against 48 cases and 31 deaths in 1878-79; 33 cases and 21 deaths occurred at Thayetmyo and at Kamptee and Tayrangoon. Prior to the outbreak at Thayetmyo cholera prevailed in the neighbouring villages, and diarrhoea of a severe type was common amongst the troops. The first case amongst the troops happened on the 22nd June and the last in September. The usual sanitary precautions were adopted, and the removal of the affected into camp was attended with marked benefit. The army was entirely free from small-pox. Vaccination was carefully attended to in every regiment. The admissions from malarial fevers numbered 3,186, of which 3,018 were cases of ague and 168 of remittent fever. There was only 1 death from ague, giving a ratio of 0.33 per mille of admissions; but 6 deaths resulted from remittent fever, giving a rate of 35.71 per mille of admissions. The deaths from this cause

during the three past years were 3, 5 and 6, respectively. Ague was most prevalent after the rains, and young soldiers were most liable to it. Enteric fever caused 8 admissions against 6 in 1878-79 and 57 in 1877-78; but this reduction is mainly due to a change in nomenclature, some medical officers having classed cases formerly registered as enteric under the head of remittent or simple continued fever. Of the 8 cases 5 proved fatal, giving a death-rate of 625.0 per mille of admissions. The deaths from diseases of the digestive system were in the ratio of 4.58 per mille of strength against 5.29 in 1878-79. Sunstroke furnished 38 cases and 13 deaths against 32 cases and 21 deaths in the previous year. No less than 13 cases with 2 deaths occurred in the small detachment at Malapuram.

The following table gives particulars for the whole Madras Army (European):—

Circles.		Average strength.	Average daily sick.	Admitted.	Died.	Invalided.	Ratio per 1,000 of strength.			
							Average daily sick.	Admitted.	Died.	Invalided.
Presidency	1878-79	2,036	174	3,170	34	...	85.46	1556.97	16.69	...
	1879-80	1,420	123	2,586	20	...	86.62	1891.55	14.09	...
	Increase	...	...	...	...	...	1.16	334.58	...	...
	Decrease	616	51	484	14	...	...	...	2.60	...
Mysore	1878-79	2,332	155	2,933	33	...	66.46	1257.71	14.15	...
	1879-80	1,849	162	3,150	23	...	87.61	1703.62	12.44	...
	Increase	...	7	217	...	...	21.15	445.91	...	...
	Decrease	483	...	...	10	...	...	...	1.71	...
Hyderabad	1878-79	3,284	230	5,065	74	...	70.04	1542.32	22.53	...
	1879-80	3,086	207	4,388	34	...	67.07	1421.90	11.01	...
	Increase	...	...	...	...	...	...	...	...	...
	Decrease	198	23	677	40	...	2.97	120.42	11.52	...
Burmah	1878-79	1,934	94	2,333	41	...	48.60	1206.31	21.20	...
	1879-80	2,974	166	4,020	60	...	55.82	1351.71	22.19	...
	Increase	1,040	72	1,687	25	...	7.22	145.40	0.99	...
	Decrease	...	...	...	...	...	...	...	...	...
Depôts	1878-79	605	42	790	13	...	69.42	1305.78	21.50	...
	1879-80	695	48	801	14	...	69.06	1152.52	20.14	...
	Increase	90	6	11	1	...	0.36	153.26	1.38	...
	Decrease	...	...	...	...	...	...	...	...	...
On the march	1878-79	154	4	82	5	...	25.97	532.46	32.46	...
	1879-80	264	10	182	8	...	37.88	639.39	30.30	...
	Increase	110	6	100	3	...	11.91	156.93	...	...
	Decrease	...	...	...	...	...	...	...	2.16	...
Total	1878-79	10,345	689	14,373	200	499	67.57	1389.36	19.33	48.23
	1879-80	10,288	716	15,227	165	467	69.59	1480.06	16.03	45.30
	Increase	...	17	854	...	...	2.02	90.70	...	...
	Decrease	57	...	...	35	32	...	...	3.30	2.84

Health of
Native troops.

The health of the Native Army in 1879-80 was not nearly so good as in either of the two preceding years. The chief diseases were malarial fever, rheumatism, diarrhoea and dysentery, and there were also isolated outbreaks of small-pox and cholera in some circles. The troops serving in the Rampa country suffered very severely, causing much inefficiency and a heavy death-rate; paroxysmal fevers and dysentery of a grave type were prevalent with their usual consequences. The following table gives the general results for the Native Army:—

Years.	Average strength.	Treated.	Died.	Average daily sick.	Ratio per mille of treated to strength.	Ratio per mille of deaths to strength.
1877-78	...	28,225	24,546	329	839	869.65
1878-79	...	26,773	18,822	299	826	703.02
1879-80	...	23,033	29,774	312	1,029	1292.66

The ratio of treated per mille of strength was 589.64 in excess of the rate for 1878-79, and the death-rate for 1879-80 was 2.38 per mille in excess of that for the preceding year. The subjoined abstract shows the sickness and mortality in each of the circles of medical administration:—

Divisions.	Natives.					
	Average strength.	Treated.	Died in hospital from all causes.	Average daily sick.	Ratio per mille of	
					Treated to strength.	Deaths to strength.
Presidency Division	1,859	2,841	20	88	1528.13	10.75
Northern Districts	4,010	8,145	80	236	2031.17	19.95
Southern Division, Malabar and Canara	2,209	1,607	19	89	727.47	8.60
Mysore Division	1,459	1,493	11	51	1023.30	7.53
Ceded Districts	649	1,499	5	45	2309.70	7.70
Hyderabad Subsidiary Force	3,591	2,685	27	116	747.70	7.51
Nagpore Force	2,901	2,632	38	82	907.27	13.09
British Burmah Division	6,355	5,872	112	322	1396.06	17.62
Total	23,033	29,774	312	1,029	1292.66	13.54

The most unhealthy circle was the Ceded Districts, malarial fever having been very prevalent at Bellary. The next in order of unhealthiness were the Northern District and the Presidency, Burmah and Mysore Divisions. The highest death-rates occurred in Nagpore, Burmah, the Southern District and Hyderabad. The most severe outbreak of cholera occurred in the left wing of the 2nd Regiment while on the march from Berhampore to Kamptee. There were in all 244 cases, of which 52 occurred amongst the men and 192 in the families. The deaths were 83, chiefly confined to families and followers. In British Burmah 30 sepoy were attacked and 17 died.

Outbreaks of small-pox took place in the lines of the 12th Regiment at Cuttack and amongst the families of the right wing of the 2nd Regiment while on the march. 80 cases occurred in the former and 28 in the latter regiment.

Eight military lock hospitals were in operation in 1879-80. The following statement shows the number of women treated during each of the past 5 years:—

Years.	Treated.
1875-76	1,549
1876-77	1,605
1877-78	2,660
1878-79	2,943
1879-80	2,705

The decrease in 1879-80 amounted to 238, and was partly due to the closing of the Trichinopoly hospital on the withdrawal of European troops. There were 9 deaths: 7 were from venereal and 2 from other diseases, giving a ratio of 3.32 per mille of treated. Contrasted with the previous year's returns, the lock hospitals of Bangalore, Bellary, Kamptee, and Trichinopoly show a decrease, and those at Cannanore, Saint Thomas' Mount, Secunderabad, and Wellington an increase in the number of women treated in 1879-80. Primary syphilis was very prevalent amongst prostitutes, although in some stations less so than in the previous year.

Ordnance
Department.

The Gunpowder Factory turned out 141,405 lbs. of gunpowder, which was (with the exception of 5 barrels of P. powder, made experimentally from old F.G. powder) manufactured not from fresh materials, but by the conversion of P. powder, which in part had been passed into the service and afterwards condemned, or which never had been passed at all. The barrelling room, press house and glazing house were repaired, and this caused a considerable stoppage in the usual business of the factory, which worked only 274 days. A large reduction was made in the annual outturn of the factory as well as in the establishment. Full reserves were not kept up in the Arsenal, Madras. The amount realized by the sale of condemned and redundant stores, and by payment indents, was about Rupees 37,000, which, but for the restriction placed on the sale of old lead, would have been considerably enhanced. The Ordnance Establishment at Trichinopoly was abolished, and that at Cannanore reduced to 1 warrant officer. At Bangalore and Nagpore the establishments were brought down to very nearly the strength recommended by the Special Ordnance Commission.

Military
Account
Department.

The sanctioned budget estimate for 1879-80 (exclusive of the cost of stores from England) was Rupees 2,99,07,890 and the revised estimate Rupees 2,98,73,037. The actual expenditure (that for the month of March being approximate) was Rupees 3,09,09,041, being in excess of the sanctioned estimate by Rupees 10,01,151, and of the revised by Rupees 10,26,004. The chief causes which led to the excess over estimated expenditure were (a) the extra charges incurred by the location of additional troops in Burmah, amounting to about 7½ lakhs of rupees; (b) the employment of troops to quell the Rampa disturbance, the expenditure on which account amounted to over a lakh; (c) the payment of difference of pay and allowances (Rupees 46,738) to subaltern officers of British Cavalry and Infantry; and (d) the value of

huts (Rupees 29,646) of native corps and detachments which moved without relief. On the other hand, while the sum of Rupees 12,00,000 was provided in the sanctioned budget estimate on account of the Kabul expedition, the probable expenditure, so far as this Presidency was concerned, amounted to about 7½ lakhs (that for the month of March being approximate). There was also a decrease of about 4 lakhs, owing to the transfer of H.M.'s 67th and 33rd Regiments of Foot to the Bengal Presidency. The actual expenditure during the year 1878-79 amounted to Rupees 3,07,11,633. The unadjusted balance of advances (the greater portion of which will probably be adjusted in supplementary accounts) up to 31st March 1880 amounted to Rupees 4,54,899.

The value of stock in the Army Clothing Department on the 1st April 1879 was Rupees 7,28,776-9-9, the receipts during the year were Rupees 5,41,740-4-3, the expenditure was Rupees 5,97,496-11-8, and the balance at the end of the year Rupees 6,73,020-2-4. The value of stores indented for on England was Rupees 4,92,261 and the cost of establishment Rupees 78,388-15-7. The number of garments made up was 71,063.

On the 31st March 1880 there were 29,970 military pensioners of all grades and classes borne on the registers of the office, whose pensions aggregated Rupees 20,29,841, showing a decrease of 229 pensioners during 1879-80 as compared with the previous year, but an increase in the amount of pensions of Rupees 10,078. This increase was chiefly attributable to casualties which occurred amongst the lower grades and the enhanced rates of pension granted to native commissioned officers in 1878. The number of family certificates granted by troops and departments amounted to 139,880, and the sum paid on them was Rupees 9,26,752, showing an increase in number, as compared with 1878-79, of 52,708 certificates, and in money of Rupees 3,68,585. This large increase was owing to the family certificates granted by troops which proceeded on service to Afghanistan and Burmah.

Mutton and beef were supplied at all stations in the Madras Presidency by contract, except at Kamptee and Madras, where favorable terms could not be obtained. Bread was issued departmentally at Kamptee, owing to tenders being unfavorable. At Madras, Bangalore, Secunderabad, Rangoon, Tonghoo, and Thayetmyo Government steam bakeries have been established, and at all other stations bread was supplied by contract. Indian tea was issued to the troops at 9 annas a lb., the previous year's rate being 9 annas 3 pies. The store wastage was under 1 per cent. Rum was supplied by contract at Rupees 1-1-3 per gallon proof-spirit. In 1878-79 the rate was Rupees 1-1-7. The consumption of rum fell to 19,443 gallons from 33,278 gallons in the previous years, owing to the operation of the new canteen rules and

the withdrawal of troops to the frontier. The average per man was -23 per diem.

Transport.

During the year 18 elephants were purchased in Burmah; 200 mules were sent to Jhelum, to be employed on field service, and were replaced by 200 bullocks from Hoonsoor; 350 young bullocks were received from the Amrut Mahal. The mortality amongst camels at Secunderabad amounted to 42·3 per cent. In the Amrut Mahal Cattle-breeding Establishment the births were 62·08 per cent. and the deaths 3·74 against 90·05 and 4·01 respectively in the previous year.

Remount
Depôt.

There remained 553 horses at the Remount Depôt on the 1st April 1879, exclusive of 8 horses attached to the farm; 340 were purchased during the year, making a total of 893. 424 were issued to the service between 1st April 1879 and 31st March 1880, 2 died, and 6 were sold, total 432. The number remaining at the depôt on 1st April 1880 was therefore 461. The horses purchased during the year consisted of 225 Australians at an average price of Rupees 553-14-2, 59 Persians at Rupees 520-5-5, and 56 Northerns at Rupees 468-4-10½, making a total average of Rupees 533-15-6 for 340 horses, or Rupees 5 more per horse than in the year previous. The cost of keep during the year was Rupees 12-4-4 per mensem for each horse. The Australians were selected from 534 horses submitted by four shippers. Out of 94 Persian horses brought to the depôt 57 were purchased. The number of Northern horses imported was comparatively small in consequence of the war in Afghanistan. Out of 240 horses commissioned only 107 were brought, and from these 56 were purchased. The horses were generally good of their class. The annual Remount Committee assembled on the 1st of September and following days for the examination of 501 horses, which were classed as follows:—

Classes.	Horse Artillery.		Field Battery.		Dragoons.		Body Guard.	Light Cavalry.		Total.
	Chargers.	Remounts.	Chargers.	Remounts.	Chargers.	Remounts.		Chargers.	Remounts.	
Australians	23	63	19	116	34	47	6	1	6	320
Persians	...	...	...	...	...	...	...	3	20	23
Northerns	...	...	...	...	1	37	8	3	109	158
Total ...	23	63	19	116	35	84	14	7	135	501

MARINE.

The following table shows the number of vessels entering the ports Shipping of the Presidency, their tonnage, and the dues collected, during the and dues. official year 1878-79:—

Vessels.	Number.	Tonnage.	Dues.
British	2,399	2,825,711	Rs. 1,59,439
	67	67,473	...
Foreign	2,466	2,893,184	1,59,439
	394	105,926	10,988
	340	10,707	...
Native	743	116,633	10,988
	17,247	741,560	24,231
	18,200	966,176	...
Total ...	35,447	7,707,736	24,231
	38,656	4,717,553	1,94,709

The British vessels entering were 2,466 of 2,893,184 tons burden, or an average of 1,173 tons. Of these 2,399 paid port dues at the rate of 11 pies per ton, and 67 vessels entered ports where no dues are levied. 349 foreign vessels, aggregating 10,707 tons, and 18,200 native craft, aggregating 966,176 tons, entered ports where no dues are levied. The foreign vessels are mostly small craft from the Persian Gulf and Arabia &c. and frequent ports on the Western Coast. 349 foreign vessels entered at ports where no dues are levied, and of these no less than 330 entered at ports in South Canara, principally at Barkur. The average burden of the foreign vessels on which dues were leviable was 156 tons, and they paid 20 pies per ton in dues. The average burden of the country craft was 48 tons, and including all entering vessels the dues were 3 pies per ton, but a great number of these visit ports where no dues are levied, and if these are deducted, the rate on the remainder is 6 pies per ton. At the ports where dues are levied the rate authorised is 2 annas per ton, except at Madras, Cocanada and Coringa, Tuticorin, Cochin, Calicut and Beypore, where 3 annas are levied. The dues collected were 0·103 per cent. of the value of imports and exports at all ports, and 0·111 on Rupees 17,41,90,628, the value of the trade of the places at which port dues are levied.

Weather.

On the 19th May 1879 the weather became very suspicious and continued to get worse. In consequence the shipping at Madras were ordered to put to sea on the 20th. The centre of the storm passed northwards during the night of the 20th, without doing any damage at Madras, but it afterwards took a westerly direction, and warning was consequently given to the principal ports on the West Coast. Great damage was done among the shipping there. The *Fattay Allam* was lost at Cochin, and a very large number of native craft at ports further north. On the 14th November again there were palpable indications of approaching bad weather, and it was eventually predicted that the nucleus would pass north of Madras. Warnings were accordingly given the Port Officers of Northern Ports to be prepared. The centre struck the coast in the Nellore District near Armeghon, and the country in the vicinity was flooded for some days. Some damage was also caused to the Armeghon Lighthouse, and the influence of the storm was severely felt as low down as Pulicat.

Native
Passenger
Ships Act
VIII of 1876.

There has been considerable friction between the local Agents of the British India Steam Navigation Company and the Marine Department regarding the working of this Act. The former complained that whilst the steamers running from Rangoon to Negapatam direct were allowed to carry deck passengers in all seasons without provision of space in between decks, the latter department declined to allow deck passengers to be carried from Madras ports on long voyages. Again in the matter of "substantial bulwarks" licenses were refused for vessels not so provided, and "cabin accommodation" has always been excluded in Madras measurements for space to be allotted for native passengers. These and other questions have now been partially disposed of. Vessels with a freeboard of not less than 5 feet are permitted to use canvas screens in lieu of "substantial bulwarks," but the Government do not consider them sufficient protection in the case of a cyclone, and it is suggested that during foul weather seasons some space in the between deck should be reserved for deck passengers. The Government of India have ruled that cabin accommodation is not to be included in the space considered as between decks under this Act. It has also been decided that voyages between ports on the Coromandel Coast and Chittagong, and ports south of Chittagong, shall be reckoned "Long voyages."

Wrecks and
casualties.

56 vessels were lost against 24 last year; of these 42 stranded, 6 collided, 4 foundered. Two Courts of Inquiry were held, one in the case of the British Barque *Fattay Allam* and the other in the case of the P. and O. Steamer *Hindustan*.

Pamban
Channel.

Sanction has been accorded for the levy of port dues in the Pamban Channel at the rate of 3 annas per ton. This change will come into operation on 1st April 1880. In future these dues will be credited to

Port Fund, and the maintenance charges will henceforth be met from the same source. 2,143 vessels, aggregating 228,087 tons, passed through the channel against 1,618 last year. The Government four-fifth share of the pilotage amounted to Rupees 17,010, showing an increase of Rupees 5,224 on last year's collections. The passenger traffic between Madura District and Ceylon has not been as brisk as usual. The sailing ship passenger trade with Burmah is now almost entirely superseded by steamers, seven of which touched at this port, and conveyed 4,834 passengers to Rangoon. From Tuticorin 22,465 passengers went to Ceylon and 36,140 returned.

The net Port Fund balance, which stood on the 31st March 1879 at Port Fund. Rupees 5,14,657, increased to Rupees 6,03,565 on the corresponding date in 1880, while the charges, as compared with the preceding year, fell by Rupees 15,169. Proposals are now before the Government of India for making Port Funds bear all but exceptional demands. The balance will probably therefore be greatly reduced.

The number of officers (23) and subordinates (379) employed in the Marine Department was the same as in last year, and the charge was Rupees 1,41,289 as against Rupees 1,43,657.

AGRICULTURAL PROTECTION.

A sum of Rupees 2,00,000 was sanctioned for advances under this Act Land Im- in the budget of 1879-80, but the amount actually advanced was only Rupees 1,325, and it was restricted to the Tinnevely district. No appli- cations for advances were received in any other district, a fact which is evidence of a general reluctance on the part of the ryots to accept the terms offered. The Collector of Bellary reports that the large loans taken up by ryots in the famine years were more due to their anxiety to secure means of subsistence during the distress than to any desire to effect improvements in their lands. The sum advanced during the year, viz., Rupees 1,325, is exclusive of the advances made to the Sivaganga and Ramnad Zamindars against the loans of Rupees 1,50,000 and Rupees 2,00,000 respectively sanctioned for the repair of irrigation works in those estates. Including the advances made during the preceding year, the amount paid to Sivaganga was Rupees 76,000, while the whole amount of the loan to Ramnad had been paid when the year expired; this was a special grant, not made under the Land Improvement Act or Rules.

The following statement shows the advances outstanding at the commencement of the year, those made during the year, and the amounts recovered, in the several districts:—

Districts.	Total amount of advances outstanding at the beginning of the year 1879-80.		Advances made during the year 1879-80.	Amount recovered during the year.	
	RS.	A. P.	RS. A. P.	RS.	A. P.
Ganjam	991	5 4	...	504	5 4
Vizagapatam	...	...	...	...	...
Godavari	...	...	...	...	...
Kistna	650	0 0	...	450	0 0
Nellore	1,12,306	15 2	...	61,265	9 1
Cuddapah	68,267	1 4	...	18,834	7 0
Bellary	3,58,422	1 4	...	1,23,683	0 6
Kurnool	17,279	0 0	...	8,818	0 0
Madras	250	0 0	...	250	0 0
Chingleput	1,25,628	0 0	...	36,859	0 0
North Arcot	79,312	0 9	...	39,827	2 0
South Arcot	20,163	4 8	...	9,537	14 2
Tanjore	...	...	...	...	...
Trichinopoly	...	...	...	...	...
Madura	69,410	8 11	...	41,719	0 0
Tinnevely	10,692	14 4	1,325 0 0	9,260	1 2 ⁿ
Coimbatore	59,186	6 2	...	16,041	12 8
Nilgiris	347	0 0	...	100	0 0
Salem	96,886	8 8	...	56,056	5 1
South Canara	...	...	...	...	...
Malabar	5,000	0 0	...	5,000	0 0
Total	10,24,795	2 8	1,325 0 0	4,23,244	9 0

On the whole Rupees 4,23,244 were collected against the outstanding balance of Rupees 10,24,795.

Destruction
of wild
animals.

During the year 1,057 wild animals were destroyed against 1,031 in 1878-79. Particulars are given below :—

	1878-79.	1879-80.
Elephants	...	1
Tigers	179	125
Panthers	618	667
Bears	119	124
Wolves	13	19
Hyænas	102	121
Total	1,031	1,057

Two notorious man-eating tigers were killed in Malabar, and a special reward was offered in Bellary for the destruction of a man-eating tiger or panther which infested the Hospet taluk. The Collectors of Godavari, Nilgiris, and South Canara remark that fewer animals were killed in their districts than in 1878-79—in the first district, owing to the disturbed state of the country consequent on the Rampa rebellion; in the second owing to the operation of the game laws; and in the third owing to the Arms Act, which was for some time erroneously believed by the shikarries to prohibit the use of arms.

The amount of rewards paid was Rupees 16,178 against Rupees 16,838 in the preceding year. The loss of human life and cattle caused by wild animals was greater than in 1878-79, but the loss of crops was less as will be seen from the figures given below :—

	1878-79.		1879-80.	
	NO.	RS.	NO.	RS.
Loss of human life	269	...	312	...
Do. of cattle	9,788	...	11,334	...
Do. of crops, estimated value in.	...	13,876	...	10,311

The loss of human life was greatest in the Malabar district, where no less than 141 persons were killed by wild animals against 29 in the preceding year.

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

Season and
rainfall.

TAKING the whole year, the rainfall in all the districts, except Nellore, Madras, Chingleput, Tanjore, Tinnevely, and Nilgiris, fell below that of the preceding year. 1878-79 was, however, in some respects an abnormal year, and a comparison of the rainfall for the official year 1879-80 with the average of the ten years preceding the famine shows that the season did not differ materially from that of an ordinary year. Under the south-west monsoon, which is of the more importance as affecting a much greater area, the fall was quite up to the average except in Godavari, Kurnool, Trichinopoly, and Madura, and the deficiency in these districts was inconsiderable under the north-east monsoon. On the other hand, the only districts which received a supply up to the average were Godavari, Kistna, Nellore, Madras, Chingleput, Tanjore, and the two West Coast districts; throughout the rest of the Presidency the rainfall was deficient, and markedly so in the Ceded Districts, the west, centre and southernmost districts; in those parts the failure was greater even than in the previous year, when there was a deficient north-east monsoon. On the whole the season, though it varied greatly in different districts, cannot be regarded as generally favorable. A statement showing the rainfall of each district under the two monsoons as compared with that of the preceding 3 years and the average of the previous 10 years is subjoined:—

PRODUCTION AND DISTRIBUTION.

139

Districts.	South-west monsoon.					North-east monsoon.					Total.				
	Average of ten years from 1860-67 to 1875-76.					Average of ten years from 1860-67 to 1875-76.					Average of ten years from 1860-67 to 1875-76.				
	1876-77.	1877-78.	1878-79.	1879-80.		1876-77.	1877-78.	1878-79.	1879-80.		1876-77.	1877-78.	1878-79.	1879-80.	
Ganjam ...	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
Vizagapatam.	29'19	27'17	23'72	30'83	30'55	11'55	14'00	4'13	32'53	9'81	40'74	41'74	32'85	63'41	40'36
Godavari ...	27'93	20'00	27'65	33'63	30'23	13'29	16'14	6'19	34'97	10'79	41'22	36'14	33'84	65'65	41'07
Kistna ...	24'85	21'79	20'04	40'16	22'57	11'86	4'43	7'14	22'47	13'09	36'71	26'22	27'18	62'03	35'03
Nellore ...	20'30	15'63	20'67	33'29	24'67	10'09	4'53	10'11	15'18	13'37	30'39	20'16	30'78	48'47	38'54
Cuddapah ...	12'36	8'55	21'70	17'55	14'43	20'07	3'77	18'08	11'86	23'94	32'43	12'32	39'78	29'41	38'37
Bellary ...	17'34	7'23	17'61	25'37	17'84	10'72	1'98	7'42	8'87	7'26	23'06	9'21	25'03	34'24	25'10
Kurnool ...	15'83	7'05	16'63	24'05	21'09	6'58	0'70	10'50	8'76	3'19	22'41	7'75	27'18	32'81	24'21
Madras ...	21'52	7'56	15'70	33'52	19'13	5'82	1'18	6'55	11'80	3'54	27'34	8'74	22'25	45'32	22'07
Chingleput...	18'11	15'03	30'49	18'55	17'97	36'50	6'49	35'78	12'79	38'60	54'61	21'52	66'27	31'34	56'67
North Arcot.	18'51	15'91	23'72	23'34	22'19	21'38	5'67	20'58	9'59	26'11	39'89	21'58	44'30	32'93	48'30
South Arcot.	19'27	15'63	21'29	27'52	19'20	14'54	2'77	17'52	13'21	12'36	33'81	18'40	38'81	40'73	31'66
Tanjore ...	17'86	17'53	19'21	22'87	21'00	20'39	7'55	26'04	14'01	11'44	38'25	25'08	45'25	56'33	32'44
Trichinopoly.	14'70	13'01	13'55	17'13	22'17	23'18	15'37	37'06	13'96	23'16	37'88	23'38	50'61	31'09	45'32
Madura ...	17'45	17'55	14'23	22'14	16'46	19'66	5'49	24'15	11'34	10'21	37'11	23'04	38'38	33'43	26'67
Tinnevely ...	13'60	10'62	12'56	20'73	12'05	15'24	8'20	33'59	11'78	11'58	28'84	18'82	46'15	32'51	23'63
Coimbatore...	6'35	5'84	7'15	11'16	10'60	21'64	12'98	42'36	14'37	16'32	27'09	18'62	49'51	25'53	27'01
Nilgiris ...	12'77	14'39	12'69	16'97	13'69	11'09	3'75	18'11	10'40	6'54	23'86	18'14	30'80	27'37	20'23
Salem ...	24'07	21'63	29'34	26'34	32'55	26'45	15'26	38'19	17'43	20'71	50'52	36'89	67'53	43'77	53'26
South Canara.	19'54	14'86	18'82	25'18	21'56	10'60	3'81	18'31	12'59	7'06	30'14	18'67	37'13	37'77	28'63
Malabar ...	124'83	115'76	118'67	163'22	134'35	11'71	1'70	14'74	15'34	12'87	136'59	117'46	133'41	178'56	147'22
	93'78	78'93	96'11	125'59	91'49	13'16	4'26	27'38	20'60	16'61	106'34	83'19	123'49	146'19	108'10

The season was decidedly favorable to cultivation in the districts of Ganjam, Vizagapatam, Madras, Chingleput, Nilgiris, South Canara, and Malabar, except in some parts of Ganjam, Chingleput, and South Canara. In 4 (Ganjam, Vizagapatam, South Canara, and Malabar) out of these 7 districts the rainfall was less than that of the preceding year, but it was up to the average, and the quantity that fell was sufficient, timely, and well distributed. In the districts of Godavari, Kistna, Nellore, Cuddapah, Tanjore, and Tinnevely the season was, though not adverse, not altogether propitious, for although the total rainfall of the year exceeded the average (except in Godavari, Tinnevely, and Cuddapah, where it was not far below it), the rains were partial and unequally distributed over the year, and cultivation suffered to some extent except under river and spring channels and tanks fed by them. In the remaining districts of Bellary, Kurnool, North Arcot, South Arcot, Trichinopoly, Madura, Coimbatore, and Salem the season was more or less unfavorable. The north-east monsoon was deficient and the rainfall generally was partial and insufficient. The subjoined statement shows the rainfall distribution during the several months of the year in comparison with the figures for the preceding 3 years and the average of the previous 6 years:—

	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	Total.
GANJAM.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
Average of 6 years ending													
1875-76	1.14	1.91	6.25	6.27	6.75	9.09	9.74	1.49	0.54	0.22	0.11	0.52	44.00
1876-77	0.39	2.01	3.39	4.51	7.08	9.79	9.05	0.04	...	0.75	2.36	1.80	41.17
1877-78	2.64	...	1.30	3.66	4.82	6.44	2.00	0.17	0.07	...	0.13	0.62	23.94
1878-79	0.28	2.66	1.45	6.69	12.87	6.93	12.89	5.57	13.02	...	0.11	0.92	63.41
1879-80	0.01	5.82	2.02	6.74	8.54	7.42	4.65	3.12	0.97	0.07	0.97	0.03	40.36
VIZAGAPATAM.													
Average of 6 years ending													
1875-76	0.81	2.11	4.60	5.33	5.97	8.01	10.68	1.55	0.92	0.09	0.28	0.30	40.65
1876-77	0.12	1.44	3.83	2.61	6.24	5.76	10.49	0.42	...	1.13	1.95	2.15	36.14
1877-78	1.56	9.01	2.08	4.17	3.23	7.60	3.88	0.12	0.04	...	0.63	0.63	32.32
1878-79	0.66	3.98	3.59	9.17	9.69	6.59	11.99	4.12	18.57	...	0.07	0.22	68.65
1879-80	0.06	8.73	4.75	4.57	6.61	5.56	4.70	4.92	0.19	0.35	0.61	0.02	41.07
GODAVARI.													
Average of 6 years ending													
1875-76	0.39	2.01	4.08	6.24	4.98	8.58	10.48	1.51	0.38	0.11	0.18	0.34	39.28
1876-77	0.03	1.09	2.78	5.15	7.96	4.78	1.29	0.05	...	0.92	1.35	0.82	26.22
1877-78	0.39	5.01	1.68	3.11	3.83	6.02	6.14	0.17	0.01	...	0.01	0.01	26.37
1878-79	0.79	2.56	4.07	13.12	10.52	9.10	14.43	4.40	3.52	...	0.12	0.12	62.63
1879-80	...	5.21	6.21	3.28	5.53	2.34	6.81	6.25	...	0.01	0.02	...	35.66
KISTNA.													
Average of 6 years ending													
1875-76	0.21	1.47	2.99	4.85	5.00	6.77	8.54	1.61	0.28	0.47	0.05	0.34	32.58
1876-77	0.07	1.00	3.71	2.82	5.75	2.28	0.24	0.51	...	0.68	0.48	2.62	20.16
1877-78	0.31	5.32	1.19	3.64	3.52	6.69	6.37	1.03	0.09	...	0.02	0.02	28.18
1878-79	0.88	1.99	4.13	11.44	8.71	6.14	12.62	2.26	0.20	...	0.10	0.10	48.47
1879-80	...	5.14	5.89	2.51	8.97	2.16	5.75	7.74	0.13	...	0.25	...	38.54
NELLORE.													
Average of 6 years ending													
1875-76	0.13	1.45	1.43	3.04	3.45	4.82	11.07	7.65	2.32	0.35	0.57	0.19	36.47
1876-77	0.04	1.23	2.02	0.88	3.65	0.67	0.17	1.47	...	0.17	0.30	1.66	12.32
1877-78	0.17	6.67	1.56	0.85	0.98	4.81	9.61	4.33	2.48	...	...	...	31.46
1878-79	0.56	1.08	0.72	4.54	5.56	5.09	4.41	2.60	3.13	1.02	0.21	0.49	29.11
1879-80	...	4.28	2.17	2.52	3.31	2.15	12.66	11.02	0.12	0.11	0.03	...	38.37
CUDDAPAH.													
Average of 6 years ending													
1875-76	0.23	2.62	2.44	2.99	4.09	7.00	7.97	2.44	0.69	0.13	0.15	0.22	30.97
1876-77	0.20	0.35	1.50	6.92	3.64	0.62	0.10	0.55	...	0.18	0.02	1.13	9.21
1877-78	0.15	3.89	3.36	1.10	1.90	7.21	6.01	1.34	0.28	...	0.10	0.10	25.34
1878-79	0.51	1.07	2.76	7.20	6.36	7.47	4.41	2.78	0.63	0.17	0.52	0.36	34.24
1879-80	0.07	5.91	2.40	4.01	2.78	2.67	5.45	1.81	...	...	...	...	25.10
BELLARY.													
Average of 6 years ending													
1875-76	0.54	2.63	2.96	2.60	3.49	5.91	6.41	0.71	0.22	0.06	0.01	0.14	25.77
1876-77	0.38	0.39	2.71	0.97	1.14	1.46	0.26	0.05	...	...	0.39	7.75	...
1877-78	0.49	1.90	3.68	2.02	2.04	6.55	8.40	1.00	0.71	...	0.05	26.84	...
1878-79	0.61	1.98	3.03	4.94	6.97	6.52	6.05	2.06	0.07	...	0.41	0.17	32.81
1879-80	0.28	6.08	2.19	5.92	3.83	2.79	2.37	0.63	...	...	0.19	...	24.23
KURNOOL.													
Average of 6 years ending													
1875-76	0.29	2.05	3.29	5.32	4.19	8.37	5.24	0.74	0.34	0.04	...	0.14	30.01
1876-77	0.24	0.08	2.04	0.82	3.06	1.32	0.07	0.16	...	...	...	7.95	8.74
1877-78	0.36	2.37	2.19	0.82	2.20	7.76	4.94	1.56	0.10	...	0.38	21.68	...
1878-79	1.26	1.26	2.34	8.93	12.36	7.37	6.79	4.66	...	0.35	...	45.32	...
1879-80	0.04	3.34	4.03	2.84	6.28	2.60	2.49	1.05	...	...	...	22.67	...

	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	Total.
MADRAS.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
Average of 6 years ending													
1875-76	0.63	2.09	3.17	4.58	4.84	6.08	14.34	16.27	4.37	0.10	1.10	0.39	57.96
1876-77	0.71	1.19	3.10	3.77	3.00	3.26	1.04	5.30	0.11	0.01	...	0.03	21.52
1877-78	...	21.27	2.36	1.22	2.49	3.15	8.56	21.25	5.86	0.11	...	...	60.27
1878-79	0.34	1.60	0.12	4.80	5.62	6.07	6.26	2.10	1.63	1.30	...	1.50	31.34
1879-80	...	4.42	2.10	4.30	6.61	4.54	18.23	10.91	4.33	2.65	2.40	...	56.57
CHINGLEPUT.													
Average of 6 years ending													
1875-76	0.45	2.82	2.72	3.94	5.32	6.17	9.66	12.14	2.84	0.26	1.69	0.21	48.22
1876-77	0.36	0.80	2.43	3.90	2.94	5.48	0.41	4.86	...	0.15	0.05	...	21.53
1877-78	...	9.62	2.73	1.00	3.18	7.19	8.13	9.22	2.74	0.24	...	...	44.05
1878-79	0.56	1.53	1.97	4.12	8.29	6.87	84.21	2.03	1.19	0.78	...	1.38	32.93
1879-80	...	4.61	3.58	4.44	7.61	1.95	12.94	8.89	1.76	1.26	1.26	...	49.30
NORTH ARCOT.													
Average of 6 years ending													
1875-76	0.32	4.47	2.53	3.46	5.26	7.51	7.83	5.81	1.34	0.28	1.03	0.50	40.34
1876-77	0.20	2.21	3.15	3.14	2.75	4.18	0.72	1.58	...	...	0.01	0.16	18.40
1877-78	0.44	4.58	2.91	0.90	2.52	9.94	10.26	5.03	1.77	...	0.05	0.05	38.40
1878-79	0.91	1.61	2.78	5.63	10.95	5.64	4.80	3.72	1.31	1.46	0.52	1.40	40.73
1879-80	0.23	4.62	4.44	4.43	2.86	2.62	8.27	3.35	0.15	0.21	0.38	...	31.56
SOUTH ARCOT.													
Average of 6 years ending													
1875-76	0.97	3.35	1.79	3.16	6.27	6.51	8.19	9.62	3.11	0.25	1.35	0.20	44.77
1876-77	1.27	1.81	2.49	2.53	6.17	3.26	2.21	4.88	0.46	...	...	...	25.08
1877-78	0.21	6.57	1.34	1.36	1.26	8.47	9.80	8.48	7.45	0.31	...	...	45.25
1878-79	0.77	2.21	2.33	2.93	6.62	8.01	2.80	7.46	1.27	0.91	...	1.57	36.88
1879-80	0.27	1.47	4.29	6.29	4.36	4.32	5.91	2.69	1.87	0.63	0.34	...	32.44
TANJORE.													
Average of 6 years ending													
1875-76	1.87	2.75	1.88	2.43	4.00	4.34	8.28	10.21	4.67	0.71	1.50	0.25	43.49
1876-77	0.24	3.00	0.88	0.71	5.83	4.34	8.28	10.21	4.67	0.71	1.50	0.25	43.49
1877-78	...	3.68	1.27	1.78	1.20	5.62	10.29	10.98	13.51	0.17	...	0.05	28.38
1878-79	0.61	1.63	1.41	1.61	5.93	5.94	4.00	5.54	1.98	0.21	...	2.23	31.09
1879-80	0.67	1.21	2.88	5.09	6.14	6.18	9.19	4.32	7.91	0.72	0.99	0.02	45.32
TRICHINOPOLY.													
Average of 6 years ending													
1875-76	1.42	2.44	2.01	1.88	4.49	4.32	8.34	6.50	2.14	0.35	0.95	0.10	34.94
1876-77	0.52	4.33	1.06	2.49	4.92	4.23	1.36	2.03	1.58	...	...	0.52	23.04
1877-78	0.19	3.92	0.88	0.48	1.19	7.57	11.46	5.26	5.46	1.45	...	...	37.86
1878-79	3.27	3.15	1.07	4.72	4.24	5.69	4.90	2.98	0.92	0.25	...	2.29	33.48
1879-80	1.61	1.40	1.25	5.39	2.15	4.66	6.42	2.96	0.41	0.17	0.20	0.05	26.67
MADURA.													
Average of 6 years ending													
1875-76	1.99	1.61	1.30	0.86	2.36	1.83	5.12	5.03	1.44	0.56	1.03	0.60	23.73
1876-77	1.13	2.00	0.73	1.19	3.16	2.41	2.92	1.96	1.60	0.02	...	1.70	18.82
1877-78	1.34	2.40	1.34	1.12	0.49	5.98	13.30	7.49	10.23	0.87	...	0.04	41.49
1878-79	2.18	5.17	1.91	3.21	5.68	2.58	3.08	3.86	1.03	0.02	0.55	3.24	32.51
1879-80	0.88	0.79	0.75	4.40	1.58	3.65	5.62	3.55	1.17	0.60	0.28	0.36	23

	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	Total.
COIMBATORE.													
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
Average of 6 years ending	1.97	2.03	2.07	1.66	2.19	2.69	5.56	3.95	0.56	0.15	0.56	0.52	24.81
1875-76	1.25	5.12	0.56	1.56	3.16	2.74	2.09	0.88	0.13	...	...	0.65	18.14
1876-77	0.97	2.45	2.12	0.39	0.63	5.84	9.81	3.99	3.54	0.13	...	0.01	30.16
1877-78	2.02	3.54	1.57	2.75	3.95	3.14	4.93	2.40	0.66	0.15	0.33	1.87	27.37
1878-79	0.61	3.53	0.65	4.51	1.19	3.20	4.28	1.81	0.23	0.14	...	0.03	20.23
1879-80													
NILOIRIS.													
Average of 6 years ending	3.24	5.90	5.04	3.67	3.29	5.39	9.32	8.55	2.03	1.73	2.07	1.05	50.69
1875-76	2.17	5.73	1.53	4.51	4.54	2.85	6.09	2.16	1.83	0.01	0.54	4.63	36.89
1876-77	1.75	3.03	8.81	1.78	4.49	9.46	14.21	10.13	8.32	0.90	...	0.08	62.98
1877-78	2.32	4.16	3.87	4.70	6.85	4.33	4.54	4.43	4.57	0.07	1.99	1.83	43.77
1878-79	2.66	7.41	5.63	9.57	5.36	5.89	10.43	5.82	2.49	1.06	0.63	0.23	53.26
1879-80													
SALEM.													
Average of 6 years ending	1.26	5.23	2.40	2.70	4.77	6.63	7.22	2.80	1.06	0.07	0.40	0.82	35.30
1875-76	0.51	3.86	1.53	2.22	3.04	3.67	1.25	0.73	0.10	...	...	1.73	18.67
1876-77	0.41	3.37	2.69	1.01	0.94	10.50	11.06	3.64	1.87	0.01	...	0.15	35.55
1877-78	2.14	3.76	3.67	4.79	5.66	5.16	4.90	3.72	0.60	1.04	0.98	1.65	37.77
1878-79	0.87	2.15	1.51	8.43	3.23	5.32	4.70	1.66	0.02	0.46	0.22	...	28.63
1879-80													
SOUTH CANARA.													
Average of 6 years ending	1.09	8.50	38.09	47.57	22.08	14.56	8.55	1.63	10.27	0.82	0.18	0.26	143.60
1875-76	1.67	1.22	34.70	49.35	21.20	7.62	0.95	0.75	...	...	...	...	117.46
1876-77	1.62	1.40	40.67	22.75	33.98	18.25	12.27	1.60	0.97	...	...	...	133.41
1877-78	2.12	6.67	45.23	31.13	46.85	31.22	11.35	2.17	1.82	...	...	...	178.56
1878-79	0.71	25.12	35.84	28.56	34.68	8.44	10.63	1.96	0.27	...	...	0.01	147.22
1879-80													
MALABAR.													
Average of 6 years ending	3.66	9.53	35.42	32.17	11.44	8.51	8.49	3.18	0.77	0.56	0.61	0.61	114.95
1875-76	1.67	2.46	22.27	35.64	11.82	5.07	2.25	1.18	0.08	...	0.14	0.61	83.19
1876-77	2.70	5.00	38.13	10.33	24.26	15.09	20.14	4.22	2.40	0.01	...	0.81	123.69
1877-78	3.62	6.99	36.27	22.18	32.82	23.71	12.61	4.47	1.52	0.17	0.30	1.63	146.19
1878-79	2.06	22.81	17.88	25.76	15.66	7.12	10.28	3.96	1.76	...	0.25	0.36	108.10
1879-80													

The districts of Ganjam, Vizagapatam, and Godavari, which had suffered from cyclones during 1878-79, were free from similar visitations during the year under review, but there was a cyclone in Kistna and Nellore and considerable damage was done by it to tanks and irrigation works in both districts. In Kistna there was also a considerable loss of crops in addition to the loss of many boats, houses, and trees, and some human lives. The cyclone occurred in Kistna on the 19th November 1879 and in Nellore on the 18th and 19th idem. The northernmost taluk of the Chingleput district was also affected to some extent by a storm.

Cultivation. Excluding the districts of South Canara and Malabar, for which information regarding the areas under occupation is not available, the total extent of ryotwari lands cultivated during 1879-80 was 14,617,373

acres against 14,766,834 acres in 1878-79 and acres 16,787,201, the average area cultivated in the 5 years preceding the famine. The decrease compared with the figures of an average year was thus greater during the year under review than during its predecessor, being 12.9 per cent. against 12 per cent. in 1878-79. It is, for the most part, confined to the districts which suffered from the famine, and is most marked in the districts of Cuddapah, Bellary, Kurnool, Madura, Coimbatore, and Salem. The effects of the famine are thus still traceable; the falling off, as compared with the previous year, must be ascribed to the unfavorable character of the season in the districts referred to. A statement showing the percentage of decrease in the extent of cultivation in each district, as compared with the extent cultivated in an average year, is subjoined.

Districts.	Average of 5 years ending 1875-76.	1879-80.	Increase or decrease.	Percentage of increase or decrease.
	ACRES.	ACRES.	ACRES.	
Ganjam	267,078	318,072	+ 50,994	+ 19.0
Vizagapatam	79,182	78,180	- 1,002	- 1.2
Godavari	539,437	546,899	+ 7,462	+ 1.4
Kistna	1,508,399	1,422,195	- 86,204	- 5.7
Nellore	738,512	744,442	+ 5,930	+ 0.8
Cuddapah	1,179,972	944,803	- 235,169	- 19.9
Bellary	2,414,571	1,721,644	- 692,927	- 28.7
Kurnool	1,212,801	841,946	- 370,855	- 30.5
Chingleput	412,497	441,190	+ 28,693	+ 7.7
North Arcot	558,255	493,867	- 64,388	- 11.5
South Arcot	1,036,998	1,085,633	+ 48,635	+ 4.7
Tanjore	937,877	947,068	+ 9,191	+ 0.9
Trichinopoly	845,434	782,171	- 63,263	- 7.4
Madura	784,166	640,783	- 143,383	- 18.3
Tinnevely	1,029,247	950,916	- 78,331	- 7.6
Coimbatore	2,071,192	1,763,029	- 308,164	- 14.8
Nilgiris	54,885	64,393	+ 9,508	+ 17.3
Salem	1,116,695	827,143	- 289,552	- 26.0
Total	16,787,201	14,617,373	- 2,169,828	- 12.9

The area cultivated with cotton shows an increase of 95,465 acres, Cotton. or of 7.8 per cent., compared with the figures for the preceding year, but there is still a decrease amounting to 295,587 acres, or 18.3 per cent., compared with 1875-76, the year preceding the famine. The districts which contributed to the increase as compared with 1878-79 were Godavari, Kistna, Nellore, Kurnool, Madura, Tinnevely, and Coimbatore. The crop suffered generally from insufficient and unseasonable rainfall, and the outturn on the whole was unsatisfactory. In Coimbatore, one of the principal cotton-growing districts, the outturn is stated to have been miserable and the yield per acre very small. A statement showing the extent cultivated in each district for the last five years is given below:—

Districts.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	Increase or decrease as compared with		Percentage of increase or decrease as compared with	
						1875-76.	1878-79.	1875-76.	1878-79.
	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.		
Ganjam	7,723	7,721	8,412	5,165	3,163	4,560	2,002	59.04	38.76
Vizagapatam	13,107	15,957	15,412	12,985	11,815	1,292	1,170	9.85	9.01
Godavari	10,834	9,808	4,495	4,347	7,317	3,517	2,970	32.46	68.22
Kistna	219,267	211,619	183,208	162,608	186,622	32,645	24,014	14.88	14.77
Nellore	18,378	7,370	12,444	14,165	16,357	2,021	2,192	10.93	15.47
Cuddapah	76,074	30,152	41,135	62,835	59,747	16,327	3,088	21.46	4.91
Bellary	385,596	44,713	203,256	258,570	242,194	143,402	16,376	37.19	6.33
Kurnool	243,637	83,519	122,053	131,749	162,680	80,937	27,031	33.23	20.72
Chingleput	3	3	1	2	1	2	1	66.66	50.00
North Arcot	263	214	144	211	72	181	139	72.58	65.87
South Arcot	16,303	9,403	5,173	5,553	4,901	11,402	649	69.94	11.69
Tanjore	4,061	3,536	3,039	4,051	3,305	756	746	18.61	18.41
Trichinopoly	42,691	36,713	42,031	41,986	40,577	2,114	1,409	4.95	3.35
Madura	95,101	73,949	80,703	76,411	101,067	6,566	25,256	6.90	33.05
Tinnevely	281,560	211,406	248,825	253,874	269,573	11,936	10,639	4.22	4.13
Coimbatore	184,517	118,605	146,746	164,210	195,921	11,404	31,711	6.18	19.31
Nilgiris	...	...	...	...	...	...	...	...	...
Salem	12,630	11,506	8,235	13,336	10,207	2,423	3,729	19.19	26.76
South Canara	164	134	153	211	212	48	1	29.27	0.47
Malabar	...	...	...	...	...	...	...	...	...
Total	1,611,918	876,328	1,126,115	1,220,806	1,316,331	-295,587	+ 95,465	- 18.33	+ 7.82

* Inclusive of the area cultivated with other crops as well as cotton.

Indigo. The extent under indigo cultivation increased by 31 per cent. compared with the previous year. The largest increase was in the South Arcot district, where the extent cultivated was more than trebled. This is ascribed to the large demand for indigo in Pondicherry. A statement of the extent cultivated in each district is subjoined.

Districts.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	Increase or decrease as compared with		Percentage of increase or decrease as compared with	
						1875-76.	1878-79.	1875-76.	1878-79.
	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.	ACRES.		
Ganjam	986	58	973	207	...	986	207	100.00	100.00
Vizagapatam	3,803	3,408	2,707	1,907	743	3,060	1,164	80.47	61.03
Godavari	1,730	1,899	1,456	620	786	953	160	54.80	25.56
Kistna	42,975	29,039	27,989	27,506	30,744	12,231	3,238	28.50	11.77
Nellore	57,519	20,200	12,348	31,864	45,636	11,833	13,772	20.66	43.22
Cuddapah	62,824	19,090	36,106	54,088	53,040	8,875	139	14.12	0.25
Bellary	10,358	111	494	3,713	4,819	5,539	1,106	53.47	29.79
Kurnool	40,556	16,902	8,419	24,200	19,112	21,444	5,088	52.87	21.02
Chingleput	5,157	2,570	1,633	2,854	5,434	277	2,580	5.38	90.39
North Arcot	13,728	8,320	6,430	11,503	16,231	2,553	4,778	18.59	41.23
South Arcot	61,318	35,532	35,102	18,752	56,829	4,489	38,077	7.32	203.05
Tanjore	472	490	542	707	432	40	275	8.47	38.53
Trichinopoly	837	424	803	934	961	124	27	14.81	2.89
Madura	72	14	93	169	186	114	17	158.33	16.03
Tinnevely	245	181	201	331	262	117	31	47.75	9.37
Coimbatore	...	...	...	...	...	...	...	...	...
Nilgiris	...	...	...	...	...	...	...	...	...
Salem	2,087	1,932	2,005	779	917	1,170	138	56.66	17.71
South Canara	...	...	...	...	...	...	...	...	...
Malabar	...	...	...	...	...	...	...	...	...
Total	304,676	141,238	137,420	130,140	237,191	- 67,485	+ 57,051	- 22.15	+ 31.67

Districts.		Average of wages per classes of artisans									
		On 30th June.					On the diminished Condition of the people.				
		Able-bodied agricultural laborer.	Sycc or horse-keeper.	Common mason, carpenter, or blacksmith.	Able-bodied agricultural laborer.	Sycc or horse-keeper.	Able-bodied agricultural laborer.	Sycc or horse-keeper.	Common mason, carpenter, or blacksmith.	Able-bodied agricultural laborer.	Sycc or horse-keeper.
		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
15. Madura	✓	1875 ... 6 0 0	1876 ... 7 0 0	1877 ... 20 0 0	1878 ... 6 0 0	1879 ... 7 0 0	1875 ... 20 0 0	1876 ... 6 0 0	1877 ... 7 0 0	1878 ... 20 0 0	1879 ... 6 0 0
16. Tinnevely	✓	1875 ... 6 4 0	1876 ... 6 0 0	1877 ... 14 6 0	1878 ... 6 4 0	1879 ... 6 0 0	1875 ... 14 6 0	1876 ... 6 0 0	1877 ... 6 4 0	1878 ... 6 0 0	1879 ... 6 4 0
17. Coimbatore	✓	1875 ... 4 0 0	1876 ... 6 0 0	1877 ... 15 0 0	1878 ... 4 0 0	1879 ... 6 0 0	1875 ... 15 0 0	1876 ... 6 0 0	1877 ... 4 0 0	1878 ... 6 0 0	1879 ... 6 0 0
18. Nilgiris	✓	1875 ... 7 0 0	1876 ... 8 0 0	1877 ... 25 0 0	1878 ... 7 0 0	1879 ... 8 0 0	1875 ... 25 0 0	1876 ... 8 0 0	1877 ... 7 0 0	1878 ... 8 0 0	1879 ... 8 0 0
19. Salem	✓	1875 ... 2 8 0	1876 ... 5 4 0	1877 ... 16 14 0	1878 ... 2 8 0	1879 ... 5 4 0	1875 ... 16 14 0	1876 ... 5 4 0	1877 ... 2 8 0	1878 ... 5 4 0	1879 ... 2 8 0
20. South Canara	...	1875 ... 7 8 0	1876 ... 6 0 0	1877 ... 20 10 0	1878 ... 7 8 0	1879 ... 6 0 0	1875 ... 20 10 0	1876 ... 6 0 0	1877 ... 7 8 0	1878 ... 6 0 0	1879 ... 7 8 0
21. Malabar	...	1875 ... 7 8 0	1876 ... 7 0 0	1877 ... 15 0 0	1878 ... 7 8 0	1879 ... 7 0 0	1875 ... 15 0 0	1876 ... 7 0 0	1877 ... 7 8 0	1878 ... 7 0 0	1879 ... 7 8 0

The wages of agricultural laborers show an increase in South Arcot, Coimbatore, Salem, South Canara, and Malabar, and a decrease in Ganjam, Nellore, Madras, Tanjore, and Madura, but as these laborers are generally paid in kind, at fixed rates, the fluctuations in the money values above referred to do not indicate any change in their condition. The wages of horse-keepers, who are not a numerous class, show an increase in the districts of Godavari, Cuddapah, Madras, Trichinopoly, Coimbatore, Salem, and Malabar. In the other districts they were either stationary or slightly less than in the preceding year. Wages of artisans, who are generally paid in money, rose in two districts, viz., South Arcot and Coimbatore, and declined in Kistna, Nellore, Bellary, Madras, Tanjore, Madura, and South Canara. Elsewhere they were stationary. The fluctuations are not material.

In many of the districts there are no mines of any importance. Iron Mines are found in parts of Vizagapatam, Godavari, North Arcot, Trichinopoly, Madura, Coimbatore, and Salem, and the native mining industry is generally confined to producing small quantities of this

Black crystals, and garnets occur in parts of Vizagapatam. There are some insignificant diamond mines in Cuddapah. The diamond fields in Kurnool were farmed for one year at a sum of Rupees 150, but do not appear to have been worked. A licence was also made for a lease of these mines in Cuddapah for a term of years, but orders were postponed until the selection of the blocks required. The South Indian Prospecting Association contemplate mining for copper in the Jangamrazh Hills in Cuddapah, and have obtained a lease for twenty years of a block of land for that purpose. The investigations made by Mr. Brough Smyth, the Mining Engineer deputed by the Government of India to examine the auriferous rocks of the Nilgiris and Malabar, established the existence of gold in South-East Wynad and Nanjanad Valley in sufficiently large quantities to render gold mining a profitable industry. Several applications were received for lands for gold-mining purposes, and private capitalists have already subscribed large sums of money with a view to developing the resources of the tracts referred to. No grants, however, were made pending the decision of the Secretary of State as to the terms on which the leases should be granted, which was not received till after the expiration of the year. Under instructions from the Government of India orders have been issued to the effect that in all future settlements of land revenue the right of Government to minerals should be asserted and reserved, or, where this is not possible, the right to put a separate assessment on mineral produce is to be so reserved, and that in all leases and grants of waste lands for cultivation which may hereafter be granted, a condition should be inserted reserving these rights and the right of access and other reasonable conveniences for working the mines. The question of the rights of ordinary ryots in minerals in occupied lands is still under consideration.

Manu-
factures.

Weaving is the principal manufacturing industry. The material used consists chiefly of English yarns, which are both cheaper and finer than country twist. There are three cotton mills worked by steam in Madras, where a large quantity of twist is manufactured, and a weaving establishment is maintained in South Canara by the Basel Mission. Woollen and cotton carpets are manufactured in parts of Godavari, Kistna, and Kurnool, and chintzes and colored cloths in Chingleput and Kistna; some superior work in dyeing cloths is done in Madras, but these industries are not important. Silk is produced in small quantities in Coimbatore; excellent fancy articles in ivory and lacqueredware are made in Ganjam and Vizagapatam and jewellery of good workmanship in Vizagapatam and Trichinopoly. There was a general improvement in the weaving industry, due to the

abatement of the effects of famine and the consequent increased demand for clothing, and the condition of weavers and other classes of artisans was, on the whole, better than in the preceding year.

The effects of the famine were still perceptible in the diminished breadth of cultivation, which, compared with the average area cultivated in a normal year, showed a deficiency of two million acres. The comparative failure of the north-east monsoon contributed in some measure to this deficiency, but the greater portion of it must be ascribed to the crippled resources of the ryots resulting from the famine. The Collector of North Arcot remarks that though there was an increase in the number of puttass there was still a decrease in the total extent of holdings, thus indicating the cautious attempt of the poorer land-holders to recover their agricultural status by taking up only such small portions of land as their reduced means sufficed to cultivate. The condition of the people, however, was, on the whole, fairly good, and the year may be characterized as one of recovery. The considerable fall in prices afforded great relief and the laboring classes were nowhere in want of work. The great pressure applied during the year for the recovery of arrears was fairly responded to, a sign of the general improvement in the position of the ryot, though in some of the districts, notably Kurnool, the effect of the pressure was to bring a larger extent of land to sale and to reduce the value of landed property.

GOVERNMENT AGRICULTURAL OPERATIONS.

The season of the past official year 1879-80 was very favorable generally to agricultural operations and was marked by revived energy in farming pursuits. No extension of the work of this department, however, took place, and its scope remains the same as it was three years ago.

Increased attention has been paid to the School of Agriculture as constituting the principal means by which a real impression on the agriculture of the country may be eventually looked for. The first class of students completed their course of training and 24 received certificates of having passed the examinations of the institution successfully. The Government of Bombay Presidency secured the services of many of the most competent of them as Agricultural Instructors for their Mofussil Schools. An attempt was made to form a fresh class, but it was found impossible to get together a sufficient number. On a suggestion made at the instance of the Director of Public Instruction sanction has however been accorded by Government for opening agricultural classes in 3 mofussil schools as an

experimental measure, but the scheme for working them has yet to be developed.

Agricultural
tours.

The only tour made during the year by any officer of the department was one by the Superintendent. He proceeded on in the month of August to the Cuddapah and North Arcot Districts, and returned convinced that "under favorable circumstances, as in the Cuddapah valley, native cultivation attains a high standard of excellence and that the ryot has not been slow to devise and use implements, which, though of rude and simple construction, are sufficiently well adapted to the conditions under which he tills his land." A party consisting of an agricultural instructor and 2 ploughmen was sent by him to the Trichinopoly District to exhibit to the ryots some of the improved ploughs at work. The exhibition was, however, unsatisfactory owing mainly to the inexperience of the man sent in charge. A repetition of the experiment under the supervision of a thoroughly experienced person has been recommended to Government with a view to remove from the minds of the ryots the unfavorable impression which may have been created.

The Saidapet
Experimental
Farm—
Season.

The total rainfall registered was 56.95 inches falling in 82 days, the average of the previous 10 years having been 50.74 inches collected in 64.3 days. The excess was chiefly due to very unusual rains which fell during January and February. The rainfall was tolerably well distributed except that on few occasions a great amount fell in a very short time and that in September there was a great deficiency. The peculiarities of the season were on the whole more conducive to the growth of forage than of grain crops. In some of the fields, however, the yield of grain was in excess of that obtained in previous years; this was the case with the early sown crops, the late sown crops not having produced much. Cotton, which had on account of the favorable season been sown very early, did not begin to bear until very late, but the indigo crop was on the whole unsuccessful.

—Drainage.

The piece of land drained in the year 1875 and redrained last year gave satisfactory results at first, but during the heavy rains the water in the nullah into which the drainage water is discharged rose several times some feet above the outlet and stopped the action of the pipes. But, although the drainage did not entirely fulfil the object for the sake of which it was undertaken, there can be no doubt that the piece of land has been greatly improved by it. On a portion which never previously produced a fair crop a very fine crop of gram was grown this year. The rotations of crops commenced in the year 1877-78 and referred to in last year's Report were adhered to.

—Area of
land culti-
vated.

At the commencement of the year the extent of cultivable land on the farm available for arable purposes was 142.04 acres. Of this 27.22 acres were laid down in grass for pasturage and remained so

during the year. On the remaining area 37.23 acres of crop were standing on April 1st, 1879; including this the area of crop raised during the year was 227.79 acres. Twelve pairs of cattle were maintained to perform the work of cultivation or one pair for each 19 acres of crop raised; they also performed a good deal of other work.

The area of unirrigated cereal crops raised during the year was small. Black Cholum (*Sorghum saccharatum*) and Planter's Friend (*Sorghum Kaffrarium*) grew well. Irrigated cereal crops were grown on an area of 14.43 acres. Crops of Carolina paddy were sown at different times of the year; but, though every care was taken with them, they failed. With Madagascar paddy better results were obtained. This crop has a very valuable characteristic in that the plants tiller largely, and thus a small quantity of seed will suffice. The crops of white car paddy were satisfactory. The tobacco crop was very successful as regards outturn. The leaf was reported on by competent persons as being fairly cured, even in color, and of good smell, but possessing the fatal characteristics (for a cigar tobacco) of burning slowly, not keeping a light well, and yielding a black ash, all defects which it is believed can be overcome by treatment of the crop. With this object some small experiments have been made with different manures in the Botanical Garden of the School of Agriculture. Samples of the tobacco raised in this manner have been forwarded for analysis. The casuarina trees planted out in 1878-79 have progressed for the most part very favorably and are now nearly safe from the effects of a prolonged dry season. They cost comparatively little for watering and will in a few years largely increase the value of the property; the land they have been planted on is not fit for any other purpose and as fruit and hardwood trees will be planted amongst them it will become a permanent source of revenue. During the season just concluded 9.2 acres of the remaining poor land were planted out, and up to the present the trees have done very well on the whole. The unirrigated cereal fodder crops nearly all gave a low outturn, but, as most of them were simply grain crops that had failed, and were cut out green to make room for some other crop to follow, this is not surprising. With Guinea-grass several very satisfactory cuttings were recorded.

During the past year the following manures were used on the Farm:—cattle-box, sheep, and horse manure, refuse of the slaughter-yards, ashes, crushed bones, and lime. Large sums of money have already been spent on manure both in the form of artificial food supplied to stock and in the purchase of manure, but owing to the original poverty of the soil and also to the extensive levelling operations which have been carried out, much remains to be done before

many of the fields will be fit for regular cropping, and more particularly for experimental work, either in carrying on manuring experiments, or in raising a variety of crops. By getting rid of the poorest land, which has been planted out with the only crop it is fit to produce, the expenditure with this object will be more usefully directed than it has been in former years. During the past year, including one-third of the cost of artificial food supplied to stock debitable to this heading, the total expenditure on manure was Rupees 1,086-13-4, besides the cost of raising the green-manure referred to above. Several experiments were commenced and are being proceeded with, which have for their object the demonstration of the inadvisability of burning cattle dung for fuel.

—Live stock. The cattle were generally very healthy but the sheep flock suffered severely from foot-and-mouth disease. The number of lambs born was 81. Many were sickly.

—Implements. The ploughs imported from Sweden continue to give favorable results whenever deep ploughing is required and when the soil is rather dry. The single stilted plough has been mostly in use; being of very simple construction and at the same time strong and effective it is very well adapted for hard soil, especially as the draught required is moderate. The wooden drag harrow hitherto in use on the farm has been found very effective in reducing clods on heavy and medium soil, but it requires a rather strong pair of cattle to drag it. In order to make this kind of harrow more suited to the native cultivator a lighter one was made up on the farm: the tines instead of being fastened to the frame with bolts and nuts were fastened with screws, whereby the cost was considerably reduced. A harrow of the original pattern cost Rupees 25, whereas the new pattern costs only Rupees 11. A number of new reaping-knives of an improved pattern were made. The cost of the old pattern knives was Rupees 1-8-0 a-piece and that of the new knives is 7 annas. The double mottes continue to give satisfactory results; the only drawback to them is that the repairs of the buckets, ropes, and neck-pieces are rather expensive.

Estate. In April 1879 a piece of land belonging to the farm estate on which it is intended to erect the new slaughter yards was transferred to the Commissariat Department; it measures about 23 acres and is situated about half a mile from the Farm. During the year little was done to improve it, except in completing works already commenced. The buildings were maintained in good order, the cattle-boxes being re-roofed, and such repairs as were necessary executed. The implement workshops attached to the Farm, where improved tools suited to the conditions of the country were manufactured and sold to the public at cost price, were closed during the year under the orders of Government.

The following abstract statement shows the income of the department and the expenditure on various objects during the year:—

	RS.	A.	P.		RS.	A.	P.
Balance on the 1st April 1879				2,29,786	0	2	
<i>Receipts.</i>				<i>Expenditure.</i>			
Provincial grant	20,000	0	0	General Supervision	15,577	10	1
Surplus Pound Fund	44,218	15	7	Saidapet Experimental Farm	9,835	2	3
Saidapet Experimental Farm	2,975	10	0	Implement Workshops	938	9	2
Implement Workshops	1,236	5	4	School of Agriculture	28,798	0	5
				Estate improvements	3,498	13	2
				Compensation for killing diseased cattle in the Nilgiri District	456	2	10
				Balance in favor of the Department on the 1st April 1880	2,32,112	9	8
					2,98,216	15	7

GOVERNMENT HORTICULTURE.

During the official year 1879-80 464 fruit trees, 2,127 timber trees, 8,151 ornamental trees, shrubs, and bedding plants, 4,395 packets of vegetable and flower seeds, 70 bouquets and 182 baskets of cut-flowers were sent out by the gardens, and 1,748 trees, shrubs, and plants and 227 packets of seeds were distributed gratuitously and in exchange with other establishments. The actual receipts were Rupees 3,611-5-8 or Rupees 385-11-4 more than has been realized during any of the previous seven years. Every effort has been made during the year to utilize the resources of the gardens and increase the receipts by rendering them as generally useful to the public as possible. But in a public garden like that of Ootacamund, where upwards of 30 acres of lawns, roads, and flower-beds are maintained in the highest order throughout the year, it must be obvious that the expenditure cannot but continue to be largely in excess of the revenue. The total rainfall was 46 inches and 40 cents, which is 4 inches and 71 cents less than in the preceding year. On the whole the season 1879-80, though somewhat irregular, may be considered as having been favorable for gardening operations.

The operations and planting of the lower garden, which have been in progress during the past four years, are now well advanced towards completion and are beginning to have effect. The chief improvement carried out during the year was the formation of a carriage-stand near the centre of the garden. The principal specimen trees and shrubs have been provided with strong teakwood labels bearing their botanical name and native country lettered in black on a white ground. The gravelling of all the garden walks has been taken in hand, and will be carried on continuously until the whole of them are put in

thorough order. The collection of tender flowering plants, ferns, and ornamental foliage plants in the green-house and conservatory has been largely increased. Many orchids and other uncommon plants flowered in these houses during the year, and are a source of attraction to visitors. In addition to the new works above noticed many other minor improvements have been effected, especially in cultivation and the planting of suitable trees in various parts of the gardens.

Further experience has gone to show that Prickly Comfrey is the most valuable green fodder yet introduced to the Nilgiris. The plants mentioned in last year's Report received no special cultivation, and have continued to yield a constant supply of succulent fodder. Even during the frosty dry months of January, February, and March they gave frequent cuttings, when Lucerne and grasses under similar conditions were completely burned up.

In the autumn of last year His Grace the Governor presented the gardens with a small packet of seed of *Medicago sentillata*, a plant indigenous to the shores of the Mediterranean, where it is recognised as a valuable fodder. From the packet of seed eighteen plants were raised, and are now growing luxuriantly in the nurseries. Prairie Grass and Santung Cabbage are still cultivated with success, and a quantity of seed of each was sent out during the year to Wynad, Bangalore, and other parts of the Presidency. A number of grass seeds were received from Australia last year and have been sown in the gardens, and it is hoped some of them will be found suited to the Nilgiri soil and climate. Upwards of 5,000 plants of *Chinchona ledgeriana* were raised from two tola weight of seed received from the Commissioner of the Nilgiris; these will shortly be handed over to the Chinchona Department. Attention is being especially directed to the stocking of the nurseries with young plants to meet next year's demands. The catalogue of trees, shrubs, seeds, &c., for sale has been carefully revised and enlarged, and to encourage purchasers the prices have been reduced to a figure that will leave but a small margin over the actual cost of production.

A large number of books, seeds, shrubs, trees &c. were presented to the gardens by private individuals.

Sim's Park. Rupees 1,747 were spent on the upkeep of this property. The principal new work taken on hand during the year was the gravelling, draining and completion of the carriage road commenced by the Public Works Department in the early part of last year. The steps at the main entrance, which were of the roughest description, have been dug up and replaced by a flight of sixteen substantial cut-stone steps set in Portland cement. Several other minor alterations and

improvements were also effected. 139 specimen trees of an ornamental character were put out.

The gross receipts from the Barliyár Garden were Rupees 555-15-2, and the expenditure was Rupees 296. The privilege of collecting the fruit and spices of the garden was put up at auction in the Commissioner's office in March 1879 and sold for Rupees 660. A good deal has been done during the year in the improvement of roads, repairs of fences, extension of nurseries, &c. The Cocoa trees continue to thrive and yield remarkably well. 2,250 seedlings were raised during the year. Ipecacuanha has not proved a success; but West African Coffee continues to thrive well.

Rupees 382 were spent on the nursery garden at Kalhatti. The new works carried out during the year were confined chiefly to the formation of new and extension of existing nurseries, and the general overhauling and stocking of the garden with a variety of trees hitherto untried at Kalhatti. Old and useless trees were replaced by valuable kinds. Ceara Rubber and *Chinchona ledgeriana* grew well in these and the Barliyár gardens.

On this garden an expenditure of Rupees 465 was incurred. The medicinal amount credited by transfer for drugs supplied to the Medical Department during the past year was Rupees 414; thus the actual cost of the garden for the year was Rupees 51. The propagation and growth of Jalap has so far been very successful. In addition to Jalap the following plants are being propagated and planted out as fast as young plants can be produced:—Peppermint, Rhubarb, Rosemary, Lavender, Digitalis and Taraxicum; of these the most important are Peppermint and Rhubarb. The Ootacamund climate does not seem favorable for the cultivation of Peppermint, but Taraxicum and Digitalis grow freely.

Rupees 600 were expended on the Stone-House and Sunning Dale gardens, and Rupees 995 on the Upper Norwood property. The flower-beds and lawns were maintained in good order.

GOVERNMENT CHINCHONA.

The following notice is for the official year 1879-80.

The season was favorable to the growth of chinchona. At Naduvattam and Pykara this year like its predecessor was noticeable for the absence of the usual continuous high winds and heavy rain during the south-west monsoon; but on the 12th April 1879 a most violent hail-storm occurred at Pykara, doing great damage to *succirubra* trees on several plots. The frost was not so severe as in the previous year,

although some of the young private plantings within the station of Ootacamund, lying in more exposed sites, suffered to some extent. The rainfall at Naduvatom amounted to 100 inches against 80 in the previous year; that at Dodabetta to 46 inches against 51. The appearance of all the plantations at the end of the year was satisfactory.

No addition was made to the number of trees in permanent plantations; 28,259 *Chinchona succirubra* trees on the Hooker plantation, which were injured by the hail-storm referred to, were uprooted during the year. *Chinchona officinalis* plants are being planted out in lieu of these *succirubra*, as it was found that the former which were intermixed with the latter did not suffer so much by the storm.

The surviving trees on the abandoned Maillkudah plantation were uprooted under the orders of Government.

Thirty acres of chinchona were coppiced. The shoots are doing well on all the plantations. Harvesting under the "scraping" system is now being carried out on a small scale. The experiment of using grass instead of moss has proved a success at Naduvatom.

The whole of the plantations were as usual thoroughly weeded and the weeds buried near the roots of the trees. Several thousands of renovating pits were dug on the Naduvatom and Pykara estates. At Dodabetta terracing was done to about 200 acres to prevent further wash, from which this plantation has suffered greatly owing to the steep incline. The beneficial results of terracing are already perceptible, and it is therefore contemplated to terrace the entire plantation. Roads and drains on all plantations received the necessary attention, and several bridges at Naduvatom which were destroyed during the rains were rebuilt. Manure was applied to 7,716 plants on the Pykara estate, to 1,000 at Naduvatom and to 6,000 at Dodabetta. The issue of plants to the public has greatly fallen off, especially at the Naduvatom plantation, owing to private parties having undertaken their propagation and under-selling the Government. The *calisaya* (Ledgeriana) plants referred to in last year's Administration Report have not done well. Of the 1,000 plants at Dodabetta most have, from some unexpected cause, died away. From the second supply of seed of this variety from Java 7,000 and 4,000 plants were raised at Dodabetta and Naduvatom respectively. These plants are doing well in the heated propagating-houses, but it is feared that they, like others, will die off if put out in the open. Most of the private planters to whom small quantities of this seed were issued have entirely failed in getting it even to germinate. The demand for seed from Ceylon is still great.

179,299 pounds of barks were harvested during the year under report. The total crop, with a balance in store at the beginning of the

year of 4,635 lb., was therefore 183,934, which was distributed as follows:—

Shipped to the Home market	...	...	...	173,539
Supplied to the Madras Medical Stores	...	...	...	2,000
Do. to Bombay	...	...	...	2,000
Do. to Messrs. Smith and Co.	...	...	...	20
In store on 31st March 1880	...	...	...	6,375
Total	...	...	...	183,934

At Naduvatom a new set of permanent cooly lines was started and will be completed this year; the cutcha lines, which were blown down by a storm, had to be renewed, and at Pykara three sets of cooly lines which were accidentally destroyed by fire were rebuilt. A new corrugated iron verandah was erected around the drying shed at the Wood estate in place of the former thatched one. Twenty new huts were completed on the Dodabetta plantations. The supply of labor has improved at Naduvatom; at Dodabetta also labor was plentiful. The receipts for the year amounted to Rupees 3,43,815 against Rupees 4,01,265 in the previous year. The total amount expended was Rupees 79,724 against Rupees 73,682 in 1878-79, giving a net profit of Rupees 2,64,091.

FORESTS.

Some progress towards the formation of reserves has been made during the year, but it is felt on all sides that much cannot be accomplished until the Forest Act becomes law. This, it is hoped, will take place in 1880-81; and it will then become possible to inaugurate a thorough and systematic forest conservancy.

Meantime the Government have sanctioned the proposals of the Forest Reserve Commission as regards South Coimbatore. The latter have concluded their work in Tinnevely and are now engaged in the Madura district.

Some progress was made in the selection of additional tracts for forest reserves by the departmental officers. Eight further reserves in Cuddapah, aggregating 127 square miles, were selected. The general question of reserves in North Arcot, South Arcot, North Coimbatore, and Salem are still in abeyance pending the visit of the Reserve Commission, though in some of these districts tracts have been generally indicated. The areas of certain proposed reserves in Bhadrachalam and Rajapalle in Godavari were curtailed under the orders of Government.

The subjoined abstract shows the quantity and value of timber and other produce felled or collected departmentally as well as the particulars of sales and supplies, during the past official year:—

Description of Timber, &c.	Timber, &c., felled.				Timber, &c., sold.			
	Quantity.		Value.		Quantity.		Value.	
	1878-79.	1879-80.	1878-79.	1879-80.	1878-79.	1879-80.	1878-79.	1879-80.
Teakwood ... { Cubic Feet ...	58,829	43,116	RS. 26,290	RS. 26,225	69,133	30,435	RS. 74,144	RS. 35,723
... { Logs or No. of ...	...	16,950	...	...	...	...	...	...
... { Saplings ...	...	...	...	...	...	...	...	...
Ebony or Black-wood ... { Cubic Feet ...	3,635	668	2,440	265	3,472	122	1,757	56
Rosewood ... { Do. ...	...	...	...	...	...	...	...	...
Sandalwood ... { Maunds ...	4,546	7,937	14,745	25,615	3,207	9,057	13,554	39,223
Redwood ... { lb. ...	18	...	...	...	...	...	...	...
... { Maunds ...	1,65,050	2,56,231	19,165	38,923	1,77,267	2,56,231	32,563	47,670
... { Posts, No. ...	25	...	...	...	...	...	...	...
Other jungle-wood used as timber ... { Cubic Feet ...	57,716	60,861	31,516	38,718	56,364	62,612	36,219	36,473
... { Saplings No. ...	29,003	502	...	...	12,601	...	...	...
Railway fuel and firewood ... { Tons ...	1,234	1,234	4,956	3,297	1,509	1,422	11,083	6,578
Charcoal ... { Cart-loads ...	714	...	...	...	814	...	...	...
... { Do. ...	...	...	...	...	5	...	35	...
Bamboos ... { Cart-loads ...	1,341	16	...	...	1,438	62	...	...
... { Head-loads ...	27	...	...	...	...	...	...	...
... { Ass-loads ...	...	...	2,505	2,403	...	...	2,721	2,274
Forest produce. { Number ...	37,253	35,389	...	...	210	...	...	...
... { Maunds ...	3,143	2,311	...	...	37,265	31,538	...	...
... { Tholams ...	7	237	4,198	3,540	2,782	2,795	6,864	6,061
... { Cart-loads ...	9	...	...	...	...	...	...	...
Total Rupees ...	...	...	1,05,875	1,38,995	...	...	1,80,423	1,93,962

From the above it will be observed that the total value of timber &c., felled and removed during the year amounted to Rupees 1,38,195 against Rupees 1,05,875 last year, and that the sales realized Rupees 1,93,962 or Rupees 13,539 more than in 1878-79. Redwood and sandalwood have been in good demand, but the supply of teak was diminished owing to the reduced requirements of the Public Works Department.

The subjoined abstract shows the total area of fuel reserves in each division, their stocking, expenditure and receipts during and up to the end of the year:—

Divisions.	Area in Acres.									
	At the end of the year.							Equal to fully Stocked.		
	Bare.	One-fifth.	Two-fifths.	Three-fifths.	Four-fifths.	Full.	Total.	Bare.	One-fifth.	Two-fifths.
Cuddapah ...	2,058	2,750	3,450	3,450	7,173	14,400	33,281	...	550	1,380
North Arcot ...	997	300	200	100	1,000	3,020	5,617	...	60	80
South Arcot ...	7,490	12,125	33,128	10,000	...	5,011	67,763	...	2,425	13,251
Trichinopoly ...	1,146	870	311	302	400	1,057	4,176	...	174	124
Madura ...	2,882	14,370	83	...	...	...	17,340	...	2,874	35
Tinnevely ...	4,121	...	...	1,230	...	404	5,755	...	...	...
North Coimbatore ...	...	...	...	13,170	...	...	13,170	...	...	...
Salem ...	1,819	2,600	1,994	1,752	1,610	1,511	11,286	...	520	797
Walliar ...	3024	300	600	1,400	1,400	...	4,002	...	60	240
Total ...	20,824	33,315	30,771	31,404	11,673	25,403	1,62,390	...	6,663	15,908

Bombay and engaged in A
The export
years. Pri
under rev^{is}.
the abur
export

	Area in Acres—continued.				Expenditure.			Receipts.		
	Equal to fully Stocked—continued.				In the year.	Up to the year.	Total.	In the year.	Up to the year.	Total.
	Three-fifths.	Four-fifths.	Full.	Total.						
Cuddapah ...	2,070	5,738	14,400	24,138	RS. 1,900	RS. 34,043	RS. 35,943	RS. 398	RS. 3,193	RS. 3,591
North Arcot ...	60	800	3,020	4,020	625	6,381	7,006	...	50	50
South Arcot ...	6,000	...	5,011	26,637	2,777	23,972	26,749	6,509	12,742	19,251
Trichinopoly ...	181	352	1,057	1,928	773	11,370	12,143	752	3,360	4,112
Madura ...	...	...	...	2,909	280	3,250	3,530	...	3,791	3,791
Tinnevely ...	738	...	404	1,142	260	11,400	11,660	2,075	10,625	12,700
North Coimbatore ...	7,902	...	...	7,902	504	17,974	18,538	...	4,279	4,279
Salem ...	1,051	1,288	1,511	5,167	1,858	28,283	30,141	889	6,304	7,193
Walliar ...	840	1,120	...	2,200	667	49,820	50,393	1,731	5,017	6,748
Total ...	18,842	9,338	25,403	76,154	9,604	1,80,499	1,96,103	12,354	49,361	61,715

The total area of all the reserves and their stocking are nearly the same as those of 1878-79, and the difference in expenditure is too small to call for remark. No serious fires were reported.

The total number of plantations under conservancy during the past year amounted to 81; they are generally situated in the railway districts in close contiguity to the line, as they were formed chiefly for supply of fuel to the railways. The subjoined abstract shows the total area of planted acres according to class, the expenditure and receipts during and up to the end of the year:—

Division.	Range.	Area planted.			Area according to Class.				
		In the year.	Up to last year.	Total.	Timber.	Mixed.	Fire-wood.	Experimental.	Total.
		ACS.	ACS.	ACS.	ACS.	ACS.	ACS.	ACS.	ACS.
Ganjam ...	Goomsur and Surada ...	...	34	34	...	...	...	34	34
Cuddapah ...	Cuddapah ...	6	676	982	...	...	932	50	982
North Arcot ...	North Arcot ...	...	1,069	1,069	...	...	1,044	25	1,069
South Arcot ...	South Arcot ...	...	583	583	...	...	571	11	583
Trichinopoly ...	Trichinopoly ...	117	933	1,050	...	...	1,050	...	1,050
Madura ...	Madura ...	...	22	22	...	...	13	...	22
N. Coimbatore ...	Satyamangalam ...	9	171	180	180	...	...	...	180
S. Coimbatore ...	Collegal ...	...	19	19	...	...	...	...	19
Nilgiris ...	Anamalai ...	...	101	101	...	...	...	...	101
...	Mudumalai ...	...	23	23	...	...	...	...	23
...	Sigur ...	...	...	...	...	...	...	...	...
Salem ...	Ootacamund and Coonoor. ...	60	1,113	1,297	1,297	...	1,173	...	1,297
S. Canara ...	Salem ...	...	5	5	...	...	...	...	5
Nilambur ...	S. Canara ...	...	109	109	...	...	...	...	109
...	Nilambur ...	...	3,363	3,363	3,363	...	...	...	3,363
Total ...		1924	8,502	8,694	3,813	1,173	3,617	901	8,694

Name.		Expenditure.			old.	
Division.	Range.	In the year.	Up to last year.	Total.	In the year.	Up to last year.
		RS.	RS.	RS.	RS.	RS.
Ganjam ...	Goomsur and Surada ...	36	359	395	...	...
Cuddapah ...	Cuddapah ...	383	43,447	43,830	26	449
North Arcot ...	North Arcot ...	2,946	53,169	56,106	925	26,756
South Arcot ...	South Arcot ...	900	38,960	39,860	325	908
Trichinopoly ...	Trichinopoly ...	2,596	46,617	49,213	2,903	8,706
Madura ...	Madura ...	46	4,678	4,724	8	18
N. Coimbatore ...	Satyamangalam ...	2,314	40,988	43,250	...	...
S. Coimbatore ...	Collegal ...	207	4,115	4,322	...	...
Nilgiris ...	Anamalai ...	5,240	59,871	65,111	2,371	30,634
Salem ...	Mudumalai ...	191	2,254	2,445	1	...
South Canara ...	Sigur ...	32	10,829	10,261	...	...
Nilambur ...	Ootacamund and Coonoor ...	21,523	3,45,639	3,67,164	1,82,439	2,07,511
Total ...		36,416	6,50,442	6,86,858	31,631	2,49,910

From the above it will be observed that the total area planted during the year amounted to 192½ acres and is greater than the area planted in 1878-79 by 110½ acres.

The expenditure shows an increase, but the receipts a falling off, which is due to depressed state of timber trade in Bombay and elsewhere.

The subjoined abstract shows the quantity and value of timber &c., removed during the year under this system compared with the results of 1878-79:—

Description of Timber and other Produce.	Measurement or Quantity.	Quantity.		Amount realized.	
		1878-79.	1879-80.	1878-79.	1879-80.
Teak ...	Trees ...	22	...	RS.	RS.
Blackwood ...	Cart-loads ...	7	2	110	...
Other Junglewood ...	Trees ...	2,12,737½	3,14,535	35	10
Firewood and Railway fuel ...	Cubic-feet ...	210	1,309	47,250	51,635
Charcoal ...	Posts ...	356	33,609½	72,693	32,861
Bamboos ...	Cart-loads ...	47,711	2,813½	21,662	...
Forest produce ...	Tons ...	2,295	3,329½	7,912	10,180
	Parahs ...	...	...	...	...
	Cart-loads ...	...	...	...	...
	Head-loads ...	...	...	...	...
	Cart-loads ...	40,578	46,838	24,557	34,153
	Number ...	251	3,036	...	...
	Ass-loads ...	...	...	...	...
	Head-loads ...	...	...	...	...
	Maunds ...	...	1,49,846	27,048	23,524
	Cart-loads ...	52,901	223	...	...
	Head-loads ...	...	401	...	...
Total Rupees ...		...	...	1,79,605	1,74,025

* Charges incurred on Ganday Plantation.

Bombay and Calcutta, mostly for the use of the British troops engaged in Afghanistan.

The exports of cocoanuts show a steady increase during the last few years. Prices, however, have fluctuated considerably, and in the year under review there was a fall of Rupees 11-4-0 per 1,000, owing to the abundance of the crop in Malabar, which supplied the bulk of the exports. Bombay and Cutch were the chief customers for an export trade of 79 million cocoanuts worth Rupees 17,69,732.

There was a large decrease in the export of coir, notwithstanding the great increase in the production of cocoanuts during the year. It is reported that the exports to Bombay this year took the form of cordage spun from coir-yarn. The value of this trade was Rupees 17,62,670 against Rupees 25,78,996 last year. The United Kingdom, Bombay, Bengal, the United States and Portugal were the chief customers.

A decrease under "Foreign Ports" is attributed to a falling off in the number of Arabian ships which visited the Malabar ports.

The trade in timber and wood, and in the manufactures thereof, shows a decline, but not to any material extent. Under this head are included principally teak and sandal. Three-fourths of a trade worth Rupees 11,37,880 went to Bombay.

A decrease in the trade with foreign countries is ascribed to diminished demand on the part of the Arab merchants; and in respect of "Foreign Ports in India" it is due to a decrease in the number of vessels arriving from the State of Cutch. There was, however, an increase in the exports to Bombay and Kurrachee on account of saplings required for the railway to Sibi in course of construction.

The trade in tobacco shows a tendency to expand, and, if proper attention were given to the cultivation and the curing of the raw produce, it would eventually become a prominent article of export. The quantity exported was 7,372,627 cwts. worth Rupees 11,31,370 against 5,223,829 cwts. worth Rupees 11,38,860 last year. The reason of these marked fluctuations in prices is not apparent. Nearly three-fourths went to British Burmah; the remainder chiefly to Bengal, Mauritius and the Straits Settlements.

There is an increase in quantity in the exports to the other Presidencies as well as those to foreign countries. Nearly the whole of the former and more than one-half of the latter were drawn from Godavari District, where excellent tobacco is produced on the islands of the river. The other half of the exports to foreign countries was supplied for the most part by Tanjore, Fort St. George, and Tinnevely.

The trade in living animals is ordinarily subject to great fluctuation, and in the year under review shows a decline of Rupees 3,13,495.

The exports consist of horses, bullocks, cows, sheep, and goats sent chiefly from the districts of Madura and Tinnevely and to some extent from Tanjore, to Ceylon. The decrease is explained as being due to the diversion of the trade to Bombay.

All other articles.

The only articles requiring special notice under this head are oil-cakes, Peruvian bark, tea, myrabolams and ghee.

Oil-cake.

This article is largely exported to Ceylon for the purpose of manuring the coffee plantations and for feeding cattle. The figures for the year under report show a decrease of 9,295 cwts. in quantity and 1,91,271 rupees in value. The decrease is partially owing to the depression of trade there.

Peruvian bark.

The exports of Peruvian bark produced on the Nilgiris amounted to Rupees 4,36,775 and show a considerable increase over the preceding four years. The whole quantity was sent to the United Kingdom from Fort St. George and Malabar.

Tea.

The trade in this article has of late been assuming greater importance and the exports show steady progress during the last five years; they are nearly altogether to the United Kingdom, which took Rupees 2,28,050 worth of a total trade of 208,247 lbs. worth Rupees 2,33,904.

Myrabolams.

The export of this article used for dyeing purposes shows a considerable decrease compared with the previous years, the falling off being attributed to the injury done to the trees in Vizagapatam and Godavari by the cyclone of 1877-78, the disturbances in Rampa which impeded the collection of the produce, and the fact that the quality of the article obtained in certain parts does not find favor in European markets. The exports were practically confined to the United Kingdom and were 60,158 cwts. worth Rupees 2,13,964 against 354,764 cwts. worth Rupees 13,82,790 last year.

visions—

The export of this article shows an extraordinary increase over the preceding year, the value amounting to Rupees 20,32,735 against Rupees 1,78,666. The exports were mostly to Calcutta, the North-Western Provinces and the surrounding districts which usually supply Calcutta with ghee having been drained by the demand for the supply of the troops in the north-west and Madras being largely lent on to supply the deficiency. Large exports to Burmah and Charybay were also unusual.

Exports.

The re-exports of foreign merchandise, ranging only between 1 and 2 per cent. of the total imports, are not of any great importance in the Madras Presidency and have been steadily diminishing since 1874-75. The re-exports to the United Kingdom and Indian ports were mainly from Fort St. George, while those to Ceylon and Straits Settlements were chiefly from Tanjore and South Canara. The

articles re-exported consisted almost exclusively of cotton manufactures, salted fish, animals living, and apparel, the first to Pondicherry, Bengal and Ceylon, the second and the third to Ceylon, and the last to the United Kingdom. The re-exports of colored piece-goods to the Straits fell off by two lakhs. No reason is assigned for this.

It has already been remarked that there was a net decrease in the value of imports in merchandise and treasure amounting to 125 lakhs of rupees. It is the result of a gross decrease in merchandise of 135 lakhs and a gross increase of 9½ lakhs in treasure.

		1878-79.	1879-80.
		Rs.	Rs.
Foreign ...	Merchandise ...	2,99,20,532	3,15,82,658
	Treasure ...	33,91,229	44,07,598
British ports in other	Merchandise ...	4,00,59,111	2,50,81,984
Presidencies.	Treasure ...	3,73,615	3,19,839
Indian ports not Bri-	Merchandise ...	5,54,561	3,78,693
tish.	Treasure ...	30,900	38,925
Total		7,05,34,204	5,70,43,335
		37,93,744	47,06,362
Grand Total		7,43,27,948	6,18,00,697

The very large decrease in the imports from other Presidencies (chiefly due to diminished imports of grain from Bengal) is, to a certain extent, compensated for by increase in imports from foreign countries. The principal articles of imports are noted below. It should here be observed that the revision of the tariff valuation, which was generally towards a reduction of the original valuation, did not materially affect the value of the imports from foreign countries, as the reduction was made good by an increase of quantity:—

Articles.	1878-79.		1879-80.	
	Quantity.	Value.	Quantity.	Value.
Cotton piece-goods ...	68,532,976	Rs. 105,23,407	86,932,037	Rs. 132,60,242
Twist and yarn ...	189,161	95,21,614	93,164	1,20,33,904
Grain—	14,133,540		16,464,319	
Rice ...	2,494,958	1,37,09,053	611,862	27,79,610
Paddy ...	1,868,609	59,89,069	1,038,287	30,32,875
Other grains ...	770,744	42,68,012	572,428	20,85,456
Metals ...	249,412	31,35,682	347,853	35,53,825
Liquors—				
Spirits ...	95,905	10,00,435	100,896	10,03,395
Wines ...	109,981	7,86,096	71,587	5,86,145
Ale, beer, and porter ...	197,176	4,26,352	140,956	8,27,079
Apparel ...		16,08,726		16,77,654
Timber and wood ...		16,66,146		10,40,879
Railway materials ...		16,59,927		5,39,391
All other articles ...		1,62,42,685		1,44,32,890
Total Merchandise ...		7,05,34,204		5,70,43,335

The year 1878-79 (the first after the famine and when its effects were strongly felt in almost every branch of trade) was one of great depression in this as in almost every other class of imports. In 1879-80, however, there was a revival of trade after a fairly good season and stocks were found everywhere deficient. The demand

began to improve to such an extent that it outstripped the supply. The quantity imported was even greater than in 1875-76 though, owing to the reduction in the tariff valuations, the value was less.

In twist the increase is ascribed to increased imports of Turkey red yarn and larger imports of the lower numbers, which are free of duty, while the increase in piece-goods is chiefly in coarser qualities, the importation of which has been stimulated by the exemption of duty. The subjoined statements show the countries which supplied cotton piece-goods and twist :—

Cotton piece-goods.

Countries whence imported.	Denomina- tion.	1878-79.		1879-80.	
		Quantity.	Value.	Quantity.	Value.
<i>Foreign Countries.</i>					
United Kingdom	Yards ...	44,533,292	RS. 64,82,975	61,185,234	RS. 89,52,487
	Number...	145,658	14,645	67,021	10,979
Ceylon	Yards ...	11,042,934	16,46,715	8,499,834	12,36,913
	Number...	15,150	3,496	7,448	2,794
France	Yards ...	123,010	23,370	52,920	15,642
	Number...	7,909	1,947		
United States	Yards ...	48,420	8,970	90,000	19,125
	Number...	72,767	13,973	232,236	43,127
Straits Settlements	Yards ...	253	52	271	165
	Number...	74,820	24,080	122,290	35,107
Italy	Yards ...	3,114	725	3,453	916
	Number...	24	7	124	32
Other countries	Yards ...				
	Number...				
Total	Yards ...	55,958,145	82,00,808	70,185,967	103,03,377
	Number...	169,084	20,147	74,864	13,970
Foreign ports in India	Yards ...	31,200	6,025	21,563	1,887
	Number...	304	38	320	64
<i>Interprovincial Trade.</i>					
Bombay	Yards ...	10,720,317	19,18,761	13,520,714	23,33,796
	Number...	13,571	4,496	17,712	5,006
Bengal	Yards ...	1,754,801	3,56,203	3,182,291	5,94,066
	Number...	712	1,060	268	182
British Burmah...	Yards ...	68,301	14,992	24,102	7,563
	Number...	5,490	877		
Total	Yards ...	12,543,419	22,89,956	16,724,507	29,35,756
	Number...	19,773	6,433	17,980	5,188
Grand Total	Yards ...	68,532,976	105,23,407	86,934,637	132,60,241
	Number...	189,161		93,164	

Twist and yarn.

Countries whence imported.	1878-79.		1879-80.	
	Quantity.	Value.	Quantity.	Value.
<i>Foreign Countries.</i>				
United Kingdom	LB.	RS.	LB.	RS.
	8,481,790	65,60,786	9,847,193	79,76,108
Ceylon	121,076	82,553	69,617	51,208
	6,000	8,200	26,365	35,041
Other countries	10,603	10,968	5,256	4,534
	...	...	...	...
Total	8,619,469	66,62,502	9,948,431	80,66,891
	...	...	...	...
<i>Interprovincial Trade.</i>				
Bombay	5,240,473	25,36,922	5,588,664	28,23,440
	272,504	3,21,253	926,024	11,43,048
Bengal	1,004	937	...	...
	...	...	...	...
British Burmah	...	...	...	...
	...	...	...	...
Total	5,514,071	28,59,112	6,514,688	39,66,488
	...	...	...	...
Grand Total	14,133,540	95,21,614	16,464,319	1,20,33,904
	...	...	...	...

The machine-made twist and piece-goods being fine and at the same time cheap find favor with the people generally and this coupled with the poverty of the weavers in India has tended to a great decline of the local manufactures. The large decrease in the imports from Ceylon seems to be due to the above cause.

The different classes of piece-goods compare as follows :—

Articles.	1878-79.		1879-80.	
	Quantity.	Value.	Quantity.	Value.
Grey Yds.	45,539,084	RS. 62,23,088	58,470,263	RS. 79,46,592
White "	7,734,040	14,51,066	8,842,821	15,79,797
Colored "	15,203,526	28,20,867	19,616,093	37,12,442
Handkerchiefs No.	189,161	26,618	93,164	19,222
Other sorts Yds.	6,326	1,768	5,454	2,183
Total ... { Yds. No.	68,532,976	1,05,23,407	86,934,637	1,32,60,241
	189,161	...	93,164	...

Grey piece-goods, which are mostly used by Natives, form the bulk of the imports.

The value of the imports is the highest on record, excepting the Grain and famine years of 1876-77 to 1877-78, and 1878-79. The increase seems to be due to extensive exports to Bombay, where scarcity was apprehended during the latter part of the year, and consequent deficiency in stock required for local consumption. The subjoined statement shows the countries from which the article was imported :—

Countries whence imported.	1878-79.						
	Paddy.		Rice.		Other grains.		Total.
<i>Foreign Countries.</i>							
Ceylon	CWT.	RS.	CWT.	RS.	CWT.	RS.	RS.
Ceylon	752	3,532	17,830	1,10,947	8,857	53,300	1,67,779
Straits Settlements	295	1,171	8	53	1,263	8,084	9,308
Other countries	15	60	1,390	7,592	721	3,621	11,173
Total ...	1,062	4,763	19,228	1,18,592	10,840	64,905	1,88,260
<i>Foreign ports in India</i>							
Foreign ports in India	12,459	49,444	370	2,243	630	4,217	55,804
<i>Interprovincial Trade.</i>							
Bengal	75,850	2,19,928	1,974,313	1,08,92,821	445,878	23,08,839	1,35,11,688
Bombay	379,028	11,64,203	47,319	2,72,664	151,719	9,36,497	23,73,364
Scinde	...	...	...	...	1,932	9,703	9,703
British Burmah	1,403,210	45,50,731	453,728	24,22,733	159,745	8,53,851	78,27,315
Total ...	1,855,088	59,34,862	2,475,360	1,35,88,218	759,274	41,98,890	2,37,21,970
Grand Total ...	1,868,609	59,89,069	2,494,958	1,37,09,053	770,744	42,68,012	2,39,66,134

Countries whence imported.	1879-80.						
	Paddy.		Rice.		Other grains.		Total.
<i>Foreign Countries.</i>	CWT.	Rs.	CWT.	Rs.	CWT.	Rs.	Rs.
Ceylon	99	31	437	2,356	1,213	6,800	9,487
Straits Settlements	41,390	1,21,150	432	2,350	729	4,116	1,27,616
Other countries	3	10	...	...	8	79	89
Total ...	41,492	1,21,491	869	4,706	1,950	10,995	1,37,192
Foreign ports in India	3,850	11,731	3,345	14,164	5,558	30,855	56,750
<i>Interprovincial Trade.</i>							
Bengal	98,232	2,83,630	479,577	22,17,216	274,925	13,18,351	38,10,256
Bombay	74,955	2,19,797	6,308	30,332	102,693	6,08,815	8,58,944
Scinde	6,250	15,249	49	198	995	4,937	20,384
British Burmah	873,478	23,80,918	121,654	5,12,994	186,305	7,11,503	36,03,415
Total ...	1,052,945	28,99,653	607,588	27,60,740	564,920	26,43,606	83,03,999
Grand Total ...	1,098,287	30,32,875	611,802	27,79,610	572,428	26,85,456	84,97,941

The decrease as compared with the previous year is observable in all countries except in the Straits Settlements, Scinde, and Foreign Ports in India. The increase in the imports from Penang is due to certain exports from Burmah last year having been detained there by stress of weather and brought in this year; while that from Foreign Ports is attributable to a consignment of rice from Bengal having been *en route* landed at Pondicherry on account of an accident.

Metals.

Among the imports of dutiable goods metals come next to cotton twist and piece-goods. The total imports were 347,853 cwts. worth Rupees 35,53,825 and they show an increase of about one lakh in quantity and four lakhs in value over the figures for 1878-79, owing to the revival of trade. The principal metals are iron and copper.

The trade with foreign countries was confined chiefly to the United Kingdom, where alone the increase occurs. Madras is the chief place of importation. There is a decrease in the imports from other foreign countries and from Bombay and Bengal which is due to the fact of large stocks remaining in the several places which respectively trade with them.

Liquors.

The three main divisions under this head are (1) ale, beer, and porter; (2) spirits; and (3) wines.

Spirits.

In spirits the trade this year compares favorably both in quantity and in value with the preceding years; in 1877-78 the imports were abnormally high owing to limited supply in 1876-77. The increase is in a great measure owing to the increased demand for cheap spirits, which are coming more into use among the natives. The present high rate of duty has not checked the imports. 100,896 gallons worth Rupees 10,93,395 were imported.

As usual the different kinds of spirits were largely imported from the United Kingdom. The whole of the imports from France and British Burmah consisted of brandy. Bombay supplied 3,000 gallons of brandy valued at Rupees 34,224, and Pondicherry 1,505 gallons worth Rupees 20,005.

Next to spirits come wines. The imports of wines show a considerable decrease in quantity compared with the preceding four years notwithstanding the reduction of duty on still-wines other than clarets to the rate imposed on clarets, viz., 1 rupee a gallon. The decrease is probably due to the growing use of spirits, whisky having taken the place of beer and higher wines to a great extent. The different wines imported were mostly champagne, claret, port and sherry. 71,587 gallons worth Rupees 5,86,145 were imported. The imports from France consisted chiefly of claret and other sorts, and those from Spain of sherry.

The value of imports of malt liquors, on which only a very small duty is levied, amounted to Rupees 3,27,079 against 4,26,352 in 1878-79. Beer is not consumed by the natives of the country, and the quantity imported is used almost solely by the European and Eurasian population. The decrease is due partly to the withdrawal of troops from this Presidency on account of the Afghan war and partly to the fact that beer is falling into disfavor with Anglo-Indians as a beverage.

The trade in this article, imported chiefly for the use of the European residents, amounted to Rupees 16,77,654 against Rupees 16,08,726 in the preceding year. Madras imported a very large quantity worth Rupees 14,41,877, chiefly from France and the United Kingdom; while Bombay supplied the greater part of the remainder to the Western Ports, especially to Calicut, for eventual conveyance by Railway to the Nilgiris, Bangalore and other places. France had been steadily increasing its supply during the four preceding years; but a reaction is observed in the year under review. On the other hand the import from the United Kingdom has been steadily decreasing. Bombay has this year contributed largely, but of the total imports Rupees 2,86,181 are of foreign manufacture.

The trade in this article is subject to considerable fluctuations, and the year under review shows a large decrease, the value having fallen from Rupees 16,66,146 to Rupees 10,40,879.

Teak was chiefly supplied by British Burmah. The value of the imports amounted to Rupees 5,80,365. Ceylon supplied other timber to the extent of Rupees 85,350 and other kinds of ornamental wood worth Rupees 9,631. Sandalwood was obtained from Bombay to the value of Rupees 26,414. The manufactures of wood were derived chiefly from Bombay, Ceylon, Bengal, and British Burmah.

This cannot be said to be a normal article of trade. For the last few years during which railways have been under construction large quantities of materials have been imported; but as these railways approached completion, the imports fell off, and future supplies, unless new lines are opened, must consist chiefly of materials required for upkeep of the permanent-way and rolling-stock. The imports have

accordingly, fallen from Rupees 45,95,289, in 1875-76 to Rupees 5,39,391 in the year under report.

Other articles. The following are the principal articles entered under the head "All other Articles" with the countries which supplied them largely:—

Articles.	Countries whence imported.	1878-79.	1879-80.
		RS.	RS.
Horses	Victoria	1,59,900	1,74,300
	Schinde	1,70,500	53,500
Coal	United Kingdom	8,79,862	6,91,740
	New South Wales	87,988	1,12,930
	Straits Settlements	1,08,412	1,52,511
	Bengal	1,04,954	1,44,633
Drugs and medicines	Bombay	1,03,870	1,64,028
	United Kingdom	3,91,991	3,14,978
Hardware and cutlery.	Ceylon	96,823	1,83,071
Gunny-bags	Bengal	61,444	4,79,273
Machinery	United Kingdom	3,77,062	1,94,552
Oils	Bombay	3,43,994	1,30,069
	United Kingdom	4,40,598	3,67,063
Provisions	Bombay	1,02,450	1,73,834
Salt	Bombay and other countries	5,76,933	4,53,539
	Ceylon	5,86,507	7,17,480
Spices—Betel-nuts	Straits Settlements	1,13,202	1,40,814
	Sumatra	3,26,038	1,80,576
	Bombay	10,35,463	4,03,385
Seeds	Bombay	7,31,290	5,18,754
Silk, raw	Bengal	15,80,811	16,55,516
Stationery	United Kingdom	4,07,401	4,41,646
Sugar	Bombay	3,43,997	2,25,457
	Bengal	2,07,569	1,32,470
Wool, manufactures	United Kingdom	2,20,487	2,36,754
	Bombay	1,05,984	1,90,068
	France	19,563	1,700
	Italy	1,22,182	1,03,470
	Egypt		7,776
Corals, real	United Kingdom	19,120	
	Ceylon		133
	Straits Settlements	60	
	Bengal	1,200	
	Bombay	200	313

The result of the alteration of the tariff valuation at the close of the preceding year (noticed in page 168 of last year's Administration Report) is exhibited in the following statement:—

Statement showing the quantity and value of articles imported from foreign ports into the Madras Presidency, whose tariff valuations were revised on the 13th March 1879.

	1878-79.		1879-80.	
	Quantity.	Value.	Quantity.	Value.
Cotton—		RS.		RS.
Twist and Yarn—				
Mule, Nos. 33 to 42	3,775,201	21,10,071	3,766,147	22,90,441
Do. " 43 to 52	335,290	2,38,438	387,520	2,84,415
Do. " 53 to 60	315,905	2,54,800	409,065	3,34,587
Do. " 61 to 70	55,120	50,140	62,425	59,776
Water, Nos. 21 to 30	7,400	4,377	7,170	3,862
Do. " 31 to 40	1,500	1,082	2,300	1,503
Orange Red, &c.	1,074,964	8,67,304	1,221,286	9,18,164
Turkey Red, &c.	1,734,324	24,27,136	2,494,873	32,56,749
Grey Piece-goods—				
Jaconets exceeding 10 x 10 to the quarter inch	524,189	4,48,934	729,280	5,71,019
Jaconets, other sorts	6,236	5,745	1,851	1,792
Mulls	45,077	52,417	60,188	61,972
Printers	2,235	1,795	684	450
Shirtings and Long Cloths	7,040,068	41,77,775	5,508,588	32,08,937
T Cloths, 18-reed and upwards	452,399	2,64,419	173,532	99,391
T Cloths under 18-reed, &c.	36,575	19,242	35,053	17,547

	1878-79.		1879-80.	
	Quantity.	Value.	Quantity.	Value.
Drugs, &c.—		RS.		RS.
Assafoetida (Hing)	...	...	1	109
Camphor, Other kinds	...	...		
Crude, in powder	192,222	78,623	267,640	1,22,511
Refined cake	224	174	56	40
Cassia lignea	151	4,669	143	3,563
Dyeing and Coloring Materials—				
Gallnuts, country (Myrabolams)	3,068	12,038	200	620
Sapan wood and root	392	2,012	560	2,473
Glass—				
Sheet and Plate—				
Crown, of sizes	399,351	27,298	365,033	21,962
Beads and False Pearls—				
Pearls, False—				
Boria	15,000	20	...	...
Jowria	500,000	44	...	...
Nathia	50,000	20	35,000	11
Wattanah	200,000	22	150,000	13
Gums, &c.—				
Cutch and Gambier	20½	211	17	213
Bdellium (common gum)	1	5	6	34
Ivory—				
Unmanufactured—				
Elephant's tusks not less than 10 lb., &c.	13	50	...	...
Metals—				
Brass—				
Wrought—				
Old	80½	2,719	29	869
Sheets, rolls, very thin	58	4,790	131½	6,707
Orsidue and brass leaves, China	29	18	300	350
Wire	13,923	6,466	16,646	7,536
Copper—				
Old, for remanufacture	4½	204	2	140
Unwrought—				
Australian cake	339	16,172	348	16,753
Tiles, ingots, &c.	33	1,331	299	9,491
Wrought—				
Mixed, &c.—				
Patent or Yellow Metal—				
Sheathing Sheets and Bolts	14,134	5,56,751	18,800	6,90,385
Do. do. old	76	3,150	...	...
Sheets and other manufactures—				
Bolt	½	25	...	...
Brazier's	...	...	245	11,457
Nails and Composition Nails	23	1,637	77½	3,805
Sheet, Sheathing and Plate	1,748½	87,292	2,087½	1,00,139
Wire	8,510	4,495	3,889	2,058
Iron—				
Old, for remanufacture	3,316½	10,097	5,297	16,142
Cast (pig)	1,092	2,950	2,303	5,180
Wrought—				
Angle, Bolt and Rod—				
Flat, Square and Bolt, &c.	57,372½	2,52,790	137,938	6,56,109
Nail, Rod	9,433½	62,148	11,454	57,911
Rod, Round, British, not exceeding ½ inch diameter	3,562	20,191	6,129½	32,263
Rod, Round, British, exceeding ½ inch diameter	4,573½	20,840	15,901	78,115
Swedish, flat and square	3,805½	31,650	4,293	35,024
Hoop, plate and sheet	17,940	1,14,888	24,058½	1,40,924
Tinned plates	2,389	29,450	850	9,589
Nails, Rose clasp, &c.	949½	12,431	639½	7,246
Lead—				
Pig	4,734½	55,412	2,424	28,183
Sheets, other sorts	595½	7,632	155	1,929
Quicksilver	5,325	7,076	13,345	15,526
Steel—				
Cast	389½	10,484	602	13,819
Other sorts—				
Blistered	40	509	60	437
British and Foreign, &c.	480	4,275	270	2,664
Spring	311	3,223	528	4,577
Tin—				
Unwrought—				
Block	2,004½	83,990	762	35,184
Zinc or Spelter—				
Unwrought—				
Plate and other shapes, hard	536	6,620	133	1,067
Wrought or Manufactured—				
Nails	5	...	...	...
Sheet & Zinc Sheathing	1,934½	32,210	602	9,302

		1878-79.		1879-80.	
		Quantity.	Value.	Quantity.	Value.
Metals unenumerated—					
Gold leaf—European leaves	... Cwt.	55,160	Rs. 1,234	65,305	Rs. 1,877
Paints and Colors—					
Ochre other than European	... "	7	25	...	...
Paints of composition	... "	2	50	2	300
Prussian blue, European	... "	21½	3,441	20½	3,090
Turpentine	... Gals.	4,167	7,130	6,346	11,371
Vermilion, Canton	... Boxes.	2	200	...	...
Perfumery—					
Roseflower, dried	... Cwt.	...	...	1	15
Provisions—					
Bacon	... Lb.	44,208	29,842	36,685	32,258
Joints and Cheeks	... "	116	73	43	38
Pork hams	... "	39,689	30,703	25,107	22,439
Cheese	... "	57,366	46,531	43,591	38,164
Ghee	... "	124	40	517	166
Vinegar, European, in wood	... Gals.	1,123	1,792	1,242	1,621
Shells and Cowries—					
Shells—					
Large shells, &c.	... No.	...	...	150	15
White, dead	... "	570,500	11,622	527,830	16,796
Cowries—					
Maldiva	... Cwt.	42	417	21	157
Mother-of-pearl	... "	1	30	66	1,111
Spices—					
Betel-nuts, other sorts	... J.b.	10,977,232	9,96,302	11,271,160	10,44,696
Cloves, other sorts	... "	574	384	6	5
Nutmegs*	... "	9,879	6,011	10,316	5,817
Pepper*	... "	129,937	22,795	262,215	66,401
Other sorts—					
Aniseed, star	... "	1,204	430	5,631	1,763
Chillies, dried	... "	3,086	254	2,138	144
Mace	... "	3,137	3,585	5,883	6,075
Sugar and Sugarcandy—					
Sugarcandy, China	... Cwt.	109	3,141	618½	16,060
Loaf	... "	50	1,276	53½	1,812
Soft	... "	44½	891	188½	3,062
Tea—					
Black	... Lb.	23,820	17,713	21,322	14,539
Green	... "	180	229	23	28
Umbrellas—					
China paper, &c.	... No.	20	6	4	1

Treasure exports.

The exports of treasure for 1879-80 amounted to Rupees 28,15,209, the smallest figure during the last five years. Of this amount Rupees 27,29,817 represent silver and Rupees 85,392 gold. The distribution to the several countries is shown below:—

Countries to which exported.	Gold.		Silver.	
	1878-79.	1879-80.	1878-79.	1879-80.
<i>Foreign Countries.</i>	RS.	RS.	RS.	RS.
United Kingdom	2,22,031	...	10,000	...
Mauritius	...	...	6,600	...
Arabia, other Arabian States	...	72,964	21,53,063	26,23,500
Ceylon	...	5,428	...	9,381
Straits Settlements	...	...	...	...
Total of Foreign Countries	2,22,031	78,392	21,69,063	26,38,881
Foreign ports in India	...	...	88,500	45,000
<i>Interprovincial Trade.</i>				
Calcutta	...	7,000	3,5,073	24,600
Bombay	...	...	73,451	19,336
Rangoon	...	...	1,01,250	2,000
Total	...	7,000	4,65,774	45,936
Grand Total	2,22,031	85,392	27,23,337	27,29,817

* Particulars of nutmegs in shell and pepper black and long are not available.

There is a considerable decrease in the exports to Calcutta and Rangoon owing to the stoppage of the imports of grain from those places after the cessation of distress. The increase in the remittances to Ceylon seems to be due to the ordinary fluctuations of trade. The export of gold to the United Kingdom entirely ceased.

The import of treasure from places beyond the Presidency amounted to Rupees 47,66,362. The countries which supplied it are exhibited in the following statement:—

Countries from which imported.	Gold.		Silver.	
	1878-79.	1879-80.	1878-79.	1879-80.
<i>Foreign Countries.</i>	RS.	RS.	RS.	RS.
United Kingdom	1,28,769	4,45,826	850	530
France	10,444	9,711	...	...
Egypt	11,37,392	19,07,095	41,289	...
Mauritius	...	...	10,000	27,500
Reunion (Bourbon)	...	...	...	16,000
Arabia, other Arabian States	...	...	...	7,000
Ceylon	51,167	114	19,81,522	19,52,680
Persia	...	...	...	2,000
Straits Settlements	...	7,248	2,691	1,660
Turkey in Asia	12,375	...	12,000	25,000
Other countries in Asia	...	...	...	...
Victoria	2,820	5,263	...	...
Total, Foreign Countries	13,42,967	23,75,228	20,48,262	20,32,370
Foreign ports in India	...	...	30,900	38,925
<i>Interprovincial Trade.</i>				
Calcutta	25,000	1,600	26,100	29,500
Bombay	25,050	8,859	2,95,465	2,79,880
Rangoon	...	...	2,000	...
Total	60,050	10,459	3,23,565	3,09,380
Grand Total	13,93,017	23,85,687	24,02,727	23,80,675

The increase during the year is mainly in the import of gold from Egypt, and the remittances to this country appear to depend chiefly upon the quantity of indigo exported thereto.

The bulk of the exports went to the United Kingdom, Ceylon, Bombay, France, and Bengal, which together took 84.4 per cent. of the whole. Of the imports from foreign countries the United Kingdom and Ceylon contributed 50 per cent. The imports from other Presidencies were—Bombay 18.1 per cent., Bengal 15.5 per cent., and British Burma 7.1 per cent. The exports to foreign countries generally show an increase. There were no exports to Holland during the year. The decrease in the export trade to Asiatic countries bordering on the Persian Gulf and the Arabian Seas is, as has already been noticed in several portions of this Report, owing to fewer Arabian trade.

vessels having visited the Western Ports. The exports to other Presidencies have improved, but those to foreign ports in India declined. Under imports the trade with the United Kingdom, Italy, Egypt, Mauritius, Bourbon, United States, Straits Settlements, China, Arabia, Victoria, New South Wales, Cutch, and Pondicherry has increased. As regards commodities, the trade in the exports of cotton, raw hides and skins, rice, grains other than rice and paddy, indigo, seeds, oils, spices, sugar, cocoanuts, Peruvian bark, tea, and tobacco exhibit an increase, while the exports of coffee, paddy, cotton piece-goods, coir, yarn and rope, timber and wood, animals, living, oil-cakes, and myrabolams show a decrease. In imports there is a decrease in every article excepting cotton piece-goods, metals, spirits, apparel, drugs and medicines, spices, silk, stationery, and woollen manufactures.

Internal
trade.

The interchange by sea of commodities and treasure between the different British ports of this Presidency was carried on to the extent of Rupees 2,50,72,919 and Rupees 14,75,775 respectively. The value this year fell off by 22 lakhs. The exports and imports of merchandise in 1878-79 and 1879-80 are compared in the subjoined statement:—

Exports.

Articles.	1878-79.		1879-80.	
	Quantity.	Value.	Quantity.	Value.
Grain and Pulse—		RS.		RS.
Paddy Cwt.	402,507	12,57,865	538,139	13,43,716
Rice "	445,531	23,05,583	468,548	20,52,961
Gram "	40,937	1,87,653	71,344	1,86,451
Wheat "	4,962	27,115	12,266	63,250
Pulse "	120,208	5,36,502	91,601	3,68,215
Other sorts "	49,772	2,05,822	23,267	52,166
Total ...	1,069,917	45,20,545	1,205,065	40,66,749
Cotton—				
Manufactures—				
Piece-goods { Yds.	7,215,609	15,80,370	5,952,439	12,47,185
Twist and yarn { No.	78,987	59,437	66,595	41,411
Seeds Cwt.	1,568,221	9,50,297	1,986,729	11,67,619
Oils Gals.	108,225	6,42,833	90,794	4,66,092
Spices Lb.	413,034	5,67,414	274,678	2,69,821
Metals Cwt.	4,394,508	5,57,310	3,282,229	5,68,760
Provisions Val.	18,730	2,60,286	11,186	1,53,427
Sugar Cwt.	3,38,879	3,38,879	4,25,680	4,25,680
Liquor—				
Spirits Gals.	81,625	5,15,454	162,465	6,89,560
Tobacco Lb.	70,267	3,42,043	41,622	2,26,866
Jute and manufactures Val.	2,361,077	2,85,771	3,144,256	3,52,420
Hides and skins { No.	11,950	4,28,599	23,152	2,48,975
Dyeing and coloring materials Cwt.	443,153	1,35,569	508,553	6,51,863
Coffee Val.	13,084	7,48,392	16,970	2,19,654
Timber and manufactures of Val.	19,113	2,06,041	12,554	4,72,586
Fruits and vegetables "	...	2,28,540	...	2,29,018
Wool—				
Manufactures of Lb.	...	65,300	...	57,458
Corals, real Cwt.	5,291	73,620	4,156	72,640
Coir and rope Cwt.	9,633	68,749	10,135	60,083
All other articles Val.	...	11,30,876	...	8,24,140
Total ...	...	1,38,10,440	...	1,27,35,726

Imports.

Articles.	1878-79.		1879-80.	
	Quantity.	Value.	Quantity.	Value.
Grain and Pulse—		RS.		RS.
Paddy Cwt.	401,067	13,39,104	491,821	12,97,167
Rice "	408,823	22,32,064	455,244	20,53,404
Gram "	56,941	2,50,656	56,006	1,89,200
Wheat "	6,029	37,476	5,599	35,594
Pulse "	114,423	5,79,799	64,606	2,09,622
Other sorts "	47,087	2,21,635	18,870	55,153
Total ...	1,035,280	46,60,734	1,092,146	39,19,200
Cotton—				
Manufactures—				
Piece-goods { Yds.	6,000,296	13,93,449	3,408,821	12,07,684
Twist and yarn { No.	127,149	78,186	69,324	42,410
Seeds Cwt.	1,398,073	9,10,122	1,859,918	11,59,164
Oils Gals.	100,043	6,84,259	79,669	4,34,846
Spices Lb.	366,011	5,21,129	214,691	2,69,806
Provisions Val.	4,177,499	5,73,350	3,285,395	5,71,846
Metals Cwt.	19,002	2,46,638	10,794	1,46,005
Sugar Val.	78,429	5,39,355	159,098	7,52,862
Jute and manufactures of Val.	1,10,807	1,10,807	...	1,24,761
Tobacco Lb.	2,360,503	3,03,794	3,608,723	3,45,531
Fruits and vegetables Val.	...	3,49,896	...	4,04,035
Hides and skins { Cwt.	8,514	3,47,518	17,047	5,13,238
Timber and manufactures of { No.	351,133	2,31,334	421,781	2,89,410
Dyeing and coloring materials Val.	14,401	1,31,618	12,003	1,58,840
Coffee Cwt.	19,548	8,27,019	10,597	8,94,563
Liquors—				
Spirits Gals.	30,526	1,71,776	29,853	1,00,454
Salt Tons.	848	52,892	7024	41,399
Coir and rope Cwt.	14,938	95,519	14,236	92,358
Wool—				
Manufactures of Val.	...	56,326	...	59,234
All other articles "	...	8,11,951	...	8,75,686
Total ...	...	1,34,61,053	...	1,23,33,193

The decrease is equally distributed between the exports and imports. It occurs chiefly in grain and pulse, coffee, seeds, oils, and piece-goods. The decrease in coffee is due to direct exportation to Europe from Mangalore instead of a portion being sent to Calicut as was the case last year. Cotton twist and yarn, on the other hand, shows a large increase owing to larger imports of Madras manufactured twist in the northern districts.

The transactions in treasure have also diminished along with merchandise, as shown by the following statement:—

	Gold.	Silver.	Total.
Exports	RS. 79,733	RS. 6,08,707	RS. 6,88,440
Imports	1,20,400	6,66,935	7,87,335
Total ...	2,00,133	12,75,642	14,75,775

The extension of the South Indian Railway and the opening of the Buckingham Canal have reduced the interportal trade. Articles imported from Ceylon are now chiefly landed at Tuticorin and distri-

buted by railway to the adjacent districts, carriage by canal or by railway being both safer and more convenient than carriage by sea.

Customs
revenue.

The total gross customs revenue of the year 1879-80 amounted to Rupees 23,26,769. Excluding refunds and drawbacks to the amount of Rupees 20,209, the net revenue was Rupees 23,06,560, of which Rupees 7,04,522 appertain to exports and the remainder, Rupees 16,02,038, to imports. The following statement gives the gross and the net duty realised on exports and imports for the last five years:—

Years.	Exports.		Imports.		Total.	
	Gross.	Net.	Gross.	Net.	Gross.	Net.
1875-76	RS. 9,75,123	RS. 9,67,479	RS. 19,04,369	RS. 18,71,399	RS. 28,79,497	RS. 28,38,878
1876-77	5,33,494	5,36,576	19,24,422	18,94,162	24,57,916	24,30,738
1877-78	2,53,895	2,51,266	18,64,112	17,82,498	21,18,007	20,33,764
1878-79	4,63,543	4,59,647	19,46,922	19,18,319	24,10,465	23,77,966
1879-80	7,07,177	7,04,522	16,19,592	16,02,033	23,26,769	23,06,560

The duty on exports shows an increase of Rupees 2,43,634 over the preceding year, owing to the extensive exportation of grain and indigo to foreign countries. The duty on indigo was abolished only at the end of the year, and the effect of this measure on the finances will therefore not be visible until 1880-81. No lac was exported in the year to foreign countries. Subjoined is an abstract of the dutiable articles of imports with the duties collected thereon in 1878-79 and 1879-80:—

Articles.	1878-79.	1879-80.
<i>Imports.</i>	RS.	RS.
Salt	5,12,649	2,40,572
Cotton piece-goods	3,88,597	3,78,156
Spirits	3,72,850	3,79,712
Cotton twist and yarn	2,14,305	2,20,708
Wines and liqueurs	1,28,428	91,025
Apparel	68,152	65,157
Metals	62,684	66,278
Spices	26,805	38,360
Provisions	25,678	21,666
Hardware and cutlery	20,342	16,711
Liquors—ale, beer, and porter	12,069	8,474
Wool manufactures of piece-goods	10,485	11,036
Drugs and medicines	10,078	11,048
Corals, real	7,521	5,654
Arms, &c.	7,309	6,718
Glass, &c.	6,576	5,973
Paints and colors and painters' materials	6,043	4,335
Stationery	5,986	6,249
Earthenware and porcelain	4,015	3,723
Tobacco	3,560	2,910
Toys and requisites for games	3,632	3,002
Instruments and apparatus	2,510	2,034
Gums	2,152	2,852
Tea	903	677
Liquors, other sorts	892	1,082
All other articles	43,253	25,490
Total	19,46,922	16,19,592

The import collections show a decrease of Rupees 3,27,330, including salt, but of only Rupees 55,253 exclusive of it. This is the net

result of a large decrease under wines, cotton piece-goods, &c., and of an increase in spices, spirits, cotton twist, metals, and other articles. The import trade with foreign countries has generally expanded, but the reductions in the tariff valuation affected the receipts considerably. The exemption from duty of the coarser cloths told upon the revenue derived from cotton goods, but cotton twist and metals show an increase owing to the quantity imported having been very large. The increase under spices is not only due to larger importations, but also to a higher rate of tariff valuation on some of them. The effect of the abolition of four-fifths of the duty on Swedish round iron of all sizes and Swedish iron sheets and plates in March 1880 will be seen next year. The very large decrease in the collections under salt is due to diminished imports on account of extensive sales on the West Coast of reserve stocks of Government salt.

Three-fourths of the revenue on imports is collected at Madras. Tanjore, whence large quantities of grain were exported to Ceylon and other places, contributed more than half the collections under exports.

The transactions on account of Government exhibit a decrease of 23 lakhs of rupees compared with those of the previous years, the total value amounting to Rupees 144,76,273 against Rupees 167,71,950 as shown below. The decrease chiefly occurs in the exports of treasure to other Presidencies:—

	1878-79.		1879-80.	
	Imports.	Exports.	Imports.	Exports.
Foreign countries	RS. 22,91,384	RS. 1,14,356	RS. 34,70,985	RS. 1,88,180
British ports in other Presidencies.	4,08,393	3,71,573	1,21,353	8,79,734
Indian ports not British	50	3,993	...	37,08,010
British ports within the Presidency.	9,75,653	6,08,129	4,92,916	5,65,157
	11,05,000	13,27,000	22,20,000	26,29,240
Total	36,75,480	10,98,051	40,85,254	16,33,769
	11,05,000	1,08,93,419	22,20,000	65,37,250
Total	47,80,480	1,19,91,470	63,05,254	81,71,019
Total of Imports and Exports	...	1,67,71,950	...	144,76,273

The value of the stores imported from foreign countries has increased by nearly 12 lakhs, while the exports thereto show but a slight improvement. Except Colombo arrack imported from Ceylon for consumption within the town of Madras, the transactions are mainly with England.

Cement, drugs, ale, beer and porter, and stationery seem to have been largely imported, the first probably for the Madras Harbour Works now in active progress. The imports of arrack from Ceylon

have of late been on the decline. The imports of stores from British ports in other Presidencies have fallen by about three lakhs, but the exports increased by a little more than five lakhs. The imports from other Presidencies consist mainly of arms.

—Exports.

The exports to foreign countries chiefly consist of Peruvian bark, which has been supplied to the United Kingdom to the extent of 175,680 lb. worth Rupees 1,72,400. The exports to other Presidencies were mostly to British Burmah and Bengal. The exports of treasure diminished by 58½ lakhs. The Government transactions with foreign ports in India were inconsiderable. The transactions in stores between the ports in this Presidency show a great fall, but in treasure there is a very large advance.

Land
customs.

In the year under report the Pondicherry-Villupuram Railway was opened for traffic, the same having been declared by notification of the Madras Government, dated 10th December 1879, to be a route by which goods may be allowed to pass into or out of French territory, under Regulation VI of 1844. The Company having undertaken the collection of the customs duties, the stations on that line, five in number, three in British Territory and two within the limits of the French Settlement, were declared customs chowkies, and the station masters at those places to be officers authorized to collect the duty. Experienced customs officials were temporarily lent to the Company to make the necessary arrangements, and to put the railway officers in the way of discharging their duties as customs officers. Rules were also framed for their guidance so as to prevent fraud on the revenue and to cause the least possible inconvenience to passengers. Sanction for an additional establishment entertained in the district of Godavari in connection with the registration of traffic in free goods crossing the Yanam frontier having been withheld, this traffic ceased to be registered, and the returns sent to the Government of India since November last have comprised only the traffic in the dutiable goods in respect of that settlement. With a view to prevent more effectually than under existing arrangements smuggling of spirits and wines into British territory, it was proposed to open at Karical, under the superintendence of the British Consular Agent at that place, a Land Custom Office similar to that already existing at Pondicherry, and a small establishment costing Rupees 22 a month was temporarily and experimentally sanctioned for six months (extended subsequently to another six months). The result of the experiment will be adverted to in the Report for 1880-81. The following statements show the registered traffic across the French frontier and that carried on between the district of Tinnevely and Travancore territory. Statements showing the latter are furnished to the Board as stated in the last report by the Travancore Sirkar :—

French Settlements.

Articles.	Exports.			Imports.		
	Quantity.	Value.	Duty.	Quantity.	Value.	Duty.
Animals, living ... No.	27,520	Rs. 55,856	Rs.	6,620	Rs. 15,784	Rs.
Cotton, raw ... Cwt.	17,554	3,65,588	...	...	1,344	...
Twist and yarn (European) ... Lb.	53,474	45,180	...	13,577	25,062	...
Do. do. (Indian) ... "	163,942	74,303	...	96,155	9,782	228
Piece-goods (European) ... "	143,142	1,74,097	...	28,817	50,015	36
Do. (Indian) ... "	184,075	5,07,267	...	41,071	41,812	2,088
Dyeing materials—						
Indigo ... Cwt.	24,075	4,54,074	15,335	10	65,294	3,304
Other sorts ... "	7,493	33,524	...	4,236	1,103	55
Fruits and vegetables ... Val.	...	84,015	...	...	14,032	702
Grain and pulse—						
Gram and pulse ... Cwt.	8,630	34,403	...	1,766	54,409	...
Paddy ... "	203,491	8,70,310	2,988	22,161	7,473	...
Rice ... "	321,045	10,88,693	1,20,106	5,866	98,152	...
Wheat ... "	325	2,602	...	21	17,165	...
Other sorts ... "	15,750	49,967	...	1,013	200	...
Gums and resins ... Val.	...	2,237	...	...	3,163	...
Hides and skins ... No.	1,937	25,533	...	651	30,252	1,518
Liquors ... "	...	16,486	...	...	11,773	...
Metals ... Cwt.	4,413	36,060	...	15,143	66,742	22,543
Oils ... Gals.	480,055	4,37,319	...	148,936	2,56,389	9,795
Provisions ... Val.	...	85,906	...	...	1,44,187	...
Seeds ... Cwt.	375,239	17,39,224	...	4,367	48,001	2,068
Spices ... Lb.	1,687,572	1,62,041	...	2,259,895	23,021	...
Sugar and other saccharine matter ... Cwt.	8,962	63,741	...	3,352	1,67,783	8,396
Tobacco ... Lb.	347,200	47,757	...	5,455	42,018	2,112
Timber and wood ... Val.	...	40,028	...	...	673	34
All other articles ... "	...	3,03,510	...	...	44,473	...
Total ...	...	67,90,589	1,38,434	...	2,44,753	4,967
Treasure ...	...	35,09,609	...	...	14,82,601	57,841
Grand Total ...	...	1,03,00,288	...	...	10,85,774	...

Travancore Trade for 1879-80.

Articles.	Exports from Travancore.			Articles.	Imports into Travancore.		
	Quantity.	Value.	Duty.		Quantity.	Value.	Duty.
Canes and rattans ... No.	12,203	Rs. 2,477	Rs.	Animals, living ... No.	1,016	Rs. 15,382	Rs.
Dyeing materials ... Cwt.	405	1,870	52	Cotton—			
Fibrous products—				Raw ... Cwt.	2,600	17,727	...
Other fibres, raw ... "	233	2,119	106	Twist and yarn ... Cwt.	1,396	69,601	...
Do. manufactured ... "	1,651	14,059	748	(Indian) ... No.	200,224	4,90,071	...
Fruits and nuts—				Piece-goods (Indian) ... "	26	4,562	...
Cocoanuts ... No.	3,320,752	99,688	4,984	Do. (European) ... & Cwt.	2,278	...	...
All other kinds ... Cwt.	456	2,230	8	Dyeing materials ... Cwt.	115	754	...
Grain and pulse—				Grain and pulse—			
Gram and pulse ... "	2,123	6,170	303	Gram and pulse ... Cwt.	4,398	22,445	...
Rice, husk-d ... "	112	374	19	Rice, husked ... "	25,777	1,03,510	...
Do. unhusked ... "	5,561	11,153	562	Do. unhusked ... "	18,065	37,120	...
Other rain crops ... "	81	142	7	Other rain crops ... "	26	63	...
Hides and skins ... No.	39,811	38,601	1,933	Goodack ... Lb.	168	84	7
Horns ... Cwt.	59	641	32	Metal ... Cwt.	433	7,728	...
Metals ... & No.	29	2,074	...	Oils ... Cwt.	1,078	26,318	...
Oils ... Cwt.	11,239	1,32,737	6,897	Provisions ... & No.	11,906	35,305	...
Provisions ... "	66,440	1,80,797	8,952	Seeds ... Cwt.	185	40,766	...
Seeds ... "	177	603	17	Sugar ... Cwt.	10,675	13,893	...
Spices ... "	21,661	5,53,935	27,979	Opium ... Lb.	3,726	4,062	406
Sugar, unrefined ... "	29,309	1,03,165	5,158	Tobacco—			
Wood, timber ... Cub. ft.	20,392	28,250	2,839	Cigars ... "	2,476	8,656	693
All other articles ... Val.	...	1,90,390	4,641	Snuff, bottles ... No.	11,064	26,273	1,942
Total ...	...	13,77,415	65,484	Spices ... Cwt.	1,074	10,438	...
				Other articles ... Val.	...	71,496	...
				Total ...	...	10,08,784	3,048

Shipping—
foreign trade.

The total number and tonnage of the shipping which entered and cleared from and to foreign countries at the ports of this Presidency during the last five years were as follow :—

	Entered.		Cleared.	
	Number.	Tonnage.	Number.	Tonnage.
1875-76	137	182,450	123	172,616
1876-77	3,353	399,775	3,248	453,904
1877-78	140	173,085	148	195,865
1878-79	3,424	400,789	3,532	469,626
1879-80	125	176,227	122	173,677
1875-76	3,267	357,806	3,196	405,791
1876-77	112	158,478	125	180,781
1877-78	3,017	367,222	3,102	413,978
1878-79	128	172,487	130	192,226
1879-80	3,142	356,244	3,129	392,185

The figures show an increase both in the number and tonnage of steamers. Sailing vessels increased in number but diminished in capacity.

The following statement shows the movement of vessels with cargoes :—

Years.	Entered with cargoes.		Cleared with cargoes.	
	Vessels.	Tons.	Vessels.	Tons.
1875-76	119	169,591	116	168,932
1876-77	1,348	178,486	2,522	369,891
1877-78	103	158,341	129	183,347
1878-79	1,303	181,798	2,409	355,402
1879-80	111	172,036	106	160,602
1875-76	1,202	180,364	2,038	295,790
1876-77	90	147,900	117	175,861
1877-78	1,281	194,122	2,256	307,552
1878-79	103	161,157	128	190,835
1879-80	1,401	196,066	2,274	312,592

The subjoined statement shows the entries and clearances of vessels that adopted the Suez Canal route with the percentage of the steam tonnage passing through the canal to the total steam tonnage engaged in the trade with foreign countries :—

Years.	Entered.		Percent- age.	Cleared.		Percent- age.
	Vessels.	Tons.		Vessels.	Tons.	
1875-76	89	149,039	81.7	78	124,459	72.1
1876-77	75	132,455	76.2	84	140,848	71.9
1877-78	84	146,366	83.5	65	117,380	67.6
1878-79	66	124,003	78.2	83	143,163	79.2
1879-80	68	126,143	73.1	91	155,728	81.1

The percentage under entrance is less than the previous year notwithstanding an increase in the import trade with European countries, but there is an increase under clearance owing to larger exports.

The nationalities of the vessels engaged in the foreign trade for the last two years are given below :—

Nationalities.	1878-79.				1879-80.			
	Steamers.		Sailing vessels.		Steamers.		Sailing vessels.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
British	97	145,002	118	104,731	105	151,452	98	87,837
British Indian	121	175,984	189	143,162	118	180,225	134	115,620
Foreign	...	...	1,492	186,429	...	...	1,541	190,559
Native Craft.	15	13,476	42	13,881	23	21,035	44	12,057
	4	4,797	69	25,611	12	11,801	75	35,895
	...	...	1,365	62,231	...	...	1,459	59,791
	...	...	1,439	63,420	...	...	1,542	61,088
Total	112	158,478	3,017	367,222	128	172,487	3,142	356,244
	125	180,781	3,102	413,978	130	192,226	3,129	392,185

The subjoined table compares the details of the vessels included under the head " Foreign " in the above statement :—

Particulars of foreign vessels.	Entered.				Cleared.			
	1878-79.		1879-80.		1878-79.		1879-80.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
American	3	4,125	5	5,570	1	1,033	10	11,396
Arabian	25	2,521	29	2,900	25	4,411	16	2,592
Austrian	...	...	1	1,606	...	...	1	1,817
French	27	19,167	22	14,025	40	19,992	47	21,238
German	...	...	7	6,950	...	...	6	6,014
Italian	1	955	...	...	3	2,071	1	955
Norwegian	...	...	...	...	...	...	3	1,994
Persian	...	...	...	...	1	915	...	...
Portuguese	...	...	...	...	1	430	...	...
Spanish	...	...	2	1,302	...	...	2	1,302
Swedish	...	...	...	...	...	...	1	338
Turkish	1	589	1	739	2	1,586	...	...
Total	57	27,357	67	33,092	73	30,438	87	47,696

The following figures show the share of each district in the movement of shipping on account of the foreign trade :—

Districts.	1878-79.				1879-80.			
	Entered.		Cleared.		Entered.		Cleared.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.	Number.	Tons.
Madras	156	185,601	138	160,812	149	187,773	119	162,170
Ganjam	16	13,725	36	27,189	17	12,627	10	9,152
Vizagapatam	...	...	22	18,754	...	...	34	26,815
Godavari	2	1,312	49	46,429	...	...	37	35,535
Kistna	9	8,259	38	25,733	8	7,823	59	46,367
Nellore	10	5,194	1	160	10	3,205	1	617
South Arcot	1	79	8	2,161	1	156	39	12,575
Tanjore	1	98	...	350	24	2,477	...	3,062
Madura	61	7,875	85	7,412	68	10,036	106	9,190
Tinnevely	26	1,724	11	895	24	2,341	4	197
South Canara	516	63,269	729	85,253	570	79,773	834	95,579
Malabar	494	31,048	287	10,643	582	32,603	307	8,421
Total	187	13,415	654	36,776	220	11,198	611	34,530
	984	106,618	463	67,149	957	100,072	442	59,779
	380	41,002	546	60,921	415	38,003	459	50,756
	216	18,275	44	2,579	136	11,510	40	1,794
	24	3,945	27	5,609	42	4,497	15	2,630
	...	...	...	...	...	...	...	...
	37	17,677	74	33,173	31	14,564	45	23,908
	19	5,727	6	2,283	15	5,573	3	974
Total	1,371	312,022	2,373	483,413	1,504	357,223	2,402	503,427
	1,758	183,743	854	111,316	1,766	171,508	857	89,884

Tanjore and Madura as usual show the largest number of vessels entered and cleared, but they are almost wholly native craft plying between the Southern Ports and Ceylon. In steam navigation Madras takes the first place and the Northern Districts stand next in importance.

Coasting
trade.

The following statement shows the entries and clearances of vessels from and to British ports in other Presidencies and foreign ports in India :—

Years.	Entries.		Clearances.	
	Number.	Tons.	Number.	Tons.
1875-76	Steam 899	1,143,291	1,116	1,406,504
	Sailing 4,492	271,188	4,395	276,252
1876-77	Steam 1,019	1,210,421	1,209	1,407,742
	Sailing 5,119	403,067	5,015	381,360
1877-78	Steam 1,252	1,380,242	1,502	1,625,771
	Sailing 4,845	380,665	4,783	371,200
1878-79	Steam 1,154	1,314,346	1,400	1,560,854
	Sailing 4,456	330,009	4,483	319,712
1879-80	Steam 1,152	1,447,401	1,331	1,644,761
	Sailing 4,443	259,135	4,573	255,495

The subjoined table shows the movement of shipping with cargoes :—

Years.	Entered.		Cleared.	
	Number.	Tons.	Number.	Tons.
1875-76	Steam 882	1,126,409	1,038	1,371,582
	Sailing 3,318	212,122	3,672	208,111
1876-77	Steam 997	1,185,130	1,110	1,290,743
	Sailing 3,934	341,138	4,327	255,450
1877-78	Steam 1,234	1,360,646	1,285	1,367,685
	Sailing 3,501	322,252	4,038	245,351
1878-79	Steam 1,139	1,298,877	1,353	1,512,723
	Sailing 3,352	273,468	3,736	205,592
1879-80	Steam 1,117	1,404,690	1,302	1,602,767
	Sailing 2,584	181,220	4,165	181,220

The share contributed by each of the other Presidencies and foreign ports in India is shown below :—

				1878-79.		1879-80.	
				Number.	Tons.	Number.	Tons.
Bengal	...	...	{ Entered	714	657,096	621	683,604
			{ Cleared	786	771,014	644	753,046
Bombay	...	...	{ Entered	2,951	552,814	3,426	648,836
			{ Cleared	3,098	617,527	3,530	607,534
British Burmah	...	...	{ Entered	556	294,675	358	223,036
			{ Cleared	622	414,288	383	317,775
Scinde	...	...	{ Entered	13	1,172	27	6,635
			{ Cleared	30	2,559	71	4,637
Total British Ports in other Presidencies.				4,214	1,505,757	4,432	1,562,161
				4,536	1,751,388	4,628	1,772,092
Cochin	...	...	{ Entered	4	811	9	1,185
			{ Cleared	2	2,167	6	595
Cutch	...	...	{ Entered	197	12,506	179	10,098
			{ Cleared	455	26,948	830	18,148
Damaun	...	...	{ Entered	78	3,749	19	1,055
			{ Cleared	2	82	1	41
Diu	...	...	{ Entered	...	...	...	...
			{ Cleared	1	43	13	728
Goa	...	...	{ Entered	480	9,682	400	8,452
			{ Cleared	439	8,806	411	8,323
Guzerat	...	...	{ Entered	13	679	16	884
			{ Cleared	40	2,263	80	4,012
Karikal	...	...	{ Entered	77	11,199	69	7,012
			{ Cleared	45	5,571	82	9,868
Mahe	...	...	{ Entered	54	3,028	63	3,009
			{ Cleared	44	3,457	40	949
Pondicherry	...	...	{ Entered	67	9,814	94	29,612
			{ Cleared	78	19,886	79	20,265
Travancore	...	...	{ Entered	426	87,070	314	89,158
			{ Cleared	241	59,955	234	64,337
Total of Foreign Ports in India.				1,396	138,598	1,163	144,375
				1,347	129,178	1,276	127,264
Grand Total				5,610	1,644,355	5,595	1,706,536
				5,883	1,880,566	5,904	1,900,256

The following statement compares the details of shipping connected with each district for two years :—

		1878-79.		1879-80.		
		Number.	Tons.	Number.	Tons.	
Madras	...	Entered	396	374,895	306	353,939
	...	Cleared	341	380,092	301	368,512
Ganjam	...	Entered	187	191,002	189	214,882
	...	Cleared	263	265,125	221	251,557
Vizagapatam	...	Entered	92	47,860	58	40,293
	...	Cleared	279	268,744	255	290,939
Godavari	...	Entered	232	180,779	242	214,820
	...	Cleared	315	202,103	209	211,824
Kistna	...	Entered	104	69,849	72	69,385
	...	Cleared	133	102,421	79	76,415
Nellore	...	Entered	11	1,383	3	1,313
	...	Cleared	12	2,090	17	14,110
South Arcot	...	Entered	36	4,021	42	9,618
	...	Cleared	32	4,564	35	10,960
Tanjore	...	Entered	344	220,087	275	210,361
	...	Cleared	368	220,235	307	232,139
Madura	...	Entered	88	16,761	88	15,852
	...	Cleared	30	7,936	30	12,706
Tinnevelly	...	Entered	179	142,815	148	140,079
	...	Cleared	147	139,687	154	137,921
South Canara	...	Entered	1,613	82,855	1,622	85,944
	...	Cleared	1,510	82,685	1,632	94,107
Malabar	...	Entered	2,328	312,048	2,550	347,048
	...	Cleared	2,453	204,884	2,644	199,257
Total	...	Entered	5,610	1,644,355	5,595	1,706,536
	...	Cleared	5,883	1,880,566	5,904	1,900,256

The nationalities of the vessels are distinguished below :—

Nationalities.	1878-79.				1879-80.			
	Steamers.		Sailing vessels.		Steamers.		Sailing vessels.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
British	2,127	2,741,871	176	127,357	2,352	2,944,653	100	75,465
British Indian ...	84	96,537	514	116,735	84	106,404	398	86,455
Foreign	53	36,772	911	72,084	47	41,105	897	55,851
Native craft ...	...	...	7,338	333,545	...	...	7,621	296,959
Total	2,551	2,875,200	8,339	649,721	2,483	3,092,162	9,016	514,730

23 vessels with a carrying capacity of 917 tons were built during the year under report, and 56 vessels with a capacity of 2,956 tons were registered under the Indian Merchant Shipping Act.

Names of ports.	Vessels built.		Vessels registered.	
	Number.	Tons.	Number.	Tons.
Coringa	...	...	3	162
Cuddalore	1	62	2	256
Porto Novo	1	24	1	24
Toputorai	3	50	3	50
Kilakarai	2	215	...	...
Pamban	4	167	6	281
Tuticorin	...	...	13	1,305
Mangalore	...	...	15	384
Mulki	3	105	3	105
Cassergode	1	20	1	20
Kondapur	1	36	1	36
Calicut	7	238	7	238
Cochin	...	...	1	95
Total	23	917	56	2,956

The total number of ports in which there was trade in this year was 65 against 60 in the preceding year.

PUBLIC WORKS—GENERAL.

The general results of the year's working may be gathered from the following tables supplied by the Examiner, Public Works Accounts, showing the original and final grants under the different main heads of service with the outlay as actually incurred against each :—

IMPERIAL.

No. I.—Statement showing Expenditure against Grants for 1879-80.

Heads of Service.	Original Budget Grant.	As modified after issue of Budget Orders.	Expenditure.	Expenditure compared with modifications.	
				More.	Less.
Original Works	RS. 4,70,163	RS. 1,17,837	RS. 55,372	RS. ...	RS. 62,465
Repairs	2,80,050	2,76,048	1,91,990	...	81,058
Establishment	1,89,805	1,82,908	1,97,266	14,358	...
Tools and Plant	18,982	16,942	18,980	2,038	...
Profit and Loss	...	...	...	...	...
Add Outlay on Harbour Works debited to Other Services agreeably to the letter from Accountant-General, Public Works Department, No. 345 G., dated 22nd May 1880 ...	9,68,000	5,93,735	4,66,608	16,396	1,43,523
Suspense Balance.	9,68,000	7,83,735	9,95,345	3,55,133	1,43,523
Stock	...	...	...	...	...
Stock purchases and sales ...	...	...	...	...	...
Miscellaneous advances	...	...	...	...	...
London Invoices	...	...	— 1,792	...	1,792
London Stores	...	...	— 6,676	...	6,676
Grand Total	9,68,000	7,83,735	9,86,877	3,55,133	1,51,991
Less expenditure in England ...	...	...	11,458	...	...
Net Excess	9,68,000	7,83,735	9,75,419	3,55,133	1,51,991
	...	...	...	2,03,142	...

NOTE.—The remaining outlay on the Madras Harbour Works, amounting to Rupees 8,50,000, has been charged to Imperial Capital Productive Public Works against a corresponding amount of grant under that head.

No. II.—Classified Expenditure under the different Budget Heads for 1879-80.

Class.	Original Works.	Repairs.	Total.
Military	RS. 21,227	RS. 1,90,125	RS. 2,11,352
Civil Buildings	34,123	4,449	38,572
Communications	22	416	438
Miscellaneous Public Improvements ...	...	...	...
Total	55,372	1,94,990	2,50,362
Establishment	...	...	...
Tools and Plant	...	...	1,97,266
Profit and Loss	...	...	18,980
Add Outlay on Harbour Works ...	...	...	4,66,608
Deduct credits to— London Invoices	...	1,792	9,95,345
London Stores	...	6,676	— 8,468
Less expenditure in England ...	...	...	— 11,458
Grand Total	...	...	9,75,419

No. III.—Statement showing Expenditure against Grant.

Heads.	Sub-heads.	Original Budget Grant.	Modified Grant.	Outlay.	Outlay compared with modified Grant.	
					More.	Less.
Original Works.	Military	Rs. 2,71,440	Rs. 72,184	Rs. 21,227	Rs.	Rs.
	Civil Buildings	1,70,380	43,980	31,123	...	50,957
	Communications	...	...	...	...	9,357
	Miscellaneous Public Improvements	19,343	1,673	22	...	1,651
	Total	4,70,163	1,17,837	53,372	...	62,465
Repairs	Military	2,75,000	2,61,868	1,90,125	...	71,743
	Civil Buildings	12,050	12,050	4,449	...	7,601
	Communications	...	...	...	...	...
	Miscellaneous Public Improvements	2,000	2,130	416	...	1,714
	Total	2,89,050	2,76,048	1,94,900	...	81,058
	Establishment	1,89,895	1,82,998	1,97,266	14,353	...
	Tools and Plant	18,082	16,942	18,930	2,038	...
	Profit and Loss	...	...	...	...	...
	Decrease of Suspense Balances	...	...	— 8,468	...	8,468
		9,68,000	5,93,735	4,58,140	16,396	1,51,991
	Add Outlay on Harbour Works	...	1,90,070	5,28,737	3,38,737	...
		9,68,000	7,83,735	9,86,877	3,55,133	1,51,991
	Less expenditure in England	...	...	11,458	...	...
		9,68,000	7,83,735	9,75,419	3,55,133	1,51,991
	Net Excess	...	...	...	2,03,142	...

PROVINCIAL SERVICES.

No. I.—Statement showing Expenditure against Grant for 1879-80.

Heads of Service.	Original Budget Grant.	As modified after issue of Budget orders.	Expenditure.	Expenditure compared with modifications.	
				More.	Less.
	Rs.	Rs.	Rs.	Rs.	Rs.
Original Works	10,26,845	7,61,677	4,01,915	...	3,61,662
Repairs	3,45,514	3,01,684	1,76,371	...	1,25,313
Establishment	6,64,718	6,92,584	6,33,199	...	59,385
Tools and Plant	13,160	8,549	—2,65,718	...	2,73,667
Profit and Loss	...	...	2,053	2,053	...
Total	20,50,237	17,66,494	9,48,320	2,053	8,20,227
<i>Suspense Balances.</i>					
Stock	49,753	54,763	46,343	...	8,420
Stock purchases and sales	...	...	—3,221	...	3,221
Miscellaneous Advances	...	...	54,022	1,54,022	...
London Stores	...	...	6,017	6,017	...
London Invoices	...	...	—271	...	271
Grand Total	21,00,000	19,21,257	11,51,210	1,62,092	8,32,130
Net Saving	...	...	...	...	6,70,047

No. II.—Classified Expenditure under the different Budget Heads for 1879-80.

Class.	Original.	Repairs.	Total.
Civil Buildings	Rs. 2,57,946	Rs. 1,32,964	Rs. 3,90,910
Communications	43,759	36,327	80,086
Miscellaneous Public Improvements	1,00,110	7,080	1,07,190
Total	4,01,815	1,76,371	5,78,186
Establishment	...	...	6,33,199
Tools and Plant	...	...	—2,65,718
Profit and Loss	...	...	2,053
Add increase in balance of Stock	46,343	...	9,48,320
Do. do. of Miscellaneous Advances	1,54,022	...	...
Do. do. of London Stores	6,017	2,06,382	...
Deduct decrease in balance of Stock purchases and sales	3,221	...	...
Do. do. London Invoices	271	3,492	2,02,890
Grand Total	...	...	11,51,210

No. III.—Statement showing Expenditure against Grant.

Heads.	Sub-heads.	Original Budget Grant.	Modified Grant.	Outlay.	Outlay compared with modified Grant.	
					More.	Less.
Original Works.	Civil Buildings	Rs. 7,85,914	Rs. 4,19,436	Rs. 2,57,946	Rs.	Rs.
	Communications	1,39,931	2,34,990	43,759	...	1,61,490
	Miscellaneous Public Improvements	1,00,000	1,00,251	1,00,110	...	1,91,231
	Total	10,26,845	7,63,677	4,01,815	...	3,61,862
Repairs	Civil Buildings	1,89,410	1,61,057	1,32,964	...	28,033
	Communications	1,54,104	1,32,286	36,327	...	95,959
	Miscellaneous Public Improvements	2,000	8,341	7,080	...	1,261
	Total	3,45,514	3,01,684	1,76,371	...	1,25,313
	Establishment	6,64,718	6,92,584	6,33,199	...	59,385
	Tools and Plant	13,160	8,549	—2,65,718	...	2,73,667
	Profit and Loss	...	...	...	...	...
	Add net increase of Suspense Balances	49,763	54,763	2,02,890	1,43,127	...
		...	...	...	1,50,180	8,20,227
	Grand Total	21,00,000	18,21,257	11,51,210	...	6,70,047
	Net Saving	...	...	...	...	6,70,047

PUBLIC WORKS—BUILDINGS AND ROADS.

The following works call for remarks:—*Presidency*.—Improvements Imperial—
to the press-house at the Gunpowder Factory were set in hand in Octo-
ber and completed within the year. A small outlay was incurred on the
Napier, Light-house, and Clive Batteries. The site for the platform
for the last mentioned not having been determined, the work was still

incomplete. *Chingleput*.—The demolition of the east and west wings of the old barracks at Poonamallee was commenced. Work on the new double-storied barracks was suspended with reference to the restrictive orders of the Government of India after an outlay of Rupees 8,000 had been incurred.

Imperial,
Other
Services.

The following items may be noticed under this head:—*Presidency*.—An outlay of Rupees 7,500 was incurred on the new combined Post and Telegraph Offices, the work of the southern block being brought up to ground level, but the funds allotted had to be withdrawn under the orders of the Government of India on the general restriction of expenditure. *Tanjore*.—A Post Office at Kumbakonam begun in the previous year was completed.

Provincial,
Productive
Public Works.

Madras Harbour Works.—Between 1st April 1879 and 31st March 1880, the progress made was as follows:—

Delay was caused in April and May by the want of diving dresses, which were despatched from England much later than they ought to have been and were then over-carried to Calcutta. 2,084 concrete blocks were set in the north pier, advancing the work by a length of 1,219 lineal feet and making the total length of blockwork on 31st March 2,745 feet. The last 445 feet of the work are built on a curve of 568 feet radius. The forming of the rubble foundation on which the blocks are set was carried on energetically, and 156,511 tons of stone (chiefly laterite) were deposited by the two steam hoppers and by cargo boats. The progress at the south pier was not equal to that at the north, chiefly owing to the want of blocks from a failure in the local supply of cement and to a breakdown in the machinery of the Titan Crane. During the year 1,772 blocks were set in the work, advancing the pier by a length of 1,037 lineal feet, and making the total length of blockwork 2,146 feet. In the rubble base 117,049 tons of stone were deposited by the two steamers and by the cargo boats. This stone was principally quarried at the Pallavaram Hills. The number of concrete blocks made in the yards was 3,797 (mostly of 27 tons each), and this number would have been greatly increased, if it had not been for the unforeseen failure in the local cement-supply. The total amount of stone quarried and sent down to the works during the year was 350,833 tons. The Harbour piers in November were to some extent tried by a heavy sea for three days, but no injury was sustained beyond the washing away of 700 feet of Railway lines. In addition to the construction of the Harbour piers the Superintendent Mr. Thorowgood, carried on heavy protective works to the north to prevent erosion of the coast, and for this purpose 42,885 tons of stone were used. An intercepting sewer was likewise constructed by the Harbour Works staff to keep the new Harbour clear of drainage from the town. It was completed for a length of 4,020 lineal feet.

the year. It is built of brick-in-cement based on cement concrete. The amount expended on the works during the year was Rupees 12,15,582.

The following works call for notice:—*Vizagapatam*.—One of the blocks of the District Jail at Vizagapatam was finished and good progress made with another. At the end of the year a little more than Rupees 10,000 on the estimate of Rupees 23,300 had been expended. *Godavari*.—Additions to the Collector's Cutcherry at Cocanada were in progress on an estimate of Rupees 31,870. At the close of the year the total outlay amounted to Rupees 12,657. The Police Station-houses at Chodavaram and Kota were roofed with corrugated iron at a cost of Rupees 4,444. The District Engineer's Office at Dowlaishweram was completed. *Kistna*.—The Subsidiary Jail at Repalle was completed on a revised estimate of Rupees 8,562. *Cuddapah*.—Excepting the ryots' shed, the concrete under-foundations for which had been laid, and the Jail latrine, the materials for which had been collected, the Kadiri Cutcherry, estimated to cost Rupees 33,070, was completed at the end of the year. *Kurnool*.—The Taluk Cutcherry at Koilkuntla was completed and handed over to the Revenue authorities, the outlay from first to last having been Rupees 68,921. *Presidency*.—Good progress was made in constructing contagious disease wards in the General Hospital, all the masonry and nearly the whole of the roofing being completed. Nurses' quarters, for which an estimate of Rupees 5,170 was sanctioned in October, were also finished. At the end of the year 1878-79 almost all the work provided for in the revised estimate for converting the old Government Workshops at Chepauk into quarters for the Secretariat and other Public Works Offices had been completed. What little remained was executed during the year under review. *Nilgiris*.—The Government House at Norwood, Ootacamund, was in progress, but outlay had to be restricted to immediately necessary work. *Madura*.—The Taluk Cutcherry at Palni was completed at a slight excess over the estimate of Rupees 25,160. The work of underpinning the north-eastern hall of the Madura palace was completed. The total expenditure up to the end of July, when the work was stopped under the orders restricting non-urgent outlay, amounted to Rupees 97,877, of which Rupees 15,055 were expended in the year under review. *Tinnevely*.—The main wall of the new jail at Payamcottah and the buildings at the entrance gate were completed. Two police station-houses, one at Saidaparpanallur and one at Saidungnallur, were completed, and the travellers' bungalow at Koilpati was purchased for Rupees 827 for the use of the Sâtur Divisional Office.

Ganjam.—The fourth section of the canal from the Chilka lake to the port of Ganjam has been under execution during the year, and the whole

Provincial,
Civil Build-
ings.

Provincial,
Communica-
tions.

is now complete and opened for traffic. It is navigable for the largest boats in use for six months at all stages of the tide, and for nine months with the tide favoring, while small boats can ply on it throughout the year. The traffic on the canal is fair, but cannot be fully developed till the line has been opened as far as Gopálpur, 12 miles south of the present terminus, Ganjam, when there is every prospect of its taking the great bulk of the traffic, which owing to the want of proper arrangements at Ganjam and of a communication between that place and the trunk road has now to be landed and transhipped at Romba on the Chilka lake. *Vizagapatam*.—The new Pottinghy Ghât was widened to full width for $3\frac{1}{2}$ miles from the foot towards Rodavalsa and other work executed, but on the whole the progress was slow and unsatisfactory. *Godavari*.—The navigation works at Dumagudem were maintained to the extent of the funds available. The outlay during the year was Rupees 5,994. *Nellore—Chingleput—Buckingham Canal*.—The net Provincial grant for the Buckingham Canal was Rupees 1,15,892, and the outlay during the year amounted to Rupees 1,03,846. The work carried out in the different sections of the canal was as follows :—(1.) *Extension from Vellar or Porto Novo to Paravanar*.—No grant was made in 1879-80 for this section. (2.) *Extension from the Palar to Merkanum*.—Considerable progress, in spite of the floods in November, was made on this section. It is a little over 20 miles in length. (3.) *Deepening the southern Canal from the Palar to the Adyar*.—Nothing was done during the year to this section. (4.) *Junction Canal from the Adyar to the Kuam river*.—A revised estimate for this section, amounting to Rupees 6,95,791, was sanctioned in April 1880, immediately after the year's close. The outlay during 1879-80, which amounted to Rupees 28,401, was for the adjustment of land compensation, the work in the section having been finished. (5.) *Canal from Pulicat (Coromandel) to Cusbah*.—The excavation of this section was completed, and the canal opened for navigation in 1878; but as the ends of the lake-cuts are constantly silting up, it will be necessary to alter the direction of the channel in this part and to carry it in the margin instead of within the water-spread of the Pulicat lake. (6.) *Improving old Canal from Cusbah to Krishnapatam*.—This section of canal was silted up very much and was for some time during the dry season of 1877 impassable. Work on it was completed before the year under review, as were also (7.) *Canal from Krishnapatam to the Penner and* (8.) *From the Penner to the Kistna frontier, end of Commamur Canal*.—At the beginning of the year the canal was navigable throughout at low tide except at a few places, which were damaged by a cyclone in May. A cyclone in November was accompanied by a storm wave from the sea and a land flood of great severity over much of the canal, chiefly throughout

100 miles to the north. Great damage was occasioned, the banks being in many places washed away and large portions of the canal filled with silt to such a depth that in many places boats could hardly pass in the highest tides, and at one or two points not at all.

In January, after much of the silt brought in during the November storm had been removed, the Governor of Madras and suite with a large fleet of boats proceeded up the canal from Madras to Bezvada on the Kistna river and returned in the following month. The boats employed on this occasion being all of much less draught than the ordinary large cargo boats, no serious interruption was experienced in the journey. Notwithstanding the drawbacks due to an exceptionally severe season with two cyclones and others inseparable from an unfinished work, the canal is rapidly growing in popularity with the natives as a means of transport for both passengers and goods, and promises eventually to be a great success. Revised rules for regulating navigation were introduced in October. During the six months from October to March the tonnage registered amounted to 9,457, the license fees collected to Rupees 9,640, the tolls to Rupees 26,023, or in all Rupees 35,663. For the corresponding period of the past year the receipts had totalled Rupees 12,621, or Rupees 23,042 less. It must be added that the state of the canal and country after the cyclones was not calculated to bring in high traffic receipts, and the foregoing figures are no test of the probable future results, though sufficient to show the favor in which the work is beginning to be held.

Tanjore.—A sum of Rupees 3,232 was expended in clearing and maintaining the Vedarniem Canal. *Coimbatore*.—The improvements carried out on the road from Mettupalaiyam to Kullar during the famine were undertaken with a view to adapt it eventually, if necessary, for a railway, as well as for the better accommodation of the present wheeled traffic. Rupees 13,280 were spent on the road during the year under review in completing culverts and in generally meeting the above objects. It was finally transferred to the Local Fund Board in January 1880, as with their reduced strength the Public Works Department could no longer attend to its upkeep.

No works requiring notice were in progress during the year.

Vizagapatam.—Pending the revision of the estimate, with reference to alterations proposed by the Inspector-General of Jails, work on the hill jail at Parvatipur was stopped. The outlay at the date of suspension amounted to Rupees 4,240. *Chingleput*.—The Agricultural College at Saidapet, together with a Veterinary Hospital and stables for cattle attacked by contagious diseases, were commenced. The foundation of the latter had to be excavated to a much greater depth

Provincial,
Miscellaneous
Public
Improvement.
Special, Civil
Buildings.

than had been estimated for owing to the badness of the soil for foundations.

Special,
Communi-
cations.

Tanjore.—Owing to difficulty experienced in obtaining labor unsatisfactory progress was made in the straight cut in the Calimodu reach of the Vedarni Canal. At the close of the year only one-fourth of the work was completed.

Special,
Miscellaneous
Public Im-
provements.

Godavari.—The quarters for the Superintendent of the Light-house at Vakalapudi were finished at a cost of Rupees 3,804. *Madura*.—The dredging works at Pamban were handed over to the Marine Department in the autumn of 1879.

Workshops.

The total outlay during the year on the Dowlaishweram Workshops amounted to Rupees 92,645-9-7, composed of Rupees 43,025-9-0 for new works; Rupees 30,384-6-11 for repairs; Rupees 3,653-7-10, the value of work done for private parties; and Rupees 15,582-1-10 spent on workshop stores and sundries. The charge for establishment, being 17 per cent. on the value of work turned out, not including stores and purchases, was Rupees 13,680-12-0. The recoveries by bills during the year totalled Rupees 1,00,681-14-8. The Bezvada Workshops turned out lock-gates, boats and screw gearing shutters for the head sluices and other works. Repairs to machinery and floating plant were also executed.

Presidency
Public Works
Stores and
Workshops.

The year opened with a balance of stock in the stores valued at Rupees 2,47,914. The receipts during the year amounted to Rupees 2,00,652, making a total of Rupees 4,48,566. The balance on the 31st March 1880 was Rupees 4,00,315, or Rupees 1,52,401 in excess of the opening balance. This increase in stock was caused by divisional officers returning for deposit a large quantity of serviceable stores. In the Workshops the saw mill and steam hammer were both in working order, and were used with profit, the former almost continuously. In May the Government lime-kilns, attached previously to the Presidency Division, were transferred to the charge of the Superintendent of the Workshops. The amount received from the State for the operations of the shops reached Rupees 1,68,670, adding to which the value of stores received from various Government Departments the total debit was Rupees 2,03,910. Against this amount there were credits to Government by cash of Rupees 63,366, and by book adjustments of Rupees 1,93,928; consequently the advances from Government were more than repaid by Rupees 53,000.

Plans and
Publications.

The lithographic branch of the Chief Engineer's Office turned out Rupees 17,820 worth of work.

Tidal
gaugings.

The arrangements for working the self-registering tide gauge at Madras having failed, attempts were made to work it by means of a long syphon, but after a careful and thorough trial this scheme had also to be abandoned. Eventually a plan was submitted for working

the apparatus by means of a vertical pipe, 7 inches in diameter, fixed under the middle of the pier. This design was, with certain modifications, adopted, and has proved quite successful.

Interesting experiments with dynamite were conducted, proving incontestably the economy of employing this explosive instead of gunpowder in nearly all blasting operations, particularly in getting material for road metal in all work connected with the formation of ghât roads, in procuring rough stone for Harbour Works, groynes, &c. The economy in time was, moreover, proved to be no less marked than the saving in cost.

Experiments made by the Locomotive Superintendent, Madras Railway Company, went to show that the coal from the Singareni field in His Highness the Nizam's Dominions is a good serviceable fuel, the only objection to it being the large quantity of ash which accumulates in the fire-boxes. The consumption per mile run was 33.48 lb. as compared with 24.56 lb. of the patent fuel hitherto considered to be the most economical. At the present price of the latter the equivalent value of Godavari coal as delivered at Madras is estimated at Rupees 15½. The actual cost of a ton of coal as sent from Singareni along about 80 miles of ordinary village roads to Bezvada and thence to Madras by canal boat was Rupees 29½, but it is estimated that by means of a tramway over the first portion the cost may be reduced to Rupees 20 and even less. His Highness the Nizam's Government have been addressed on the subject with a suggestion that a tramway may be laid and other measures taken to reduce the cost of delivery.

Owing to the organic changes which had to be introduced in the departmental staff as a consequence of the restriction of expenditure ordered by the Supreme Government, to which matter allusion will be presently made, the circumstances of the past year were in many respects unfavorable to the introduction of improvements in administration; still a foundation has been laid for them. A commencement was made with the publication of a new Departmental Code, to be followed up by standard forms of account, specifications, and designs, for all ordinary classes of buildings, &c. This work may be said now to be complete to the end of Chapter XIII, forming with its index the first and most important volume, leaving in fact the chapter on irrigation as the only one of much practical importance to complete. In the compilation of this work the principle kept steadily in view has been to adhere rigidly to the arrangement and text of the last edition of the Code of the Government of India, except where local peculiarities called for modification. Much additional matter, bringing the work up to the latest orders of Government, has, however, at the same time been introduced, so as to make the work as complete as circumstances admitted.

Alteration in the status of the Examiner, Public Works Accounts.

During the year under review it was deemed desirable to place the Examiner, Public Works Accounts, in a position more in harmony with that recognized in the other provinces under the Government of India, and with this view he has been given a footing precisely analogous to that held by the Deputy Chief Engineers of the General and Irrigation Branches. His position as the recognized professional adviser of Government and of the Chief Engineer in all financial matters may, it is hoped, materially aid in securing smoothness and efficiency in the administration of the department, at the same time leaving untouched his functions as Auditor on the part of the Government of India.

Changes in the strength of the Departmental Establishment and re-arrangement of charges on the orders restricting expenditure by the Government of India.

In September 1878 the District Engineer system had been replaced by a Superintending Engineer system, the Presidency being divided for purposes of supervision into five circles and the number of executive divisions being reduced from 76 to 39. In consequence of the late financial pressure considerable reductions in the executive staff of the department were rendered necessary, and in the autumn of 1879 the executive divisions were reduced by ten. It being found that with the increased areas thus given to each division the departmental staff would be no longer equal to the task of supervising the greater part of the Public Works expenditure of the various Local Fund Circles which had hitherto been executed under their agency, the Local Fund Boards were offered the option of making their own arrangements for the execution of their public works; and the large consequent reduction in the contribution of Local Funds to the cost of the Public Works Establishment, amounting to about 5½ lakhs of rupees, combined with the extensive reduction in the amount of the grants for Imperial and Other Services for 1880-81, necessitated a yet further reduction in the strength of the Public Works Establishment. It was therefore resolved to form three circles of superintendence in lieu of the five that had previously existed. 16 officers of the Engineer Establishment and 79 Upper Subordinates were specially retired with reference to Government of India Financial Resolution of the 31st July 1879, No. 2,079.

Three officers of Royal Engineers were granted two years' special furlough, and the services of 3 officers placed at the disposal of the Military Department. The officers of Engineers, viz., 2 Field officers and 7 Subalterns, whose services had before the commencement of the year been temporarily transferred to the Military Department for service in the field, remained absent throughout the whole period under review. The Government of India having called upon the Madras Government to restrict Public Works expenditure to the utmost possible extent, instructions were issued on the 7th of May that no work was to proceed on 24 items of the Imperial budget, nor on 50 items of the Provincial budget. The net amount surren-

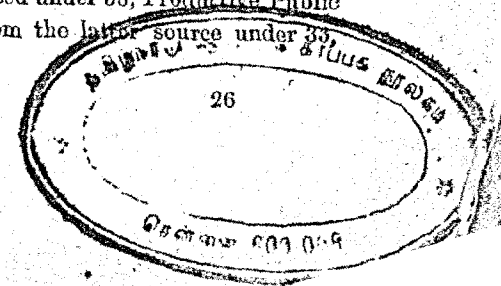
dered or withdrawn with reference to these restrictive orders was Rupees 8,37,674. Of this sum 3 lakhs under Imperial and 2 lakhs under Provincial were surrendered to the Government of India.

Viewed as a means of giving a reality to the provisions of the Local Fund Act the change which has occurred in reference to the agency to be employed in future for the execution of the needful work may be considered as having a wholesome effect. The Boards will henceforward be the responsible bodies which they were originally intended to be. The Public Works Department also gains materially in having no further connection with works a large portion of which were small and scattered and in many cases not well suited to be supervised by a highly-paid professional agency. As a further result of the reductions of establishment, it was decided to transfer the execution of all petty repairs to Civil buildings and minor work of a non-professional character costing under Rupees 1,000 to the officers of the several Civil Departments who were in immediate charge or occupation of such. With regard to Minor Irrigation Works the care of all small tanks has been entrusted to the cultivators and those directly interested in their maintenance, and in the districts which have been withdrawn from the supervision of this department the up-keep of the larger tanks (which are for the future to be designated and treated as Imperial) has devolved upon the Civil Officers. While affording a very distinct relief to the Engineers of work mostly of a trifling character and non-professional, the change, which has long since been carried out in other provinces, will, it is thought, give the several occupants a more direct interest than has hitherto existed in the preservation and maintenance of the buildings and works in question and otherwise prove to be beneficial. Initiated during the year under review, it will be fully carried out in that now current.

PUBLIC WORKS—IRRIGATION.

(a.) General.

The funds annually made available for expenditure on irrigation Classification. are either an assignment made by the Government of India loans contracted for the construction of productive public works or a grant from the ordinary revenue of the country. The works derived from the former funds are classed under 38, Productive Public (Capital Account), and those from the latter source under 39, Irrigation and Navigation Works.



The following is the revised classification of outlay prescribed by the Government of India in their Circular No. II of 1880 :—

I.—Irrigation and Navigation.

II.—Productive Public Works (Revenue Account).

III.—Irrigation and Navigation Works for which Capital and Revenue Accounts are kept (Capital).

IV.—Irrigation and Navigation Works for which Capital and Revenue Accounts are kept (Revenue).

V.—Irrigation and Navigation Works for which neither Capital nor Revenue Accounts are kept.

VI.—Agricultural Works.

The following five systems are classed as Productive Public Works, the outlay on Construction being debited to 38, Productive Public Works (Capital Account), and the outlay on Extensions and Improvements and on Maintenance and Repairs to Productive Public Works (Revenue Account) under 33, Irrigation and Navigation :—

Godavari Delta System.
Kistna do. do.
Penner Anicut do.
Cauvery Delta do.
Srivaikuntham Anicut System.

The following three systems are classed under the heads III and IV :—

Chembrambakam Tank,
Palar Anicut System,
Pelendorai Anicut System,

the outlay on Construction in their case being debited to Capital, and that on Extensions and Improvements and on Maintenance and Repairs to Revenue.

For all the above eight systems Capital and Revenue Accounts are maintained in order to ascertain what proportion the revenue they yield bears to the cost of their construction. Under head V are comprised all irrigation works other than the eight systems for which Capital and Revenue Accounts are kept.

(b.) Outlay.

The following is a statement of outlay as compared with grants for 1879-80 :—

	Grants for 1879-80.			Outlay, 1879-80.	Remarks.
	Original grant.	Budget final issue.	Revised.		
38. PRODUCTIVE PUBLIC WORKS (CAPITAL ACCOUNT).	RS.	RS.	RS.	RS.	
I.—IRRIGATION AND NAVIGATION.					
Works	5,00,038	2,11,021	1,55,536	*1,30,820	*Including the outlay on works originally provided under the head Ordinary Public Works.
Establishment	1,37,461	58,703	43,291	1,53,276	Percentage of Establishment on works outlay 117.
Tools and Plant	52,501	30,276	28,888	19,019	
Suspense Account	...	...	...	86	
Total	6,90,000	3,00,000	2,27,715	3,03,029	
Less Receipts on Capital Account	1,00,000	1,50,000	1,00,063	1,00,063	
Net Total	5,90,000	1,50,000	1,27,652	2,02,966	
33. IRRIGATION AND NAVIGATION. ORDINARY PUBLIC WORKS.					
(Subsidiary Capital outlay on Productive Public Works.)					
Works	56,491	75,990	38,376	— 54,072	The minus figures represent the adjustments of the previous year's outlay on navigation works transferred to "Irrigation and Navigation Accounts kept, Capital."
Establishment	30,529	24,137	13,882	— 22,013	
Tools and Plant	1,412	1,900	972	— 1,709	
Total	88,432	1,02,027	53,730	— 78,694	
II.—PRODUCTIVE PUBLIC WORKS (REVENUE ACCOUNT).					
Extensions and Improvements	22,500	22,500	22,846	17,264	Percentage of Establishment on works outlay 66.7.
Maintenance and Repairs	3,62,212	3,97,692	4,31,570	3,81,167	
Establishment	1,08,305	2,21,436	2,24,053	2,25,962	
Tools and Plant	66,418	67,305	68,160	64,030	
Total	6,40,435	7,08,933	7,46,629	6,88,423	
III.—IRRIGATION AND NAVIGATION WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT (CAPITAL).					
Works	10,306	40,681	1,60,613	†1,43,779	†Including the outlay in previous years on the navigation works on Commamur Canal debited to "Ordinary Public Works," and transferred during the year to this head.
Establishment	3,533	11,815	42,151	49,176	
Tools and Plant	258	1,017	13,107	13,692	
Refund to Productive Public Works, Capital Account	50,000	50,000	...	...	Percentage of Establishment on works outlay 34.2.
State Outlay on Guaranteed Irrigation Works	7,376	7,376	7,376	4,720	
Total	71,273	1,10,889	2,23,247	2,11,367	
IV.—IRRIGATION AND NAVIGATION WORKS FOR WHICH CAPITAL AND REVENUE ACCOUNTS ARE KEPT (REVENUE).					
Extensions and Improvements	7,500	7,500	6,000	4,300	Percentage of Establishment on works outlay 44.
Maintenance and Repairs	33,024	43,350	58,897	52,992	
Establishment	17,057	18,689	16,548	16,436	
Tools and Plant	1,138	1,271	1,123	1,160	
Total	63,719	70,810	62,568	64,888	

Grants and outlay.

	Grants for 1879-80.			Outlay. 1879-80.	Remarks.
	Original grant.	Budget final issue.	Revised.		
V.—IRRIGATION AND NAVIGATION WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE ACCOUNTS ARE KEPT.	RS.	RS.	RS.	RS.	
Original Works	2,69,331	1,91,787	1,87,930	1,33,385	Percentage of Establish- ment on works outlay 34'8.
Repairs	9,10,310	8,25,710	7,33,297	5,91,939	
Establishment	3,53,637	3,09,863	2,85,819	2,52,820	
Tools and Plant	29,490	25,337	25,129	23,706	
Refund to Madras Irrigation and Canal Company for surveys of abandoned pro- jects	...	...	1,95,562	1,95,562	
Total ...	15,62,818	13,53,297	14,27,637	11,96,962	
VI.—AGRICULTURAL WORKS FOR WHICH NEITHER CAPITAL NOR REVENUE ACCOUNTS ARE KEPT.					
Original Works	51,000	50,900	1,00,156	69,170	Percentage of Establish- ment on works outlay 34'9.
Repairs	1,08,400	1,08,000	1,72,893	1,29,482	
Establishment	43,845	71,829	80,892	69,441	
Tools and Plant	3,938	6,225	6,914	6,179	
Total ...	2,07,323	3,27,044	3,60,850	2,74,272	
Total 33, Irrigation and Navigation ...	26,43,000	26,73,000	29,74,771	23,47,218	
Grand Total ...	32,33,000	29,23,000	30,02,423	25,50,184	

statement
giving
estimates,
grants, and
outlay for
Productive
Public Works
(Capital
Account).

The subjoined statement shows in a connected form the several projects under execution under the head 38, Productive Public Works (Capital Account), their estimated cost, the grants and outlay of the year, and the balance of the estimates as yet unexpended :—

Names of Systems.	Names of Projects.	Estimate.	Grant for 1879-80.		Outlay.		Balance of Estimates.
			Budget final issue.	Revised.	During 1879-80.	To end of 1879-80.	
Godavari Delta.	Eastern Delta completion estimates.	RS. 12,89,505	RS. 75,000	RS. 40,543	RS. 7,208	RS. 9,69,518	RS. 3,19,987
	Western Delta completion estimates.	13,18,213	75,000	74,470	57,740	10,76,044	2,42,169
	Central Delta head sluice improvements	12,850	5,270	5,270	5,270	12,850	...
	Dowlaiswaram under sluices improvements	8,650	*	*	7,977	7,977	673
	Vejeshwaram under sluices improvements	8,700	*	*	4,702	4,702	3,998
	Total ...	26,37,918	1,55,270	1,20,283	82,987	20,71,091	5,66,827
Kistna Delta.	Improvements to head sluices at Bezvada	9,940	2,506	2,506	2,520	9,954	14
	Widening head of main canal	1,13,530	2,000	...	...	1,13,470	60
	Pulleru project	1,81,890	1,000	106	106	1,73,073	8,817
	Ryves' canal project	4,08,093	27,834	16,821	10,326	3,54,276	53,817
	Inampudy under tunnel	22,100	...	...	232	22,205	105
	Lingala drain	3,905	...	*	115	3,052	853
	Improvements to head sluice at Seetanagram	9,340	...	350	390	9,321	19
	Outlet in the 35th mile of Commamur canal and Moorkondapad channel and head sluice	9,935	...	1,619	336	8,900	1,026
	Extension of east side channel of Nizampatam canal	9,050	*	*	210	9,244	194
	Lock and Tappal Lascars' sheds	4,696	...	1,097	1,097	1,658	3,049
	Total ...	7,72,479	33,340	21,402	14,552	7,05,160	67,319

N.B.—Grants for works marked thus (*) were provided for under the head Ordinary Public Works.

Names of Systems.	Names of Projects.	Estimate.	Grant for 1879-80.		Outlay.		Balance of Estimates.
			Budget final issue.	Revised.	During 1879-80.	To end of 1879-80.	
Penner Anicut.	Penner Anicut extension	RS. 1,15,610	RS. *	RS. *	RS. 1,741	RS. 1,41,163	RS. —25,558
	Nellore tank surplus weir	15,600	*	*	1,384	14,699	901
	Total ...	1,31,210	*	*	3,125	1,55,867	—24,657
Cauvery Delta.	Vennar regulators	2,05,106	*	197	197	2,08,732	—3,626
	Kodamurthy and Tirumalrajan regulators	31,380	*	*	15,503	23,606	2,774
	Total ...	2,36,486	...	197	15,700	2,37,338	—852
Srivaikuntham Anicut.	Srivaikuntham Anicut project	9,64,270	22,411	13,654	14,456	9,34,432	29,838
	Grand Total ...	47,42,363	2,11,021	1,55,536	1,30,820	41,03,883	6,38,475

The following statement shows the distribution of outlay under Productive Public Works Extensions and Improvements and Maintenance and Repairs :— (Revenue Account).

Names of Systems.	Main Heads.	Extensions and Improvements.		Maintenance and Repairs.		
		Outlay.		Outlay.		Grant
		Amount.	Total.	Amount.	Total.	Grant
Godavari Delta ...	Head works	RS. 736	RS. ...	RS. 26,735	RS. ...	RS. ...
	Main canals and branches	3,620	...	1,00,628	...	...
	Distributaries	1,776	...	35,888	...	...
	Drainage and protective works	844	...	7,408	...	...
Kistna Delta ...	Head works	12,147	6,976	7,804	1,70,659	1,98,155
	Main canals and branches	494	...	83,407	...	...
	Distributaries	1,251	...	13,207	...	...
	Drainage and protective works	399	...	5,373	...	...
Penner Anicut ...	Head works	1,219	2,144	3,300	1,17,134	1,15,...
	Main canals and branches	...	...	12,230	...	...
	Reservoirs	...	...	8,322	...	...
	Distributaries	513	...	271	...	...
Cauvery Delta ...	Head works	491	1,732	2,000	30,097	31,200
	Main canals and branches	310	...	1,302	...	...
	Distributaries	2,629	...	31,396	...	...
	Drainage and protective works	1,912	...	8,431	...	...
Srivaikuntham Anicut.	Head works	100	4,742	7,875	42,847	66,500
	Main canals and branches	125	...	1,080	...	...
	Distributaries	1,445	...	8,631	...	...
	Drainage and protective works	...	...	200	...	...
	Total ...	...	17,264	1,867	20,430	22,500
					3,81,167	4,31,570

Godavari Delta.—The anicut, the rest-houses, the main canals, 165 Maintenance and Repairs. out of 421 distributaries, and 31 out of 158 drains were repaired.
Kistna Delta.—The usual repairs to the anicut and clearances to all the main canals were carried out. The greatest expenditure in the eastern section is reported to have been incurred on the Ellore Canal for closing the breaches caused by the cyclone of November 1879. 95 out of 700 distributaries and 21 out of 32 drains have been repaired

N.B.—Grants for works marked thus (*) were provided for under the head Ordinary Public Works.

during the year. There were numerous and extensive breaches in November 1879 in the Commamur Canal banks from a cyclonic storm and owing to the cross drainage works not having yet been constructed. In some parts of the canal these will need to be considerably enlarged or supplemented. *Penner Anicut.*—The usual repairs were fully carried out. *Cauvery Delta.*—Repairs to the banks of five river branches in the Cauvery section and to two in the Vennar section, also to 95 head sluices and 13 aqueducts were completed. The short expenditure occurred principally in the Negapatam division, where there was only a Supervisor in charge for the last four months of the year. *Srivaikuntham Anicut.*—Nearly the whole of the expenditure incurred was rendered necessary by the damage caused by the floods of December 1877. These special repairs are now practically completed. The repair of damage cost over 66,000 rupees and the remissions of revenue amounted to a little over 15,000 rupees.

The subjoined statement shows the several projects or works under execution :—

Name of system or work.	Name of project or work.	Estimate.	Budget grant, final issue.	Final grant.	Outlay.		Balance of Estimate.
					During 1879-80.	To end of 1879-80.	
Commamur Canal Do. ...	Navigation works. Normal value of famine work ...	Rs. 2,73,500	Rs. 44,365	Rs. 90,957	Rs. *1,37,197	Rs. 1,37,197	Rs. 1,36,303
Chembrambakam Tank ...	Chembrambakam tank project ...	5,06,366	4,744	63,954	†2,110	4,48,068	57,698
Palar Anicut System ...	South main channel, head sluice improvements ...	5,300	5,300	5,300	4,070	4,070	1,230
Pelandorai Anicut System ...	Extending apron ...	2,820	262	402	402	2,960	— 140
	Total ...	7,87,986	54,671	1,60,613	1,43,779	6,59,973	1,28,013

Commamur Canal.—Foundations were laid for the Kollimerla lock, which will raise the water level just above it about 6 feet. The extension of the canal below the Santaravar lock, which is estimated to cost Rupees 68,000, was completed, the work having been commenced for famine relief. The Pedda Ganjam lock, which was commenced in December 1878, made slow progress, as it is situated in the extreme end of the division, where labor is scarce and fever prevalent. This lock will effect a great improvement in the navigation. The new cut between this and the Buckingham canals made slow progress, much damage having been caused by the cyclone in November 1879. *Chembrambakam Tank System.*—The raising of the revetment of the Chembrambakam tank and the embankment of the lower part of the new Bungaroo supply channel were completed during the

* Inclusive of Rupees 60,070, the outlay incurred in previous years and adjusted during the year.

† Exclusive of Rupees 40,926 paid by the Collector of Chingleput for land compensation, but not brought into the Public Works Accounts.

year. *Palar Anicut System.*—The improvements to the head sluice of the south main channel are in progress. The masonry work is completed, but the cross beams not having been received from the Workshops, the gear had not been fixed at the close of the year. *Pelandorai Anicut System.*—A length of 370 feet of the additional apron to the Pelandorai Anicut was completed in 1878-79 and the work was finished in the year under review.

Improvements to the south weir, Doseey Mamandur tank of the Palar Anicut system, are in progress. The Pelandorai Anicut was breached for a length of 219 feet in October 1877. The repairs were completed in 1879-80. The main channel having suffered damage from the influx of cross drainage owing to the permanent cross drainage works not having been constructed for want of funds, temporary outlets were undertaken on an estimate of Rupees 7,875, and Rupees 2,384 were spent.

Byana Weir, Godavari District.—The work in connection with this weir made some small progress, but the difficulty of carrying it on in an out of the way and feverish part of the country was enhanced by changes in and reductions of establishment. *Kurnool District.*—The waste weir No. 2 at 5,750 feet of the Pedda Cumbum channel was partly built. About one-fifth of the work to be done to this channel had been completed up to the end of the year. *Chingleput District.*—A waste weir for the Cholaveram tank, which had been originally built for a higher full tank level than was finally adopted, was reconstructed. *North Arcot District.*—The construction of a weir to the Alliabad Anicut main channel was commenced in October and the work was completed with the exception of the curved apron. Owing to the prevalence of fever there was difficulty in collecting labor for this work. *Salem District.*—The work required to enable the Sangambasavan tank of the Marandahully project to hold water up to the old F.T.L. and so restore the irrigation under it, which had been interfered with by the work executed during the famine relief operations, has been nearly finished. The work similar required at the Baroor tank to allow of the irrigation of its former acut was also completed. The raising of the bund of the Penugundapuram tank to its full height of 9 feet above F.T.L. and the revetments have been completed, and the surplus weir has been lowered to 1 foot below F.T.L. so as to make the tank more secure. The above three projects were undertaken as famine relief works on approximate estimates. A regular estimate for the first is under preparation and those for the two last are awaiting review by the Chief Engineer for Irrigation. It is doubtful whether the Penugundapuram tank will ever be a satisfactory work. It was a ruined Native tank and the sub-soil is decomposed rock, which probably led to its failure originally. The leakage is great, and though drains have been constructed the safety of the bund is by no means assured. The capacity

Irrigation and Navigation works for which Capital and Revenue accounts are kept—Revenue.

Irrigation and Navigation works for which neither Capital nor Revenue accounts are kept.

of the tank moreover is small compared with the drainage basin. *Coimbatore District.*—The old head of the Pugalur channel was cleared, and the head and sand sluices and small masonry works which were absolutely necessary were constructed during the year. The total expenditure incurred on this channel and on its extensions from famine funds in previous years was Rupees 1,38,964; the normal value of work being Rupees 91,700. Revised estimates for this work are under preparation. The extension of the channel is expected to bring a considerable area of land under irrigation.

General
remarks.

In the Godavari district the south-west monsoon rains set in early and abundantly, but not in excess as in the previous year. The freshest in the Godavari were earlier than usual and a more than average water-supply was maintained for a protracted period. The water rose over the crest of the anicut on the 31st May 1880. On the 5th June it was 5 feet over it, and never again fell below the crest till 6th March 1880. The highest fresh was 12·08 feet above the crest and occurred on the 27th August 1880. This fresh was 0·33 feet less than the highest of the previous year, and 3·17 less than the recorded maximum.

The supply in the Cauvery was steady and abundant from June up to the end of October. The highest fresh in the Cauvery at Trichinopoly gauge was 8·67 on 26th July 1879. Complaints are still made as regards the defective water-supply to lands under the Srivaikuntham Anicut south main channel; but the enlargement of the head sluice and the widening of the channel which, it is hoped, will be completed in time for the irrigation season of 1880-81, will effect a material improvement.

(c.) Receipts.

The revenue dependent on the irrigation works throughout the Presidency amounted in 1878-79, the latest year for which the accounts are compiled, to Rupees 2,09,81,624 on 5,442,854 acres against Rupees 2,07,08,603 on 5,278,934 acres in the previous year.

The areas irrigated in the Godavari and Kistna Deltas and the total revenue for Fasli 1288 and charges on Revenue and Capital Account are contrasted below with the figures for the previous years:—

Name of System.	Fasli.	Area irrigated.	Total revenue.	Increase of revenue due to the system.	Total charges on Revenue account.	Total direct charges on Capital account to end of the year.	Ultimate area of irrigation.
Godavari Delta	1286 (1876-77)	ACRES.	RS.	RS.	RS.	RS.	ACRES.
	1287 (1877-78)	520,611	21,57,047	15,97,518	2,83,375	76,47,791	...
	1288 (1878-79)	502,548	25,79,965	17,73,080	2,58,931	79,08,308	...
	1289 (1879-80)	575,338	25,03,915	...	2,83,398	80,95,668	610,000
	1290 (1880-81)	261,256	10,85,763	7,90,156	2,21,906	43,35,751	...
Kistna Delta	1286 (1876-77)	247,908	9,84,645	7,81,035	2,07,105	47,62,654	...
	1287 (1877-78)	250,409	11,06,812	8,57,388	1,81,761	48,30,306	...
	1288 (1878-79)	274,573	11,50,852	...	1,77,701	49,65,052	470,077
	1289 (1879-80)	...	...	...	...	...	...

The increase of revenue under the Cauvery Delta, the Srivaikuntham Anicut and the Chembrambaukam tank for Fasli 1288, made out approximately from the channel registers, is shown below; the correct figures will not be available until the special establishment has finished the investigations:—

Name of System.	Fasli.	Area irrigated.	Increase of revenue.	Total revenue charges.	Total direct charges on Capital account to end of the year.
Chembrambaukam Tank	1287 (1877-78)	ACRES.	RS.	RS.	RS.
	1288 (1878-79)	14,371	28,524	2,078	5,57,623
	1289 (1879-80)	15,069	34,393	6,124	5,62,330
Cauvery Delta	1287 (1877-78)	794,722	6,93,257	1,18,545	13,61,355
	1288 (1878-79)	805,093	8,47,722	1,00,352	13,75,834
Srivaikuntham Anicut	1287 (1877-78)	34,255	44,873	32,154	11,68,276
	1288 (1878-79)	35,228	51,283	68,105	11,92,765

Complete information as to the revenue dependent on the eight systems for which Capital and Revenue Accounts are kept for Fasli 1288 (1878-79) not being available, the total outlay, except that on Capital Account in each district for 1878-79, is compared in the following statement with the total revenue of the district for the year:—

Districts.	Charges for 1878-79.										Total.										Remarks.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Productive Public Works, Revenue Account.					Irrigation and Navigation Works for which Capital and Revenue Accounts are kept.					Agricultural Works for which neither Capital nor Revenue Accounts are kept.					Tools and Plant.					Total of Columns 12, 13, and 14.					Area irrigated, Fasil 1288.					Total revenue dependent on irrigation, Fasil 1288.					Receipts collected in the Public Works Department, 1878-79.					Percentage of repairs on revenue.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.

30 is not yet available.

Of receipts realised at present in the Public Works Department Navigation only those derived from navigation of the Godavari and Kistna Delta receipts. Canals need notice.

The subjoined statement shows the amount of collections from this source during the year, as also some of the main facts connected with the traffic on these important systems of canals :—

Particulars.	Godavari District.		Kistna District.		Remarks.
	1878.	1879.	1878.	1879.	
(1) Number of passenger-boats licensed	112	123	44	51	Number of lockages divided by number of locks, so that trips made to and fro on level reaches without passing through a lock are not taken into account. The sum of the number of tons of laden boats registered at each lock divided by the number of locks on the canal.
(2) Number of cargo-boats licensed	954	1,019	510	612	
(3) Number of Government boats	...	64	...	47	
(4) Number of pleasure-boats	...	48	...	9	
(5) Registered tonnage cargo-boats	20,553	22,037	9,804	12,342	
(6) Registered tonnage Government boats	...	...	...	...	
(7) Rafts passed through head lock	3,905	4,070	962	1,245	
(8) Number of boat trips	15,552	20,371	2,876	4,131	
(9) Tonnage	3,27,471	4,93,491	35,473	60,879	Register of tonnage of all laden boats passing through locks multiplied in each case by number of miles in reach above or below lock according to direction in which the boats passed. Arbitrary valuation.
(10) Mileage of the canals	457-18	461-78	277-29	277-29	
(11) Ton mileage	6,870,196	10,779,647	1,727,338	1,854,678	
(12) Value of cargoes	2,83,53,124	3,76,61,673	42,86,405	66,31,909	
(13) Navigation receipts	53,386	63,348	16,366	23,234	

PUBLIC WORKS—RAILWAYS.

(a.) General.

The Conference which assembled in Calcutta in January 1880 for Railway the official year 1879-80 was attended by the Agent and Manager and Conference. the Locomotive Superintendent of the Madras Railway and by the Agent of the South Indian Railway. It was convened for the purpose of revising the code of rules and regulations for Indian railways, and also for considering the question of adopting some uniform system of recording locomotive miscellaneous services. The revised rules and regulations are to come into force on 1st September 1880. The following other subjects were discussed at the meeting :—(1) modification of Rule XVII, adopted at previous Conference, regarding the interchange

of rolling stock; (2) revision of railway statistics; (3) uniform goods classification for all India; (4) the establishment of a central clearing house; (5) uniformity of continuous brakes for all connected railways.

New Railway Act. It being considered expedient to consolidate and amend the law relating to Railways in India, all former Acts were repealed, and a new Act called "The Indian Railway Act, 1879," was passed, and brought into force from 1st July 1879.

Payment of land cess by Railway Companies. (The Government have decided that Railway Companies are legally liable to payment of land cess on all lands occupied by them, and this ruling has been accepted by the Boards of the two companies in this Presidency. The cess has been levied retrospectively.

Rate of exchange for revenue expenditure in England. It has been ruled by the Secretary of State that the contract rate of exchange does not apply to the purchase of stores and other expenditure incurred in England on revenue account, and it has been arranged that such payments shall be finally adjusted at the average rate of bills drawn on India by the Secretary of State during the half-year. All expenditure is, however, brought into the Indian books at the contract rate of exchange; and at the close of each half-year the difference due to Government is paid into the treasury, and debited in the revenue accounts of the companies. This procedure is also applied, under certain restrictions, to furlough and leave allowances and family remittances paid in England; but in these cases the loss falls on the employes themselves and not on the revenue account.

Adaptation of railway bridges for ordinary traffic. Estimates have been framed for adapting six of the railway bridges in this Presidency for wheeled traffic; but the outlay would be so great, and the cost of working, which would have to be made good out of the tolls, so high, that it is very doubtful if any of these bridges can be economically utilised as proposed.

Education. Elementary schools have been established at Jalarpet and Podanur on the Madras Railway, and it is proposed to open similar ones at Gooty and Raichur. The question of a central school of a higher standard to be located at one of the hill stations has not yet been settled. On the South Indian Railway no special railway schools have been organised.

Comparison of work done by Madras and South Indian Railways. During the year 1879 the work done by the two lines compares as follows:—

Madras Railway carried	3,344,837 passengers an average distance of 47·3 miles.
	647,408 tons of goods an average distance of 118·1 miles.
South Indian Railway carried	5,215,043 passengers an average distance of 34·4 miles.
	455,200 tons of goods an average distance of 65·3 miles.

The average bookings per mile of line were—

Madras Railway,	3,903 passengers and 550 tons of goods, excluding harbour materials.
South Indian Railway,	8,480 passengers and 441 tons of goods, do. do.

The average contents of a train on the two lines in the same year were, supposing all trains to be mixed—

Madras Railway, 76½ passengers and 36·9 tons of goods.
South Indian Railway, 154½ passengers and 25·6 tons of goods.

(b.) *Madras Railway.*

No alteration was made in the length of the Madras Railway, which Open mileage remains at 814½ miles of single and 42½ miles of double line.

The capital expenditure up to 31st March 1880 was Rupees 11,06,48,178 (£10,142,750), being at the rate of Rupees 1,29,073 (£11,832) per mile. The value of stores in stock on 31st March 1880, including stores in transit (Rupees 1,32,777), was Rupees 37,54,114.

The total capital expenditure, including stores, was up to the same date Rupees 11,44,02,292 (£10,486,877). The capital expenditure during the year was Rupees 12,83,585, made up principally by the debit of Rupees 10,78,047 under rolling stock for 600 open goods wagons obtained from England towards the end of the famine. The principal engineering works on which outlay was incurred were:—

	RS.
Cheyer new bridge	53,400
Electrical intercommunication in trains	21,740
Watering arrangements at Perambur	10,850
Extension of over-bridge and alterations at Erode Station	10,730
New permanent-way on bridges	42,310
School-house at Jalarpet	5,450

The net profits of the official year were Rupees 22,08,299 (£202,427), Dividend. giving a dividend at the rate of 1·9 per cent. on the total capital expenditure. The net profits fell short of the guarantee by nearly £321,000. The guaranteed interest from the formation of the Company up to 31st December 1879 amounted to £9,197,901, and the net profits for the same period to £4,046,417, leaving a balance of £5,150,674 to be met from the revenues of the country, in addition to the expenditure on land and control. The net cost of land for this Company is estimated at 18 lakhs of rupees.

The permanent-way and works connected therewith were generally well maintained. At Chinnammampet, between Kadambatur and Arkonam, the second line was closed from 31st October 1879 in consequence of a disastrous accident on that date, caused by a slip of the embankment. The measures taken to insure the future safety of this part of the line are the removal of the new embankment at points where slips have occurred and the substitution of good material; the lowering of formation level to 3 and 4 feet where the soil is bad; and the thorough drainage of the bank. The laying of new permanent-way on girder bridges, and the substitution of iron for wood sleepers between Palghat and Beyapore,

have been steadily continued. At the end of the official year there were only $33\frac{1}{2}$ miles laid with jungle-wood sleepers, all the remainder of the Madras Railway being laid with iron bowls, except 10 miles of creosoted pine sleepers used as an experiment near the West Coast.

New works.

The 26 southern pans of the Cheyér bridge were opened for traffic on 8th May 1879, and were run over up to 20th January 1880, when the road across the river-bed again came into use during the transfer of the girders of the northern portion. This operation was completed by the end of the year, and the bridge was opened throughout on 1st May 1880. The bracings for connecting the 2 cylinders of each pier have to be added; and the flooring of the bridge has not yet been completed. An estimate amounting to Rupees 23,037 was sanctioned for connecting the Madras Railway with the Irrigation Company's canal near Cuddapah.

Rolling stock.

The rolling stock now in use has been maintained in good working order, but a large number of vehicles have been worn out and not replaced. In January 1879 the Government of India purchased 300 open goods wagons for use on State Railways; and in March 1879 a further purchase was made of 30 coaching and 14 goods vehicles. As large additions were made to the stock of the Madras Railway during the famine, the replacement of the vehicles sold was deferred until a comparison could be made between the actual stock available and that required. An inventory has been taken, but the future equipment of the line has not yet been decided. In October 1879 10 engines and 12 brake-vans were lent to the Government of India for use on State Railways.

Block system.

The block system was in operation on the line north of Gooty (including the Bellary Branch), and worked satisfactorily. The question of its extension to other portions of the Madras Railway system is in abeyance. During the year the Telegraph Engineer, Mr. Winter, devised an arrangement for the exhibition of out-door signals in connection with the block working, small semaphore signals at each end of a station being electrically interlocked with the block instruments.

Electrical intercommunication in trains.

At the end of the year nearly the whole of the rolling stock had been fitted with electrical apparatus for intercommunication, so that both passengers and goods trains are now thus provided. The interruptions during the year averaged about one per cent.

Famine bonus.

The sum of Rupees 11,950 was sanctioned as a bonus for extra work performed by certain of the Company's servants during the famine pressure of 1876-77.

Accidents.

The following table gives the number of accidents that have happened to trains during the last and three preceding calendar years:—

	1876.	1877.	1878.	1879.
Collision	9	18	4	5
Deraiment	27	61	58	67
Fire	57	98	32	31
Running over cattle	33	76	45	43
Other causes	21	21	26	25
Total	152	274	165	176

Four of the collisions occurred at stations. The derailments were due chiefly to carelessness in working points and in shunting. One was caused by the fracture of crank axle of engine. The damages by fire were generally slight. No casualty resulted from running over cattle, and the action of the cow-catchers, with which all engines are fitted, was generally efficient. Under the head of "other causes" are included 2 cases of running over obstructions, 4 of gates being run through, 1 of axle breaking, 1 of coupling failing, 1 of broken rails, 7 of slips in cuttings or embankments, 1 of fire at station, and 8 of miscellaneous nature, chiefly of derelict wagons and injury to wagons while being shunted.

The number of persons killed and injured was as follows. The great excess is due to the Chinnammapet accident above mentioned, and to the fact that accidents to men in workshops, &c., were not included in previous years:—

	1876.		1877.		1878.		1879.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
<i>Passengers.</i>								
From causes beyond their own control ...	11	13	3	10	...	1	22	46
From their own misconduct or want of caution	1	5	...	3	...	3	1	3
Total	12	18	3	13	...	4	23	49
<i>Servants of the Company or of Contractors.</i>								
From causes beyond their own control ...	1	...	3	3	...	...	...	4
From their own misconduct or want of caution	12	14	22	21	16	19	8	23
Total	13	14	25	24	16	19	8	27
<i>Other Persons.</i>								
Crossing at level crossings	1	1	...	...	...	1	...	...
Trespassers, including suicides	5	1	31	11	10	2	5	1
Miscellaneous	...	...	2	...	...	1	4	1
Total	6	2	33	11	10	4	9	2
Grand Total	31	34	61	48	26	27	40	78

Train service. The only alteration effected during the year was the abolition, from 15th January 1880, of the mail train between Podanur and Beypore, the local train being sufficient for the passenger traffic on this section.

The through speed of the day passenger train between Madras and Erode was somewhat reduced on 1st July 1879, and in all day trains conveying passengers a halt of one hour was allowed for midday meal. Owing to the absence of chattrams at most of the stations the experiment has not been so fully appreciated as was anticipated. On 30th March 1879 the fare by mail trains was made 4 pies throughout the whole journey, instead of 4 pies for distance travelled by night and 3 pies for that by day. Return tickets were, however, issued at a fare and a half. On 1st July 1879 the third-class fare by all except mail trains was reduced to 2 pies. On 1st January 1880 a new parcels tariff was introduced, under which the charges made are irrespective of distance. A large increase in the number of parcels is anticipated from this liberal measure. No important alterations were made in the goods rates. Three additional stations were opened during the year. 20.48 per cent. of all trains were more or less late. This high percentage is due in great measure to the restriction of speed over some portions of the line between Madras and Arkonam during the latter part of the year.

The general results of the last five calendar years are compared in the following table:—

	Gross earnings.	Expenditure.	Net revenue.	Percentage of expenses to receipts.	Receipts per open mile per week.
1875	RS. 64,29,753	RS. 45,18,003	RS. 19,11,151	RS. 70.28	RS. 143.7
1876	71,13,773	45,79,778	25,33,995	64.38	168.2
1877	1,00,35,205	59,47,402	40,87,803	59.26	224.3
1878	66,30,174	50,42,193	15,87,981	76.05	148.4
1879	66,26,486	45,51,316	20,75,170	68.68	148.3

Comparison of earnings and working expenses.

The working expenses still continue to be high, though considerable reductions have been made. The expenses include Rupees 1,17,354 on account of loss by exchange, which appears in the accounts for the first time. The earnings under coaching and goods were:—

Year.	Coaching.		Goods.		Total.
	Amount.	Per open mile per week.	Amount.	Per open mile per week.	
1875	RS. 24,65,933	RS. 55.12	RS. 37,58,441	RS. 84.01	RS. 62,24,434
1876	25,89,492	57.72	42,97,130	95.79	68,86,622
1877	26,99,426	60.33	70,87,341	158.42	97,86,767
1878	27,82,517	62.27	35,69,536	79.88	63,52,053
1879	26,21,195	58.66	37,30,522	83.48	63,51,717

The train mileage and earnings per mile were:—

Year.	Mean mileage worked.	Traffic train mileage.	Average number of trains each way per diem over the whole line.	Per traffic train mile.		
				Gross earnings.	Expenses.	Profits.
1875	MILES. 858	MILES. 2,127,759	NO. 3,897	RS. 3,022	RS. 2,124	RS. 0,898
1876	858	2,333,430	3,715	3,043	1,963	1,080
1877	858	3,551,039	5,070	2,826	1,675	1,151
1878	857	2,155,546	3,446	3,076	2,339	0,737
1879	857	2,073,541	3,314	3,196	2,195	1,001

The numbers of passengers (exclusive of troops and police) carried in each class were as follow:—

Year.	First class.	Second class.	Third class.	Fourth or cooly class.	Total.
1875	12,998	44,711	1,803,627	837,965	2,699,301
1876	12,486	39,747	1,735,411	973,872	2,761,516
1877	13,090	37,224	1,707,836	810,046	2,568,196
1878	13,737	41,273	2,144,097	440,612	2,640,621
1879	10,836	35,213	2,536,937	645,750	3,278,786

The receipts from each class were:—

Year.	First class.	Second class.	Third class.	Fourth or cooly class.	Total.
1875	RS. 1,31,781	RS. 1,15,036	RS. 14,04,716	RS. 3,42,536	RS. 19,94,069
1876	1,53,216	1,27,980	14,58,189	4,22,545	21,61,930
1877	1,58,513	1,27,018	15,18,033	3,63,441	21,66,053
1878	1,62,532	1,37,991	17,05,894	1,82,473	21,88,890
1879	1,40,875	1,15,472	15,63,793	2,65,730	20,85,870

The percentages of numbers and receipts were:—

Year.	Numbers.				Receipts.			
	First class.	Second class.	Third class.	Fourth class.	First class.	Second class.	Third class.	Fourth class.
1875	0.43	1.86	66.82	31.04	6.61	5.77	70.44	17.18
1876	0.45	1.44	63.84	35.27	7.09	5.92	67.44	19.55
1877	0.51	1.45	66.50	31.54	7.32	5.86	70.09	16.73
1878	0.52	1.56	81.23	16.69	7.43	6.30	77.93	8.34
1879	0.33	1.07	78.90	19.70	6.75	5.54	74.97	12.74

The other items of coaching traffic are compared in the following table:—

Year.	Troops and police including military baggage and horses.	Passengers' luggage.	Carriage, horses, &c.	Parcels.	Special trains.
1875	RS. 1,74,550	RS. 41,256	RS. 85,164	RS. 1,05,891	RS. 61,883
1876	1,34,634	45,328	84,400	1,23,974	35,994
1877	1,84,670	88,358	67,420	1,24,836	43,321
1878	2,93,753	80,244	66,692	1,15,415	11,727
1879	2,74,512	74,453	70,773	95,477	14,930

The increased receipts from troops during the last two years are due to the war in Afghanistan. The falling off in parcels occurred in consignments from and to foreign lines.

The receipts from each class of goods were :—

Goods traffic.

—	1875.	1876.	1877.	1878.	1879.
	RS.	RS.	RS.	RS.	RS.
Special	10,79,213	16,85,200	50,50,397	15,16,277	16,25,527
First class	13,76,376	13,27,109	9,51,017	8,99,950	9,07,167
Second „	5,51,525	5,51,608	5,84,931	5,41,246	5,97,619
Third „	3,54,969	3,51,938	1,97,422	2,65,683	3,15,801
Fourth „	1,82,348	1,33,502	98,527	99,458	1,02,216
Fifth „	78,065	88,000	34,231	51,193	59,193
Total ...	36,22,514	41,37,357	69,16,585	33,73,812	36,07,523

The tonnage of goods in each class :—

—	1875.	1876.	1877.	1878.	1879.
	TONS.	TONS.	TONS.	TONS.	TONS.
Special	169,011	376,096	796,160	340,804	440,705
First class	156,731	148,956	120,141	116,274	119,055
Second „	48,312	49,052	50,281	47,524	55,480
Third „	24,455	24,621	13,233	17,791	22,669
Fourth „	7,904	5,745	3,832	4,153	4,439
Fifth „	4,554	4,901	981	1,986	2,143
Total ...	410,967	609,371	984,628	528,532	644,491

The average receipts per ton per mile from each class :—

—	1875.	1876.	1877.	1878.	1879.
	PIES.	PIES.	PIES.	PIES.	PIES.
Special	7'55	7'72	7'65	7'52	7'28
First class	10'24	10'00	9'47	9'53	9'31
Second „	13'17	12'43	12'35	12'50	12'68
Third „	16'75	16'49	17'00	16'39	16'04
Fourth „	21'78	21'56	21'79	21'36	22'91
Fifth „	30'87	30'29	33'45	25'94	27'84
Total ...	10'31	9'75	8'38	9'31	9'15

Grain traffic.

The total quantity of food-grains carried was 186,982 tons, yielding a receipt of Rupees 10,90,310. Compared with pre-famine figures the tonnage was nearly 50 per cent. larger than the average; while the receipts, in consequence of the reduced rates introduced in November 1876, and probably a shorter lead, were only 18 per cent. larger. Many other staples show a corresponding improvement in tonnage.

Cotton traffic.

The following table shows the number of tons of cotton carried, the total receipts, and the average receipts per ton during the last five years :—

Year.	Half pressed.	Full pressed.	Loose.	Total.	Average receipts per ton.
	TONS.	TONS.	TONS.	TONS.	RS.
1875	47	24,352	6,202	30,601	4,57,835
1876	11	18,503	4,963	23,476	3,79,404
1877	...	1,047	635	1,682	33,618
1878	3	8,960	2,782	11,745	1,84,346
1879	1	12,003	4,172	16,176	2,29,115

The following table gives the tonnage of salt traffic out of Madras Salt traffic, and from all stations :—

—	1875.	1876.	1877.	1878.	1879.
	TONS.	TONS.	TONS.	TONS.	TONS.
South-west line	40,250	41,638	45,661	36,741	32,933
North-west line	4,611	5,339	8,225	6,745	9,854
Total from Madras	44,861	46,977	53,886	43,486	42,787
Grand Total from all stations ...	47,996	51,470	58,609	48,912	48,018

The maintenance and locomotive charges compare as follows with previous years :—

Years.	Expenses.					
	Maintenance of way, works, and stations.			Locomotive.		
	Amount.	Mean miles maintained from Revenue Funds.	Per mean mile maintained.	Amount.	Per traffic train mile.	Per engine mile.
1875	RS.	MILES.	RS.	RS.	AS.	AS.
1876	16,58,359	842	1,969	14,63,157	11'002	8'397
1877	13,74,101	858	1,602	16,22,563	11'126	8'389
1878	12,09,548	858	1,410	21,56,704	9'718	7'426
1879	12,64,737	857	1,476	16,77,206	12'449	8'633
1879	13,13,030	857	1,532	15,96,837	12'322	8'602

During 1879 the cost of maintenance averaged Rupees 1,321 per mile of track, including sidings; or Rupees 1,532 per open mile. The following items of extraordinary expenditure are included in these figures :—

Cheyer new bridge	RS.
New permanent-way on bridges	1,27,389
Renewals with iron sleepers	33,688
Loss by exchange	1,55,458
Total ...	44,777
Total ...	3,66,312

The loss by exchange in the Locomotive Department amounted to Rupees 45,880. The cost of repairs and renewals of engines continues to be high.

The expenditure in other departments is shown in the following table :—

Years.	Expenses.					
	Carriage and wagon.		Traffic.		General charges.	Miscellaneous.
	Amount.	Per 1,000 vehicle miles.	Amount.	Per traffic train mile.	Amount.	Amount.
1875	RS.	RS.	RS.	AS.	RS.	RS.
1876	3,17,015	9'764	6,22,457	4'681	4,35,100	22,514
1877	3,93,135	11'086	6,65,182	4'561	4,50,192	74,605
1878	7,00,083	14'181	8,17,328	3'683	4,31,797	6,31,012
1879	6,29,227	18'763	8,34,852	6'129	4,54,453	1,81,619
1879	3,66,609	10'638	7,13,688	5'507	4,63,681	1,07,471

The carriage and wagon expenses show a great reduction, due chiefly to the large amount of work done in the two preceding years. During the year under review 15 vehicles were renewed and 4,134 repaired; but the repairs were generally of an inexpensive character. At the end of the year 646 vehicles were broken up, and the question of their renewal is being considered with the proposals for fixing the future permanent equipment of the line. Owing to the age of the stock renewals will in future amount to from 150 to 200 vehicles a year; and the expenses of this department will be considerably increased.

The traffic expenses show a considerable decrease, but are still higher than in 1874 and 1875, and further reductions are being made. The cost of this department must, however, always remain higher than in 1872, owing to the improved train service and accommodation provided for the public, and to the greater convenience afforded generally. The weak point of the arrangements on this line is the lighting of carriages, and considerable expenditure is being incurred to remedy this defect.

(c.) *South Indian Railway.*

Open mileage. At the commencement of the official year the total length of line open for traffic was 611½ miles. During the year the following sections were opened:—

	MILES.
On 1st July 1879, Chidambaram to Coleroon	4½
On 16th December 1879, Pondicherry Branch (Villupuram to Gingee river)	16½

On the same date the Pondicherry Railway (from Gingee river to Pondicherry), 7½ miles, was also opened for public traffic; and, as this line is worked by the South Indian Railway, the total length under that Company open at the end of the official year was 640½ miles.

The line from Chingleput to Conjeeveram, now under construction, is 21½ miles long; but as a mile of the old line will be abandoned, the total length to be in future worked by the South Indian Railway Company is 661 miles.

Capital expenditure.

The capital expenditure on the open line up to 31st March 1880 was Rupees 4,06,75,044 (£3,898,025), being at the rate of Rupees 64,308 (£6,163) per mile. The value of stores in stock on 31st March 1880 was Rupees 31,69,837. The total capital expenditure, including line under construction and stores, was Rupees 4,39,14,259 (£4,208,449). The capital expenditure during the year 1879-80 was Rupees 14,17,328. There was no abnormal expenditure, but the following credit was brought to account:—

	RS.
Sale proceeds and depreciation of broad gauge stock sold to State Railways	5,07,279

The total expenditure on the southern extension up to 31st December 1878 amounted to Rupees 1,13,07,744, which for a length of 215½ miles gives a rate of Rupees 52,533 per mile. The cost of the northern extension is somewhat higher.

The net profits of the official year were Rupees 9,85,790, being at Dividend. the rate of 2·2 per cent. on the total capital expenditure. The net profits fell short of the guarantee by about £108,000. The guaranteed interest from the formation of the Company up to 31st December 1879 amounted to £2,206,762, and the net profits for the same period to £879,391, leaving a balance of £1,327,371 to be met from the revenues of the country in addition to the expenditure on land and control. The cost of land for this Company is estimated at 20½ lakhs of rupees.

By the completion of the 4½ miles between Chidambaram and Coleroon on 1st July 1879 the main line (444 miles) from Madras to Tuticorin was opened throughout. The accomplishment of this important result depended entirely upon the completion of the large bridge over the Coleroon river. This bridge has 14 spans of 150 feet, the girders being of the Whipple-Murphy type, and the piers are founded on brick cylinders. The work was carried through with much vigour, and the admirable arrangements made for the erection of the girders enabled the bridge to be opened for traffic before the advent of the south-west monsoon floods. The only other large bridge on the length is that of two 100 feet spans over the old course of the Coleroon. The section between Villupuram and the Gingee river, to connect with the Pondicherry Railway, was commenced on 4th April 1879, sanction for collection of materials having been given in the end of January. Work was pushed on rapidly, and the line was available for public traffic on the 16th December 1879. On the 15th idem it was officially opened by His Grace the Governor, and on the same day the Pondicherry Railway was opened with much ceremony on the part of the French authorities. The bridge over the Gingee river (seven openings of 150 feet) is still incomplete, the river being at present crossed by a temporary road carried through the bed, and provided with seven openings of 12 feet each to carry the ordinary stream. The cost of the 16½ miles, including this bridge, is estimated at Rupees 8,70,093, exclusive of rolling stock.

The condition of the open line has been much improved during the year; a better description of ballast has been used in many places, and the station yards have been got into good order. The super-structures of bridges has been well maintained, and the fastenings have received attention. The additional waterways and protective works, sanctioned in consequence of flood damages in 1877, have been completed with the exception of three 70 feet openings now

in progress, about 300 lineal feet of waterway having been added during the year. These works have not, however, as yet been severely tried. In July 1879 additional waterway was shown to be necessary between the 317th and 327th miles, where the line runs at the foot of the Sirumalai hills, and estimates amounting to Rupees 40,814 were sanctioned for this purpose. The vegetable fencing continues to make fair progress, but wire has been erected on some parts of the line.

Stations.

The extension of platforms to a length of 700 feet has been carried out at all stations on the new lines; but on the old line nothing has yet been done. All stations on the new line are provided with distance signals, and it is proposed to similarly alter those in the old line. With a view to provide proper accommodation for goods where required, and to avoid unnecessary expenditure by constructing permanent buildings which may afterwards be thrown out of use, a supply of 1,000 lineal feet of light iron roofing is being obtained from England.

Water-supply.

At Cuddalore an artesian boring has been carried to a depth of 359 feet, in the hope of tapping a water-bearing stratum, but without success.

Rolling stock.

The whole of the broad gauge rolling stock has been sold to the Government of India for use on State Railways. The original cost was Rupees 13,00,000, and it realised a little under Rupees 5,00,000. There is still some iron work to be disposed of. The following additional metre gauge stock was placed on the line during the year:—

Locomotives	...	...	...	...	...	4
Coaching vehicles	...	...	...	...	...	101
Goods vehicles	...	...	...	...	...	132

The above includes 36 coaching vehicles converted from 3 feet 6 inches gauge to metre gauge.

Conversions.

The conversion of gauge from 5 feet 6 inches to 3 feet 3½ inches was carried out on 1st July 1879 between Trichinopoly and Karúr; and on 16th December 1879 between Karúr and Erode. The whole of the South Indian system is now of the metre gauge.

Agreement for working Pondicherry Railway.

The following are the general terms of the agreement under which the South Indian Railway works the Pondicherry Company's line. The South Indian Railway Company provide rolling stock, work, and maintain the line; but for the first six months after opening the cost of maintenance is paid by the Pondicherry Company. The line is worked as an integral part of the South Indian system, and with the same rates and fares. For working expenses the South Indian Company retain the same percentage of gross receipts as the traffic on the South Indian system is worked at; but for purposes of division of through traffic receipts, the Pondicherry Railway is taken as 10 miles in length. The agreement is for 10 years, but is terminable on 12 months' notice.

The concentration of the chief offices of the Company, which was first mooted in 1876, has come under consideration during the past year, and Trichinopoly has been fixed upon for the purpose. At present the Chief Engineer and the Traffic Manager are at Trichinopoly; and the Agency, Audit, Stores, and Locomotive Departments at Negapatam. In the first instance the Locomotive Department will remain at Negapatam; but the gradual transfer of this department is also contemplated. Before the change can be made suitable offices must be erected.

During the year 1879 the number of accidents, exclusive of "fires" Accidents, and "cattle run over" was 196, as follows:—

Collisions	...	...	...	...	...	12
Derailments	...	...	...	...	...	64
Gates run through	...	...	...	...	...	16
Injuries to servants	...	...	...	...	...	45
Do. to others	...	...	...	...	...	8
Defects in rolling stock	...	...	...	...	...	13
Breaches in the line	...	...	...	...	...	7
Failure of couplings	...	...	...	...	...	7
Obstructions on line	...	...	...	...	...	5
Deaths of passengers	...	...	...	...	...	4
Miscellaneous	...	...	...	...	...	15
Total	...	...	...	...	...	196

On the completion of through communication between Madras and Tuticorin on 1st July 1879, the day service of trains previously in force was at first continued, halts during the night being made at Coleroon and Madura; but on the 1st January 1880 a through service of trains was inaugurated, the journey between Madras and Tuticorin, 44 miles, being performed under 36 hours, at a through speed of about 12½ miles an hour.

On the same date the following alterations were made in the fares: first class from 8 to 18 pies per mile, second class from 3 to 6 pies per mile, third class from 2 to 3 pies per mile by through trains, the fare of 2 pies being retained for local trains.

Owing to competition by sea and land it has been necessary, in order to secure goods traffic, to reduce the rates in many instances; and grain is now carried for long distances at 2 annas per wagon-load of 6 tons.

The general results for the last 5 calendar years are compared in the following table:—

Year.	Gross earnings.	Expenditure.	Net revenue.	Percentage of expenses to receipts.	Receipts per open mile per week.
1875	RS. 10,78,431	RS. 5,19,400	RS. 5,59,031	48'16	94'8
1876	19,90,800	10,60,522	9,30,278	53'27	89'8
1877	32,33,246	16,45,025	15,88,220	50'83	106'9
1878	32,33,140	21,55,033	10,78,107	66'63	102'2
1879	33,82,067	22,98,815	10,83,252	63'37	104'8

Comparison of earnings and working expenses.

The total receipts show a gradual development, but the traffic is still small when compared with that of most other lines.

The earnings under coaching goods were as follow :—

Year.	Coaching.		Goods.		Total.
	Amount.	Per open mile per week.	Amount.	Per open mile per week.	
	RS.	RS.	RS.	RS.	RS.
1875	5,65,864	49'72	4,63,239	40'71	10,29,103
1876	11,83,325	53'38	7,18,132	32'39	19,01,457
1877	15,96,193	52'78	13,14,783	50'09	31,10,976
1878	19,06,087	60'22	12,26,495	38'75	31,32,582
1879	20,03,022	62'46	13,09,593	40'84	33,12,615

The train mileage and earnings per mile compare as follow :—

Year.	Mean mileage worked.	Traffic train mileage.	Average number of trains each way per diem over the whole line.	Traffic train mile.		
				Gross earnings.	Expenditure.	Profits.
	MILES.	MILES.	NO.	RS.	RS.	RS.
1875	2184	345,054	2166	3125	1'505	1'620
1876	424	596,540	1922	3'337	1'778	1'559
1877	580	1,136,374	2'684	2'846	1'448	1'398
1878	607	1,174,309	2'650	2'753	1'836	0'917
1879	615	1,161,153	2'686	2'895	1'980	0'915

Passenger traffic.

The numbers of passengers (exclusive of troops and police) carried in each class were as follow :—

Year.	First class.	Second class.	Third class.	Total.
	NO.	NO.	NO.	NO.
1875	3,564	23,744	1,620,956	1,548,264
1876	8,483	67,920	2,732,806	2,809,109
1877	11,738	130,161	3,893,491	4,010,390
1878	15,101	125,994	4,855,692	4,996,777
1879	17,071	106,889	5,050,933	5,180,903

The receipts from each class were :—

Year.	First class.	Second class.	Third class.	Total.
	RS.	RS.	RS.	RS.
1875	9,381	16,482	4,93,584	5,19,447
1876	18,936	37,277	10,62,932	11,19,165
1877	23,007	63,145	14,06,991	14,93,143
1878	29,116	70,409	17,05,974	18,05,499
1879	33,760	64,404	17,89,485	18,86,649

The percentages of numbers and receipts thus work out :—

Year.	Numbers.			Receipts.		
	First.	Second.	Third.	First.	Second.	Third.
1875	0'23	1'53	98'24	1'81	3'17	95'0
1876	0'30	2'41	97'29	1'69	3'33	91'9
1877	0'29	3'24	96'47	1'54	4'55	93'9
1878	0'30	2'53	97'18	1'61	3'90	94'4
1879	0'33	2'06	97'61	1'79	3'41	94'8

The other items of coaching traffic thus compare :—

Year.	Troops and police, including military baggage and horses.	Passengers' luggage.	Carriages, horses, &c.	Parcels.	Special trains.
	RS.	RS.	RS.	RS.	RS.
1875	10,321	4,918	7,901	17,229	5,942
1876	8,394	8,571	11,461	31,065	4,508
1877	24,123	15,043	13,238	38,813	6,397
1878	26,593	22,205	16,386	36,245	4,543
1879	35,717	25,914	15,707	35,402	2,458

The receipts from each class of goods were—

	1875.	1876.	1877.	1878.	1879.
	RS.	RS.	RS.	RS.	RS.
Special	1,05,239	3,75,490	13,27,162	10,52,160	11,44,084
First class	2,90,525	2,91,453	1,28,561	1,04,729	81,670
Second	112	...	...	...	...
Third	31	...	...	...	...
Fourth	15,812	15,948	17,964	21,877	20,425
Fifth	766	2,829	5,663	9,977	19,387
Total	4,12,505	6,85,720	14,79,350	11,89,743	12,74,566

The tonnage of goods in each class was as follows :—

	1875.	1876.	1877.	1878.	1879.
	TONS.	TONS.	TONS.	TONS.	TONS.
Special	32,140	116,456	335,755	350,340	421,417
First class	74,689	64,103	37,837	15,689	13,977
Second	164	...	...	...	...
Third	16	...	...	...	...
Fourth	1,373	1,619	1,502	2,565	3,740
Fifth	77	106	126	738	1,299
Total	108,359	182,134	375,240	369,332	440,463

The average receipts per ton per mile in each class were :—

	1875.	1876.	1877.	1878.	1879.
	PIES.	PIES.	PIES.	PIES.	PIES.
Special	8'029	8'162	8'083	8'515	8'130
First class	11'656	11'749	11'869	11'793	11'853
Second	17'583	...	...	...	...
Third	19'200	...	...	...	...
Fourth	23'765	22'439	23'920	23'609	23'614
Fifth	47'953	52'571	53'618	52'103	53'016
Total	10,652	9'581	8'410	8'900	8'512

Goods traffic.

The work done by the railway in transporting passengers and goods is shown in the following table :—

Year.	Passengers.				Goods.			
	Number of passengers.	Average mileage.	Total unit mileage.	Passenger miles per mean mile worked.	Tonnage of goods.	Average mileage.	Total ton mileage.	Goods ton miles per mean mile worked.
1875	1,553,250	31'13	48,586,300	229,618	121,245	72'31	8,767,189	40,171
1876	2,821,375	36'40	102,698,914	242,214	190,599	75'45	14,540,964	34,295
1877	4,043,025	37'89	153,383,313	264,463	387,052	89'49	34,638,940	60,719
1878	5,050,434	35'40	178,071,622	293,363	385,195	69'34	26,708,420	41,001
1879	5,215,043	34'41	179,441,151	291,774	455,209	65'34	29,743,487	48,363

Working expenses.

The maintenance and locomotive charges compare as follows with previous years :—

Year.	Maintenance of way, works and stations.			Locomotive expenses.	
	Amount.	Mean miles maintained from Revenue Funds.	Cost per mean mile maintained from Revenue Funds.	Amount.	Per traffic train mile.
1875	RS. 80,332	MILES. 185	RS. 434.23	RS. 2,25,402	AS. 10.452
1876	74,304	185	401.10	4,94,817	13.272
1877	1,79,287	217	826.21	7,53,062	10.612
1878	4,81,912	424	1,136.59	8,59,980	11.717
1879	5,25,825	530	993.59	7,85,944	10.830

The Engineering Department received credits, aggregating Rupees 79,487, on account of stores issued and expenditure wrongly charged in former years. The debit for "loss by exchange" was Rupees 14,775. The extraordinary expenditure amounted to Rupees 9,280. The cost per mean mile maintained shows a satisfactory decrease when compared with the previous year. Excluding the abnormal figures given above the mileage cost becomes Rupees 1,002, equivalent to Rupees 83½ per mile per mensem. The Engineering Establishment has been greatly reduced. The locomotive expenses also compare favorably with those of the preceding year.

The expenditure in other departments is compared in the following table :—

Year.	Carriage and wagon expenses.		Traffic expenses.		General charges.	Special and miscellaneous expenditure.
	Amount.	Per 1,000 vehicle miles.	Amount.	Per traffic train mile.	Amount.	Amount.
1875	RS. 29,516	RS. 4.972	RS. 1,08,700	AS. 5.040	RS. 71,800	RS. 3,650
1876	1,91,798	17.168	1,68,004	4.506	93,506	33,193
1877	1,31,154	6.285	2,75,617	3.881	1,59,686	1,46,220
1878	1,21,307	5.540	2,85,744	3.893	2,46,214	1,59,876
1879	3,68,143	15.920	3,10,735	4.282	2,48,016	60,152

MADRAS IRRIGATION AND CANAL COMPANY.

Absence of financial success.

The canal was virtually completed in 1871 with the exception of a part of the navigation works and the floating plant required for navigation purposes. Up to the end of 1875-76 the revenue derived from the sale of water was much less than the charges for repairs and maintenance. The impetus given to irrigation in 1876-77 and 1877-78 by the failure of the monsoon rains raised the revenue materially; but the rainfall in 1878-79 and 1879-80 having been good, much of the

area that had been irrigated by canal water in the two previous years was cultivated without aid from the canal, and the revenue was in consequence much reduced. The principal causes of the general absence of financial success are—

- 1st, the unwillingness of the ryots of the Kurnool district traversed by the canal to use the canal water;
- 2nd, the large capital outlay on the canal works; and
- 3rd, the postponement of the arrangements necessary for opening the canal for navigation.

The original scheme provided for the execution of works considerably more extensive than those which have been actually carried out; but the remaining portions having with the approval of Government been abandoned, Rupees 6,00,000, being part of the outlay incurred on their investigation, were refunded to the Company early in 1878, and the balance, viz., Rupees 1,95,562-9-8, was placed to the credit of the Company's capital in 1879-80.

The refund of these amounts has furnished the Company with Navigation capital sufficient to render the opening of navigation possible. It had always been intended that the canal should be rendered available for traffic, all the locks required having been constructed as a part of the canal, and it was hoped that the receipts under this head would supplement to a considerable extent the meagre revenue derived from the sale of water for irrigation purposes, which has been a source of so much disappointment, and perhaps stimulate the extension of irrigation. The arrangements for opening navigation are in active progress, and it is hoped that traffic may be commenced by 1st October 1880.

The following statement shows the estimates and outlay on navigation works by sub-heads :—

Sub-heads.	Estimate.	Outlay	
		During 1879-80.	To end of 1879-80.
Telegraph	RS. 75,000	RS. 1,724	RS. 65,560
Lock weirs	24,103	6,318	21,593
Wharves and bollards	26,222	5,919	11,919
Buildings	81,117	35,653	60,057
Completion of locks	19,184	3,277	7,470
Completing canal	51,390	22,727	37,840
Workshop buildings at Kurnool	10,966	6,650	10,698
Floating plant	1,52,870	36,087	1,22,546
Contingencies	—	11,570	7,113
Total	4,42,052	1,06,896	3,43,841

Several of the navigation works were completed and the others are approaching completion.

A table of maximum rates to be charged for traffic on the canal has been drawn up and approved by Government, and capital funds

have been made available with the sanction of the Secretary of State for working the traffic for one year from date of commencement of navigation.

Statement showing areas irrigated and ascertained demand.

The areas supplied with water and the adjusted demand on this account in the Kurnool and Cuddapah districts for the half-years ending 31st December 1879 and 30th June 1880 are shown below :—

	Half-year ending 31st December 1879.				Half-year ending 30th June 1880.				Total.			
	Kurnool.		Cuddapah.		Kurnool.		Cuddapah.		Kurnool.		Cuddapah.	
	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.
Sugar, betel, coconuts, saffron, plantains and other fruit trees ...	31'99	371	41'01	482	...	...	1'02	6	31'99	371	42'03	488
Rice fields sown ...	140'50	843	...	...	2'33	12	8'82	53	142'83	855	8'82	53
Rice on bedded and banded fields ...	4,986'04	26,593	4,250'38	22,842	48'70	147	...	...	5,034'74	26,740	4,250'38	22,842
Garden ragi, onions, chillies, sweet potatoes, tobacco, maize, garden kora, indigo and brinjals ...	1,214'64	4,762	1,882'70	7,357	...	...	...	...	1,214'64	4,762	1,882'70	7,357
Cholum, field ragi, field kora, field tobacco, field chillies, cotton grain and oil-seeds ...	683'21	1,341	190'94	382	...	...	...	...	683'21	1,341	190'94	382
Series of crops ...	2'92	18	21'18	127	...	...	...	...	2'92	18	21'18	127
First-class crop irrigated partly by the canal ...	2'41	4	94'64	369	18'19	63	26'89	44	20'60	67	121'53	413
Second-class crop irrigated partly by the canal ...	20'71	21	566'22	596	...	...	...	...	20'71	21	566'22	596
Irrigation after 1st January ...	...	...	...	...	414'58	552	2,682'47	3,963	414'58	552	2,682'47	3,963
Water supplied to store ...	...	...	...	...	1,018'07	2,062	...	...	1,018'07	2,062	...	...
Assessment on land made over to the Company ...	...	...	...	...	305'14	310	...	...	305'14	310	...	...
Penalty ...	...	113	...	156	...	14	...	41	...	127	...	197
Total ...	7,082'42	34,066	7,047'07	32,311	1,807'01	3,160	2,719'20	4,107	8,889'43	37,226	9,766'27	36,418

The irrigation in Kurnool was 8,889.43 acres and the revenue exclusive of penalty Rupees 37,099, being on the average Rupees 4.17 per acre. In Cuddapah the area irrigated was 9,766.27 acres and the revenue exclusive of penalty was Rupees 36,221, showing an average of Rupees 3.72 per acre.

Revenue collected to 1879-80.

The returns received from the Collectors of Kurnool and Cuddapah show the following results :—

	Kurnool.	Cuddapah.
Total collections up to 31st March 1879 ...	RS. 4,64,559	RS. 1,92,239
Collections in 1879-80 ...	1,19,422	53,090
Total ...	5,83,981	2,45,329

The miscellaneous collections up to 31st March 1879 amounted to Rupees 12,250 and those of the year to Rupees 1,548.

The area of cultivation, which includes a small extent of land handed over to the Company, and the total revenue of 1876-77, 1877-78, 1878-79, and 1879-80, respectively, are shown below :—

	1876-77.		1877-78.		1878-79.		1879-80.	
	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.
Kurnool ...	ACS. 73,288	RS. 1,92,881	ACS. 35,099	RS. 1,00,119	ACS. 8,352	RS. 42,056	ACS. 8,889	RS. 37,226
Cuddapah ...	17,084	54,553	15,819	49,011	10,010	39,270	9,766	36,418
Total ...	90,372	2,47,434	50,918	1,49,130	18,362	81,326	18,655	73,644

The total outlay debited to Revenue account during the year was Rupees 2,35,662 divided as follows :—

	RS.
Conservancy Establishment ...	29,885
General management ...	40,250
Maintenance and Repairs ...	1,183
Compensation and Remission ...	3,162
Home management ...	1,63,548
Total ...	2,35,662

No portion of the cost of home management having been debited to Revenue account in previous years, a sum of Rupees 1,63,548 was debited on that account during the year under review.

With a view to increase the revenue of the canal the Chief Engineer for Irrigation made certain proposals for encouraging the ryots to take up waste land commanded by the canal on favorable terms, and the subject has been referred to the Chief Engineer and Manager, Madras Irrigation and Canal Company, and to the Board of Revenue for an expression of their opinions.

The extent of land made over to the Company's Chief Engineer by the Revenue authorities during the year, and the total extent transferred up to date, together with the amount of compensation paid, are as follow :—

Particulars.	Land transferred during the year.	Total transferred up to date.	Total compensation paid.	
			Particulars.	Amount.
Class A	ACRES. 1'33	ACRES. 14,611	Compensation	RS. 97,552
" B	90'01	5,663'77	Deduct amount realized by sale of trees, &c.	2,957
" C	...	175'90		
" D	...	73'48		
Total ...	91'34	*18,554'15	Net amount paid	94,595

Compensation, it must be observed, was only granted for 7,713·19 acres, while for the remaining area taken up other land was granted in exchange. The average price paid was therefore Rupees 12·26 an acre.

IMPERIAL POST.

The following statement shows the number of Post Offices, &c., in existence in 1878-79 and the number opened during 1879-80 in the Madras Postal Circle :—

	Post offices.	Letter boxes.	Village postmen.	Letter box postmen.	Total.
In existence on 31st March 1879	700	714	311	104	1,829
Opened or entertained during 1879-80	21	36	12	1	70
Discontinued during 1879-80	13	21	7	1	42
In existence on 31st March 1880	708	729	316	104	1,857

The following statement shows the mileage of the mail lines in existence in 1878-79 and the mileage of those opened during 1879-80 in the Madras Postal Circle :—

	Railway line.	Mail boat line.	Runner line.	Boat line.	Total.
In existence on 31st March 1879	MILES. 1,572½	MILES. 34	MILES. 6,540½	MILES. 15	MILES. 8,161½
Opened during 1879-80	27½	...	324½	...	352½
Closed during do.	...	...	162½	...	162½
Balance on 31st March 1880	1,600½	34	6,702½	15	8,352½

The following statement shows the estimated total number of letters, post-cards, newspapers, parcels and packets received for delivery in the Post Offices in the Madras Circle during the official years 1878-79 and 1879-80 :—

* Out of this area 297·36 acres have been retransferred to Government.

	Number given out for delivery. 1878-79.	Number given out for delivery. 1879-80.	Increase in the number of articles given out for delivery.	Decrease in the number of articles given out for delivery.	Percentage of increase.	Percentage of decrease.
Letters paid	16,098,914	16,427,736	328,822	...	2'04	...
Do. unpaid	3,132,558	3,018,756	...	113,802	...	3'63
Do. registered	527,826	594,204	66,378	...	12'57	...
Do. service privileged	3,874	5,122	1,248	...	32'21	...
Post-cards	...	1,294,800	1,294,800	...	...	...
Newspapers	1,935,258	1,933,352	3,094	...	15	...
Book and pattern packets } Ordinary	324,792	450,970	126,178	...	38'84	...
} Registered.	...	4,446	4,446	...	...	...
Parcels paid	114,920	77,532	...	...	...	...
Unpaid	...	39,780	2,302	...	2'08	...
Total ...	22,138,142	23,851,698	1,827,358	113,802	...	...
Net increase ...			1,713,556	or	7'74	...

The following statement shows the number of complaints made by the public against the Post Office during the official years 1878-79 and 1879-80 in the Madras Postal Circle :—

Total number of complaints shown to have been well grounded.		Total number of complaints shown to have been groundless.		Total number of complaints in which the inquiry proved unsuccessful.		Total number pending.		Grand Total.	
1878-79.	1879-80.	1878-79.	1879-80.	1878-79.	1879-80.	1878-79.	1879-80.	1878-79.	1879-80.
383	289	461	504	655	573	158	137	1,657	1,503

The following statement shows the offences punishable by law committed by officers in the Post Office Department in the Madras Postal Circle during the official years 1878-79 and 1879-80 :—

Number of offences against the Postal Act.		Number of offences against the general criminal law, the Indian Penal Code.		Total.	Remarks.
1878-79	...	33	7	40	Out of these 33 cases 30 were tried magisterially and 3 disposed of departmentally.
1879-80	...	25	8	33	

The following statement shows the highway robberies of the mail, as also unsuccessful attempts at highway robberies of the mail during the official years 1878-79 and 1879-80 in the Madras Postal Circle :—

Highway robberies of the mail.						Unsuccessful attempts at highway robberies of the mail.					
No. committed in British territory.		No. committed in foreign territory.		Total.		No. committed in British territory.		No. committed in foreign territory.		Total.	
1878-79.	1879-80.	1878-79.	1879-80.	1878-79.	1879-80.	1878-79.	1879-80.	1878-79.	1879-80.	1878-79.	1879-80.
8	8	2	2	10	10*	3	1	...	1	3	2

DISTRICT POST.

A statement is subjoined showing the expenditure incurred in each district on account of the District Post in the official year 1879-80 as compared with the previous year :—

Districts.	1878-79.	1879-80.	Districts.	1878-79.	1879-80.
Ganjam	RS. 3,600	RS. 5,896	Tanjore	RS. 4,784	RS. 5,117
Vizagapatam	10,519	9,580	Trichinopoly	3,886	3,833
Godavari	7,324	6,797	Madura	8,303	8,201
Kistna	8,636	7,595	Tinnevely	4,434	4,503
Nellore	8,049	7,386	Coimbatore	3,831	3,707
Cuddapah	4,742	3,091	Salem	4,616	4,272
Bellary	8,784	7,926	South Canara	3,060	3,025
Kurnool	3,835	3,759	Malabar	4,809	4,749
Chingleput	3,190	2,966	Postmaster-General's Office... ..	2,664	1,976
North Arcot	7,840	7,016			
South Arcot	5,741	5,217	Total	1,12,757	1,06,702

The charges show a decrease of Rupees 6,055, which is due mainly to the fact that no famine batta was paid during the year.

The District Post continued to be managed by the Imperial Postal Department, and its working has been favorably reported upon. There was a general extension of the system of village receiving houses with satisfactory results in the more expeditious and regular distribution of letters in the rural tracts, and some lines of communication in the Malabar district found to be self-supporting were permanently incorporated with the Imperial Post, the funds set free by the arrangement being devoted to the introduction of the village post in two additional taluks. The village postal system was also introduced into the Nilgiris towards the end of the year.

* 3 in Kurnool District.
1 in Godavari District.
1 in Vizagapatam District.

1 in Trichinopoly District.
1 in Malabar District.

1 in Kistna District.
2 in Native States of Mysore.

In connection with the movements of troops, rendered necessary by the disturbances in the Godavari district, several temporary post offices were opened in the Rumpa tract and the charge debited to "Military." They have all of them been since closed.

The following statement shows the correspondence which passed through the District Post of the Madras Presidency during the official years 1878-79 and 1879-80 :—

	Articles received from the Imperial Post or from the District Post for delivery by the District Post.			Articles posted in the District Post for despatch to the Imperial Post or to the District Post.			Articles returned by the District Post to the Imperial Post undelivered.		
	1878-79.	1879-80.	Increase.	1878-79.	1879-80.	Decrease.	1878-79.	1879-80.	Decrease.
<i>Paid.</i>									
Registered articles ...	30,920	27,108	...	5,816	2,425	...	2,453	2,971	...
Letters ...	702,706	775,586	...	334,260	313,309	...	15,057	12,745	...
Newspapers...	44,175	49,846	...	11,028	2,789	...	757	620	...
Packets ...	14,632	...	...	2,008	...	...	430	...	...
Parcels ...	1,808	2,621	...	386	156	...	111	178	...
<i>Unpaid.</i>									
Registered articles ...	2,293	...	...	1,181	...	...	83	...	...
Letters ...	370,032	374,271	...	155,710	140,664	...	46,610	44,815	...
Newspapers...	1,939	1,752	...	440	941	...	364	63	...
Packets ...	38	...	...	88	...	...	159	...	...
Parcels ...	580	471	...	153	63	...	11	12	...
	1,169,123	1,231,655	62,532	511,070	466,347	44,723	66,035	61,404	4,631

IMPERIAL TELEGRAPH.

The following statements show (1) the length of Imperial Telegraph lines and (2) offices in the Madras Division for the official year 1879-80 :—

Lines.

From and To.	Number of Miles				Number of Wires.	Reasons for additions, &c., and local circumstances requiring notice.
	At end of previous year.	Added during the year.	Discontinued during the year.	Remaining at end of year.		
<i>Madras Sub-Division.</i>						
From Madras to Raichore (including loop Guntakal to Bellary)	387.451	...	...	387.451	2,3,4 & 6	
<i>Northern Sub-Division, South Indian Railway.</i>						
From Madras to Trichinopoly (including loop Tirupapuliyur to Pondicherry and Branch line Shiyali to Negapatam and Villupuram to east bank of river Gingee)	272.6	616.5	...	239.10	1,2,3 & 4	(a) Constructed during the year under report between Villupuram and east bank of river Gingee for the use of the South Indian Railway Company.
<i>Southern Sub-Division, South Indian Railway.</i>						
From Trichinopoly to Tinnevely (including loop Manivachi to Tuticorin and road line Madura to Tallamannaar)	350.82	...	...	350.82	1,2,3 & 4	
	1010.871	16.5	...	1027.371	...	

Offices.

At what Place.	When opened, if opened during the year.	When closed, if closed during the year.	No. of messages despatched during the year.	No. of Offices open at end of year.	Class of Office.	Reasons for which opened or closed, and any local circumstance requiring notice.
Madras	...	...	113,322	5	1st	
Pondicherry	...	...	7,167		2nd	
Negapatam	...	...	7,863		2nd	
Pamban	...	...	1,372		1st	
Tuticorin	...	...	4,908		2nd	
			134,632			

CHAPTER V.

REVENUE AND FINANCE.

I.—GROSS INCOME AND EXPENDITURE.

The transactions of the past three years arranged according to the various sub-divisions under which they will be treated in this Report were as follows:—

Income.

	1875-76.	1878-79.	1879-80.	1879-80 compared with 1878-79.	1879-80 compared with 1875-76.
	RS.	RS.	RS.	RS.	RS.
Imperial, Civil	8,15,45,912	8,58,90,119	8,75,98,073	+ 17,07,954	+ 60,52,161
Do. Public Works	2,06,292	3,49,153	2,55,465	— 93,688	+ 49,173
Do. Postal	9,72,060	11,50,762	13,52,591	+ 2,01,829	+ 3,80,522
Do. Telegraph	4,30,212	5,21,478	5,71,571	+ 50,093	+ 1,41,359
Do. Military	17,26,478	21,65,959	19,43,894	— 2,22,065	+ 2,17,416
Provincial, Proper	9,99,166	14,70,968	18,00,319	+ 3,29,351	+ 8,01,153
Do. Unfettered Funds	5,20,389	2,84,601	1,98,094	— 85,907	— 3,21,695
Do. Fettered Funds	88,53,427	82,40,410	87,95,074	+ 5,54,664	— 58,353
Excluded Funds	3,50,671	4,33,843	4,00,499	— 24,344	+ 28,828
Total	9,56,34,616	10,05,07,293	10,29,25,180	+ 24,17,887	+ 72,90,564

Expenditure.

	1875-76.	1878-79.	1879-80.	1879-80 compared with 1878-79.	1879-80 compared with 1875-76.
	RS.	RS.	RS.	RS.	RS.
Imperial, Civil	1,85,90,170	1,97,78,959	1,95,34,832	— 2,44,127	+ 9,44,633
Do. Public Works	49,58,948	39,69,022	44,71,844	+ 5,02,822	— 4,87,104
Do. Postal	7,60,301	8,45,107	11,91,112	+ 3,46,005	+ 4,30,811
Do. Telegraph	7,46,281	8,41,105	10,52,257	+ 2,11,152	+ 3,05,976
Do. Military	2,73,69,931	3,07,11,633	2,96,95,652	— 10,15,981	+ 23,25,721
Provincial, Proper	94,60,298	1,23,00,668	1,01,12,200	— 21,88,468	+ 6,51,902
Do. Unfettered Funds	5,57,053	2,89,906	1,94,603	— 95,213	— 3,62,360
Do. Fettered Funds	95,17,847	66,19,731	70,02,005	+ 3,82,274	— 25,15,842
Excluded Funds	3,23,601	3,67,772	3,33,484	— 34,288	+ 9,883
Total	7,22,84,439	7,57,23,903	7,35,88,079	— 21,35,824	+ 13,03,640

It will be seen that the net result of 1879-80 is a surplus of 313 lakhs of income over expenditure as against a surplus of 264½ lakhs in 1878-79, and of 225½ lakhs in the last year unaffected by the famine. It will also be observed that as there was a total increase of revenue in 1879-80 of 24 lakhs, and a total decrease of expenditure of 21 lakhs as compared with 1878-79, the finances were in a more flourishing condition by a total balance of 45 lakhs. Again, on comparing the present year with the year 1875-76, it is seen that there was a total increase of revenue of 73 lakhs, and an increase of expenditure of only 13 lakhs, thus showing a net balance of 60 lakhs in favor of this year compared with four years ago.

II.—DETAILED INCOME AND EXPENDITURE.

Classification
of accounts.

The transactions are treated in this division of the Report under the following six sub-divisions:—

Sub-divisions.	Sections.	Sub-sections.
		(1) Land Revenue.
		(2) Assessed Taxes.
		(3) Excise.
		(4) Customs ... { a. Sea.
		(5) Salt. ... { b. Land.
		(6) Stamps.
1. Imperial Services	(a) Civil	(7) Miscellaneous { a. Forest.
		b. Ecclesiastical.
		c. Allowances.
		d. Pensions.
		e. Exchange.
		f. Famine Relief.
	(b) Public Works.	
	(c) Postal and Telegraph.	
	(d) Military.	
2. Provincial Services	(a) Provincial Proper.	
	(b) Local Funds Unfettered	
	(Cattle Pound Fund.)	
	(Special and Local.)*	Incorporated Funds.
3. Local Funds Fettered.		
4. Local Funds Excluded.	(Not incorporated in the General Accounts.)	
5. Loans.		
6. Advances under Land Improvement Acts.		

* Details under
major heads.

The following is an abstract (arranged under major heads of account) of the transactions of the first three of the above sub-divisions, viz., Imperial, Provincial, and Incorporated Local Funds, excluding the portions relating to Sections (b), (c), and (d) of the Imperial sub-division.

* These are—1, Local Fund Act IV of 1871; 2, Jungle Conservancy; 3, Village Service; 4, Irrigation Cess; 5, Canal and Ferry; 6, Cochrane and Sadras Canals; 7, Convict Labor; 8, Police Lodging.

Imperial, Provincial, and Incorporated Local Fund Services.

Major Head of Account.	Actuals, 1878-79.	Actuals, 1879-80.	Actuals 1879-80, compared with 1878-79.
INCOME.			
I. Land Revenue	RS. 4,36,55,479	RS. 4,34,94,873	— 1,60,606
II. Tributes	31,46,430	31,46,430	—
III. Forest	6,06,788	6,26,168	+ 19,380
IV. Excise	58,79,262	59,44,533	+ 1,65,271
V. Assessed Taxes	7,99,547	8,06,426	+ 6,879
VI. Provincial Rates	61,18,903	69,17,363	+ 7,98,460
VII. Customs	20,66,320	23,24,513	+ 2,58,193
VIII. Salt	1,46,32,145	1,57,33,258	+ 11,01,113
X. Stamps	53,01,351	53,46,027	+ 44,676
XI. Registration	5,20,375	5,30,164	+ 9,789
XII. Mint	220	6,209	+ 5,989
XV. Minor Departments	82,659	1,11,910	+ 29,251
XVI. Law and Justice	8,20,604	6,96,457	— 1,24,147
XVII. Police	3,80,717	3,84,770	+ 4,053
XVIII. Marine	16,977	21,529	+ 4,552
XIX. Education	1,86,303	1,92,309	+ 6,006
XX. Medical	78,528	1,25,433	+ 46,905
XXI. Stationery and Printing	33,225	42,505	+ 9,280
XXII. Interest	7,16,316	11,01,135	+ 3,84,819
XXIII. Pensions	25,44,982	18,47,435	— 7,97,547
XXIV. Miscellaneous	6,70,303	6,67,180	— 2,03,123
XXV. Public Works Ordinary	5,94,710	6,92,499	+ 97,789
XXVI. Irrigation and Navigation	55,663	—	— 55,663
XXX. Provincial and Local Deficits	—	—	—
XXXII. Gain by Exchange	1,04,385	2,41,053	+ 1,36,668
Adjusting Receipts	3,73,816	10,91,926	+ 7,18,110
Total	9,58,86,098	9,83,92,160	+ 25,06,062
EXPENDITURE.			
2. Interest on Service Funds and other Accounts	RS. 5,90,534	RS. 5,89,649	— 885
3. Refunds	3,84,548	2,62,727	— 1,21,821
4. Land Revenue	68,41,014	70,53,260	+ 2,12,246
5. Forest	4,95,747	5,47,838	+ 52,141
6. Excise	2,07,446	2,14,338	+ 6,892
7. Assessed Taxes	30,292	47,030	+ 16,738
8. Provincial Rates	32,391	31,493	— 898
9. Customs	2,30,346	2,42,789	+ 12,443
10. Salt	15,22,648	11,46,337	— 3,76,311
12. Stamps	1,45,937	1,44,410	— 1,527
13. Registration	3,46,358	3,65,131	+ 18,773
14. Mint	14,844	14,364	— 480
15. Post Office	1,05,905	1,06,703	+ 797
17. Administration	12,95,088	13,18,672	+ 23,584
18. Minor Departments	3,04,470	3,19,730	+ 15,260
19. Law and Justice	49,39,432	50,22,463	+ 83,031
20. Police	38,81,089	39,56,190	+ 75,101
21. Marine	87,829	1,06,970	+ 19,141
22. Education	13,77,162	13,90,942	+ 13,780
23. Ecclesiastical	3,27,212	3,33,761	+ 6,549
24. Medical Services	13,85,162	14,05,472	+ 20,310
25. Stationery and Printing	4,58,340	4,11,616	— 46,724
26. Political Agencies	98,262	98,979	+ 717
27. Allowances	22,23,253	19,76,676	— 2,46,577
29. Pensions	14,68,558	16,05,856	+ 1,37,298
30. Miscellaneous	9,34,602	9,08,405	— 26,197
31. Public Works	51,85,326	57,93,002	+ 13,92,324
32. Irrigation and Navigation	14,516	—	— 14,516
36. Provincial and Local Surpluses	16,70,612	19,71,309	+ 3,00,697
38. Loss by Exchange	2,13,639	3,65,643	+ 1,46,974
Famine Relief	17,97,856	—	— 17,97,856
Adjusting Payments	3,73,816	10,91,926	+ 7,18,110
Total	13,89,89,264	13,63,43,730	— 21,45,534

IMPERIAL SERVICES—(A) CIVIL.

The following statement shows the incidence of Imperial taxation (Land Revenue, Excise, Assessed Taxes, Customs, Salt, and Stamps) on each head of population in the Madras Presidency for 1879-80:—

* Altered from Rupees 9,83,92,160 as entered in the last Report on account of subsequent alterations and amendments made in the books.
† Altered from Rupees 4,30,16,570 as entered in the last Report on account of subsequent alterations and amendments made in the books.

Districts.	Popula- tion.	Land Revenue.*		Excise.		Assessed Taxes.		Sea Customs.		Land Customs.		Salt.		Stamps.		Total.	
		Amount of Revenue.	Rate per Head.	Amount of Revenue.	Rate per Head.	Amount of Revenue.	Rate per Head.	Amount of Revenue.	Rate per Head.	Amount of Revenue.	Rate per Head.	Amount of Revenue.	Rate per Head.	Amount of Revenue.	Rate per Head.	Amount of Revenue.	Rate per Head.
Northern.																	
Ganjam ...	1,620,088	12,99,030	0 13 8	94,473	0 1 0	25,493	0 0 3	27,400	0 0 4	...	...	21,77,461	1 6 11	1,19,083	0 1 3	87,44,452	2 7 5
Vizagapatam ...	2,506,351	13,76,084	0 9 7	1,80,310	0 1 4	30,436	0 0 3	6,137	...	...	...	5,31,632	0 3 9	1,84,556	0 1 3	23,20,115	1 0 2
Godavari ...	1,620,634	44,57,135	2 12 0	3,62,432	0 3 7	77,696	0 0 9	50,064	0 0 2	148	...	8,57,106	0 8 6	3,35,026	0 3 4	61,40,207	3 12 8
Kistna ...	1,462,374	45,44,693	3 2 1	2,22,739	0 2 6	71,729	0 0 9	16,333	0 0 2	...	...	10,73,323	0 11 10	2,00,072	0 2 3	61,30,063	4 3 3
Nellore ...	1,376,811	26,21,882	1 14 6	1,17,614	0 1 4	29,804	0 0 4	203	...	...	...	12,16,004	0 14 1	1,69,561	0 2 0	41,55,073	4 0 3
Central.																	
Cuddapah ...	1,351,194	21,31,311	1 9 3	1,74,003	0 2 1	71,109	0 0 10	...	...	...	...	178	...	1,72,440	0 2 1	95,53,101	1 14 3
Bellary ...	1,653,010	28,21,701	1 11 4	6,53,582	0 3 4	39,293	0 0 8	...	...	...	...	2,233	...	1,01,053	0 1 7	36,83,863	2 11 1
Kurnool ...	914,432	15,82,783	1 11 8	2,19,000	0 3 10	31,559	0 0 7	...	...	...	...	1,151	...	6,37,763	0 1 9	18,33,088	2 1 10
Madras ...	397,652	85,763	0 3 5	9,77,763	2 7 3	35,189	0 2 7	14,24,414	3 0 4	...	...	40,40,420	0 4 11	5,37,763	0 2 1	39,59,039	7 11 10
Chingleput ...	638,184	21,04,649	2 3 11	2,06,700	0 3 5	20,853	0 0 4	...	...	...	...	121	...	1,11,163	0 1 11	61,77,777	6 14 6
North Arcot ...	2,015,278	29,36,973	1 7 3	3,93,465	0 3 1	48,719	0 0 6	...	...	...	...	...	...	2,16,812	0 1 9	35,90,000	1 12 6
Southern.																	
South Arcot ...	1,755,817	37,12,403	2 1 10	3,01,230	0 2 9	19,232	0 0 2	37,650	0 0 4	...	...	11,14,450	0 10 2	1,99,293	0 1 10	54,97,872	3 1 7
Tanjore ...	1,973,731	44,55,940	2 4 2	4,75,984	0 3 10	52,645	0 0 6	...	...	...	...	17,00,151	0 14 1	6,57,030	0 4 9	77,02,691	4 0 8
Trichinopoly ...	1,200,408	16,22,431	1 4 3	1,59,420	0 2 1	10,431	0 0 3	13,517	0 0 1	...	...	4,29,420	0 8 0	1,80,108	0 2 9	18,33,190	1 8 8
Madura ...	2,256,015	26,42,682	1 10 5	1,24,183	0 1 5	39,192	0 0 3	...	...	...	...	14,00,924	0 13 3	3,25,004	0 3 1	37,02,763	1 10 3
Tinnevely ...	1,653,569	27,95,185	1 10 5	1,56,620	0 1 5	23,375	0 0 3	59,280	0 0 7	...	...	...	...	...	...	47,50,497	2 13 0
Western.																	
Coimbatore ...	1,753,974	26,86,567	1 8 5	2,07,811	0 2 5	22,570	0 0 2	...	...	...	...	139	...	1,80,086	0 1 9	31,07,073	1 12 9
Nilgiris ...	43,120	61,601	1 3 11	1,94,983	0 1 7	4,983	0 0 3	...	...	...	...	...	...	37,639	0 12 2	2,08,540	0 6 6
Salem ...	1,098,992	22,59,233	1 2 6	3,10,371	0 2 7	27,603	0 0 4	48,719	0 0 10	...	...	...	...	1,80,597	0 1 6	28,05,531	1 6 10
South Canara ...	918,592	13,55,853	1 7 7	1,45,975	0 2 9	10,191	0 0 3	38,171	0 0 3	...	...	5,24,778	0 9 2	1,94,378	0 3 5	22,08,874	2 8 1
Malabar ...	2,201,200	16,47,607	0 13 1	2,10,830	0 1 7	39,800	0 0 3	...	...	...	...	5,60,397	0 4 0	7,91,054	0 5 7	35,04,155	1 8 10
Maisur ...	31,885,820	4,03,17,310	1 9 2	59,44,533	0 3 0	8,06,426	0 0 5	21,27,037	0 1 1	1,97,476	...	1,57,33,258	...	53,40,825	0 2 9	7,94,04,865	2 8 0
		50,000	...	...	...	...	...	...	...	...	...	...	...	5,202	...	55,202	...
				4,93,67,310	...	8,06,426	...	21,27,037	...	1,97,476	...	1,57,33,258	...	53,46,027	...	7,95,22,067	...

* Includes only so much of the tax collected by the Zamindars and Inamdars as is paid by them to Government.

(1).—LAND REVENUE.

The following form the chief sources of revenue under this head :— Collections under chief heads.

	1875-76.	1878-79.	1879-80.
Permanently settled revenue	Rs. 53,72,149	Rs. 56,06,791	Rs. 53,39,855
Reduced assessments	6,31,154	6,90,630	6,87,128
Collections from cultivators	3,52,75,903	3,88,87,270	3,89,73,266
Miscellaneous receipts	41,70,922	42,45,732	43,67,063
Total ...	4,54,50,123	4,94,90,473	4,93,67,310

Compared with 1875-76 there has been an increase of Rupees 39,17,182 in 1879-80 and of Rupees 40,40,345 in 1878-79, indicating the extent to which the revenue of the famine years 1876-77 and 1877-78 has been restored to Government.

The following statement gives the details of districts :— Collection by districts.

Districts.	Average of three ordinary past years ending with 1875-76.	Average of two famine years 1876-77 and 1877-78.	Average of last two years 1878-79 and 1879-80.	Difference between columns 1 and 2 and percentage.	Difference between columns 1 and 3 and percentage.
Northern.	(1)	(2)	(3)		
Ganjam ...	Rs. 12,67,805	Rs. 11,25,259	Rs. 13,00,639	Rs. 1,42,546	Percent. 11.2
Vizagapatam ...	14,09,109	13,52,690	13,84,527	56,410	4.0
Godavari ...	42,50,105	44,01,248	41,83,815	1,67,333	3.9
Kistna ...	40,01,948	38,03,435	42,13,022	4,09,587	10.2
Nellore ...	22,43,447	10,66,020	28,11,972	17,45,952	77.8
Central.					
Cuddapah ...	19,74,580	9,50,531	21,35,378	10,24,020	51.8
Bellary ...	24,84,165	7,83,604	24,08,323	17,00,561	68.5
Kurnool ...	14,83,561	6,88,115	16,05,692	7,95,446	53.6
Madras ...	89,297	1,18,370	80,237	29,073	32.5
Chingleput ...	16,43,376	6,96,503	19,16,162	9,46,573	57.6
North Arcot ...	24,77,646	12,98,735	30,17,003	11,78,911	47.5
Southern.					
South Arcot ...	30,51,442	21,81,979	36,20,003	8,69,463	28.5
Tanjore ...	41,86,004	41,43,060	43,31,118	42,944	1.0
Trichinopoly ...	15,23,155	13,99,373	16,89,333	1,23,282	8.0
Madura ...	25,02,483	14,24,985	26,53,719	10,77,503	43.0
Tinnevely ...	29,41,239	23,94,540	28,68,303	5,46,609	18.5
Western.					
Coimbatore ...	25,78,052	16,18,208	29,60,019	8,89,844	35.7
Nilgiris ...	43,120	50,970	68,594	7,850	18.2
Salem ...	22,28,560	11,06,624	26,11,011	11,21,936	50.3
South Canara ...	12,63,281	12,78,995	12,97,158	15,714	1.2
Malabar ...	18,02,524	19,33,165	19,09,813	1,30,641	7.2
Maisur ...	50,000	50,000	50,000	...	...
Total ...	4,54,39,964	3,39,57,294	4,94,28,891	1,14,82,670	25.3

The amount and percentages of the charges to the receipts under Percentage of charges to receipts.

Land Revenue Charges.	1878-79.		1879-80.	
	Amount.	Percentage.	Amount.	Percentage.
Charges of collection	RS. 33,71,805	6'82	RS. 34,56,432	7'06
Revenue Surveys	6,84,386	1'38	6,64,733	1'35
Revenue Settlement	4,01,480	'81	3,22,549	'67
Inam (Grant) Commission	8,914	'01	9,345	'02
Total ...	44,61,585	9'02	44,53,059	9'10

(2.)—ASSESSED TAXES.

Changes in
License Tax.

This head consists of the collection of License Tax. Act III of 1878 was suspended during the last quarter of the year in anticipation of a modification of it. The principal changes which have been effected by the passing of the modified Act VI of 1880 are that the minimum taxable income has been raised to 500 rupees, and that the official year has been adopted for the purposes of the Act in lieu of the calendar year.

The collections were Rupees 8,06,426 against Rupees 7,99,547 last year, an increase of '9 per cent.

The Act is reported to have been carefully worked and on the whole with less difficulty than in the preceding year. The cost of collection was Rupees 47,030 against Rupees 30,292 in 1878-79, or 5'8 per cent. against 3'5 per cent. In Municipal towns the duty of collecting the tax was as last year entrusted to the Municipal Commissioners.

(3.)—EXCISE.

The revenue under this head may be said to consist of two classes, (1) of collections realized in the districts, and (2) of that levied in the town of Madras. The actual realizations during the last five years have been as follows :—

	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.
Districts	RS. 51,71,437	RS. 44,26,830	RS. 34,68,730	RS. 48,80,533	RS. 49,03,765
Madras	11,67,574	11,56,859	12,41,656	9,98,729	9,77,763
Total ...	63,39,011	55,83,689	47,10,386	58,79,262	59,44,533

It will be seen that the revenue realized in the districts during 1879-80 is slightly in excess of the actuals of 1878-79, but the average of both these years shows a marked improvement over the average of the two years immediately preceding them, which were considerably affected by the famine.

The charges were Rupees 2,14,009 against Rupees 2,07,446 last year.

(4.)—CUSTOMS.

(a.)—Sea Customs.

The revenue under this head considerably improved as compared with the previous year. The receipts of the past five years have been as follows :—

	RS.
1875-76	27,93,858
1876-77	22,84,013
1877-78	19,35,627
1878-79	19,47,326
1879-80	21,27,037

The decrease in the later years compared with the earlier ones is chiefly due to the general revision of the tariff under Act XVI of 1875. The increase in 1879-80 compared with the two previous (famine) years was caused almost entirely by larger exports of rice, which the country was enabled to spare after the famine had ceased, and by the export of indigo, but the total revenue was reduced by diminished imports of wines and liquors and sundry miscellaneous articles. Tables showing the details of the various articles of import and export have already been given in Chapter IV under the head of Trade.

The charges for the collection of the above revenue were 10 per cent. against 10'5 per cent. last year.

(b.)—Land Customs.

The revenue under this head also rose considerably above the actuals of the two previous years, but did not come up to the actuals of 1875-76, in which year there was an alteration in the tariff. The receipts of the last five years were as follow :—

	RS.
1875-76	2,85,762
1876-77	1,83,346
1877-78	97,873
1878-79	1,18,994
1879-80	1,97,476

As in the case of Sea Customs, so also under this head the larger exports (due to a favorable season) of rice to Ceylon through the French Settlement of Karikal in Tanjore, and of indigo to Pondicherry in South Arcot, account for the large increase of Rupees 78,482, or 65'9 per cent. over last year.

The cost of collection was 10'6 per cent. against 17'7 per cent. last year.

Land Customs have already been noticed in detail in Chapter IV.

(5.)—SALT.

The salt revenue amounted to Rupees 1,57,33,258 and exceeded the realizations of the previous year by Rupees 11,01,113 or 7.52 per cent. The increase arose from larger sales in ten salt districts amounting to 556,472 maunds, against a loss in two districts, viz., Ganjam and Vizagapatam, of 127,902 maunds. The increase is ascribed chiefly to the suppression of the illicit manufacture and use of earth-salt in the Ceded and Southern Districts; but is also no doubt partly due to the vigour with which the production and sale of salt is now carried on and the means which have been taken for its extension. The season for manufacture of salt was not generally favorable in Chingleput and in the districts north of Madras in consequence of heavy rain in March 1879 and the cyclones in May and November. The stock on hand fell from 8,137,559 maunds at the beginning of the year to 6,169,885 maunds at its close. The quantity received into store was 4,367,369 maunds against 7,236,119 maunds in 1878-79, a decrease of 39.6 per cent. The quantity sold or otherwise issued, including wastage written off, amounted to 6,195,682 maunds against 6,054,893 maunds in 1878-79, an increase of 2.3 per cent.

The details of the above figures, including the transactions of the three previous years, are shown in the following table:—

	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.
	MDS.	MDS.	MDS.	MDS.	MDS.
Manufactured or imported ...	10,451,253	7,752,663	4,943,647	7,236,119	4,367,369
Home consumption ...	3,239,144	3,078,625	2,896,758	2,735,138	2,969,086
Inland do. ...	3,236,139	3,101,322	3,042,637	2,540,675	2,734,501
Exportation ...	772,091	294,840	183,120	138,900	149,188
French Government ...	56,951	97,153	58,024	58,670	56,005
Fish curing ...	1,881	2,677	3,355	4,855	5,653
Wastage written off ...	292,841	393,131	143,979	576,635	281,249
Total Issues ...	7,599,047	6,967,748	6,327,873	6,054,893	6,195,682
Surplus manufactured ...	2,852,201	784,918	...	1,181,226	...
Excess issued ...	...	...	1,384,226	...	1,823,313
Net Surplus ...	1,605,806				

Manufacture and issue.

The following statement gives the district details of manufacture and issues during the last three years:—

Districts.	Quantity manufactured.			Quantity issued.		
	1877-78.	1878-79.	1879-80.	1877-78.	1878-79.	1879-80.
	MDS.	MDS.	MDS.	MDS.	MDS.	MDS.
<i>Deficit Districts.</i>						
Ganjam ...	610,282	1,540,019	821,677	1,021,350	946,803	844,167
Vizagapatam ...	207,146	289,459	164,443	363,617	363,704	204,909
Godavari ...	246,955	446,242	153,253	347,386	332,617	323,360
Kistna ...	485,761	357,153	163,365	312,278	442,480	413,627
Nellore ...	144,758	615,523	290,874	484,724	414,281	473,989
Chingleput ...	487,713	2,500,839	990,192	1,534,180	1,589,206	1,517,117

'IMPERIAL SERVICES—(A) CIVIL.

Districts.	Quantity manufactured.			Quantity issued.		
	1877-78.	1878-79.	1879-80.	1877-78.	1878-79.	1879-80.
<i>Surplus Districts.</i>	MDS.	MDS.	MDS.	MDS.	MDS.	MDS.
South Arcot ...	600,066	440,742	373,977	413,324	372,490	472,888
Tanjore ...	921,951	419,558	554,043	778,530	671,281	714,790
Madura ...	289,406	72,337	44,874	187,711	160,713	166,725
Timmevelly ...	807,949	524,913	768,334	735,351	669,206	672,316
South Canara ...	121,118	29,238	32,310	39,244	39,603	153,093
Malabar ...	11,512	96	27	110,175	52,449	227,393
Total ...	4,943,647	7,236,119	4,367,369	6,327,873	6,054,893	6,195,682

In consequence of the introduction of the Excise system in South Canara and Malabar and the discontinuance of importation on Government account to those districts the sums entered against them in the column of manufacture are comparatively small. On the other hand it will be found that the issues have risen considerably in 1879-80 above 1878-79, which is due to larger sales of the old reserve stock of Government salt in those districts. This stock was reduced to 313,105 maunds on the 31st March 1880.

Salt was sold at all Government depôts at Rupees 2-11-0 per maund.

The collection charges were as follows:—

	1878-79.	1879-80.	Percentage of charge on Revenue.	
			1878-79.	1879-80.
Salaries, establishment, and contingencies ...	Rs. 6,48,144	Rs. 6,48,453	4.4	4.1
Manufacture and storage of salt ...	8,73,068	4,90,899	6.0	3.1
Total Charges ...	15,21,212	11,39,352	10.4	7.2

Cost of collection.

The decrease this year under the second head is, as already remarked above, due to smaller manufactures. The Salt Department, which was for the first time in 1878-79 constituted a separate department under a Commissioner of Salt Revenue, was more fully organized in the year under report, a grade of twelve Assistant Commissioners taking the place of the previous Deputy Collectors.

(6.)—STAMPS.

The receipts of the last five years under the two main divisions—(1) Receipts. Court Fee Stamps, and (2) General Stamps—are as follow:—

	Court Fees.	General.	Total.
	Rs.	Rs.	Rs.
1875-76 ...	32,58,276	17,61,432	50,19,708
1876-77 ...	31,95,571	17,97,795	49,93,366
1877-78 ...	29,99,121	18,33,094	48,32,215
1878-79 ...	33,34,900	19,66,451	53,01,351
1879-80 ...	33,85,578	19,60,449	53,46,027

The variations from last year's figures are not material.

The new General Stamp Act, No. I of 1879, came into operation on the 1st April 1879, but the effect of it on the revenues of 1879-80 is not known. On the suggestion of the Honorable Mr. Cockerell of the Legislative Council of India orders were issued for the discontinuance of the locally manufactured bi-color stamps and for the counterstamping in the General Stamp Office of English-made stamps. The duty of taking annually the stock of the General Stamp Office was transferred during the year under review from the Account Department to the Collector of Madras.

The receipts and issues of the several descriptions of stamps at the General Stamp Office were as follow :—

Receipts.

—	1878-79.	1879-80.	Difference.
	RS.	RS.	RS.
Court Fee Stamps, Adhesive ...	37,35,615	41,04,550	+ 3,68,935
General Stamps, do. ...	1,74,460	11,56,160	+ 9,81,700
Do. Impressed ...	14,67,051	25,69,506	+ 11,02,455
Postage and Telegraph Stamps ...	20,00,036	37,07,808	+ 17,07,772
Total ...	73,77,162	1,15,38,024	+ 41,60,862

Issues.

—	1878-79.	1879-80.	Difference.
	RS.	RS.	RS.
Court Fee Stamps, Impressed ...	26,53,943	—	- 26,53,943
Do. Adhesive ...	35,54,975	36,87,301	+ 1,32,326
General Stamps, do. ...	1,96,431	3,56,240	+ 1,59,809
Do. Impressed ...	17,07,324	20,17,551	+ 3,10,227
Postage and Telegraph Stamps ...	18,78,431	24,48,855	+ 5,70,424
Total ...	99,91,104	85,09,956	- 14,81,148

The large increase in the receipts is due to English-made stamps of high values having been obtained from Bombay and Calcutta, and to the return from the districts of the bills of exchange rendered obsolete under the new Act. The decrease in the total issues is nominal, being due to the destruction of Impressed Court Fee Stamps to the value of Rupees 26,53,943 in 1878-79.

The percentage of charges to receipts was 2.68 against 2.75 last year.

(7.)—MISCELLANEOUS.

Aggregate receipts and charges.

The aggregates of the receipts and charges under those heads which still remain out of those included under Imperial, Civil, and which for the purposes of this Report are classed here as a separate Sub-Section (7)—Miscellaneous, are as follow :—

—	1878-79.	1879-80.	Difference.
	RS.	RS.	RS.
Receipts ...	77,21,021	80,76,006	+ 3,54,985
Charges ...	1,31,86,412	1,32,63,712	+ 77,300

Excluding the nominal transactions on account of Provincial and Local surplus and deficits the figures are :—

—	1878-79.	1879-80.	Difference.
	RS.	RS.	RS.
Receipts ...	77,21,021	80,76,006	+ 3,54,985
Charges ...	1,15,15,800	1,12,92,403	- 2,23,397

The abovementioned net increase of Rupees 3,54,985 in the receipts Receipts. is the difference between a gross increase under some heads of Rupees 11,46,600 and a decrease under others of Rupees 7,91,615, as shown below :—

Increases in Receipts.		Decreases in Receipts.	
	RS.		RS.
1. Mint ...	5,989	1. Forest ...	17,944
2. Minor Departments ...	14,705	2. Law and Justice ...	51,644
3. Stationery and Printing ...	4,494	3. Marine ...	746
4. Interest ...	3,68,570	4. Pensions ...	6,97,497
5. Gain by Exchange ...	1,36,608	5. Miscellaneous ...	23,784
6. Adjusting Receipts ...	6,16,174	Total ...	7,91,615
Total ...	11,46,600		

In the charges again there has been a gross decrease of Rupees Charges. 6,01,096 under some heads, an increase of Rupees 3,77,699 under others, as shown below :—

Decreases in Charges.		Increases in Charges.	
	RS.		RS.
1. Interest ...	1,459	1. Forest ...	39,403
2. Refunds ...	89,602	2. Administration ...	16,132
3. Mint ...	480	3. Minor Departments ...	13,607
4. Law and Justice ...	27,762	4. Ecclesiastical ...	6,078
5. Marine ...	1,592	5. Medical ...	18,243
6. Stationery and Printing ...	13,830	6. Political ...	717
7. Allowances ...	2,46,577	7. Pensions ...	1,36,545
8. Miscellaneous ...	58,870	8. Loss by Exchange ...	1,46,974
9. Famine Relief ...	1,60,334	Total ...	3,77,699
Total ...	6,01,096		

IMPERIAL SERVICES—(B) PUBLIC WORKS.

This section relates only to that portion of the Public Works expenditure which is of an Imperial nature, and not to the Provincial portion of it, which will be reviewed under Provincial Services.

The following statement gives the detailed heads of income and expenditure for the last two years:—

Income.				
	1878-79.	1879-80.	Difference.	Percentage.
	RS.	RS.	RS.	
1. Military	30,220	16,894	- 13,326	44.1
2. Other Services	74,882	3,690	- 71,282	95.2
3. Irrigation				
(a) Capital Productive	71,641	1,00,063	+ 28,422	39.7
(b) Do. Ordinary	170	512	+ 342	201.2
(c) Revenue Account	1,47,704	1,16,394	- 31,310	21.2
(d) Ordinary Agricultural Receipts and Works for which neither Capital nor Revenue Accounts are kept	24,536	18,002	- 6,534	26.6
Total	3,49,153	2,55,465	- 93,688	26.8

Expenditure.				
	1878-79.	1879-80.	Difference.	Percentage.
	RS.	RS.	RS.	
1. Military—				
(a) Original Works	2,17,110	21,227	- 1,95,883	- 90.2
(b) Repairs	2,00,779	1,90,125	- 10,654	- 5.3
(c) Establishment	1,69,597	1,58,709	- 11,288	- 6.6
(d) Tools and Plant	15,731	16,023	+ 292	+ 1.8
2. Other Services—				
(a) Original Works	2,323	34,145	+ 10,907	+ 46.9
(b) Repairs	12,900	4,865	- 8,035	- 62.3
(c) Establishment	45,062	38,557	- 6,505	- 14.4
(d) Tools and Plant	1,335	2,957	+ 1,622	+ 121.5
3. Military and Other Services receipts refunded	68,588	1,257	- 67,331	- 98.2
4. State outlay on Guaranteed Railways.	1,50,392	1,27,530	- 22,862	- 15.2
5. Irrigation—				
Productive Public Works, Capital Account	2,40,423	3,03,115	+ 62,692	+ 26.07
Subsidiary Capital Outlay	73,736	78,694	+ 4,958	+ 6.7
Irrigation and Navigation Works for which Capital and Revenue Accounts are kept, Capital		2,11,367	+ 2,11,367	...
Productive Public Works, Revenue Account	7,13,549	6,88,423	- 25,126	- 3.5
Irrigation and Navigation Works for which Capital and Revenue Accounts are kept, Revenue		54,888	+ 54,888	...
Irrigation and Navigation Works for which Capital and Revenue Accounts are not kept		11,96,962	+ 11,96,962	...
Agricultural Works	19,56,058	2,74,272	- 17,11,786	- 86.2
6. Receipts on Capital Account refunded.	21,758		- 21,758	...
7. Receipts on Revenue Account refunded	19,304	767	- 18,537	- 96.02
8. Ordinary Agricultural Receipts refunded	9,062	4,568	- 4,494	- 49.5
9. Expenditure on Madras Harbour Works—				
Imperial, Other Services		3,70,781	+ 3,70,781	...
Imperial, Capital Productive Public Works		8,50,000	+ 8,50,000	...
Total	39,69,022	44,71,844	+ 5,02,822	+ 12.7

Under the first two heads of the expenditure side there is a decrease of Rupees 2,19,544, or nearly 32 per cent., which is chiefly due to the general restriction of Public Works expenditure and to the inclusion in the accounts of the previous year of the normal value of Famine Relief Works under the third head. Under the fourth head the actuals of 1878-79 included a special item of loss of Rupees 23,614 on the purchase of the permanent way for the Nizam's State Railway in 1872-73. Under the fifth head of Irrigation the variations in detail

are to a certain extent nominal, as they arise from a rearrangement of sub-heads. On the whole there has been a decreased outlay under this head on account of the general reduction of Public Works expenditure. The only other important item worthy of notice is the outlay on Harbour Works, which appear for the first time as an Imperial Productive Public Work. The total amount of expenditure on the above works up to the 31st March 1880 was Rupees 39,72,329. This percentage may be increased by 4.0 by the inclusion of Rupees 1,57,956 which was really expended in 1879-80 but remained under suspense in the accounts of the Public Works Department for that year.

IMPERIAL SERVICES—(C) POSTAL AND TELEGRAPH.

(a.)—POSTAL.

The receipts and charges of the Imperial Postal Department during the last five years were as follow:—

Years.	Receipts.	Charges.	Surplus Receipts.	Percentage of Receipts to Charges.
	RS.	RS.	RS.	
1875-76	9,72,069	7,60,301	2,11,768	127.9
1876-77	10,50,886	7,75,639	2,75,247	133.5
1877-78	11,45,971	8,49,733	2,96,238	134.8
1878-79	11,50,762	8,45,107	3,05,655	136.2
1879-80	13,52,591	11,91,112	1,61,479	Nine months. 137.1

(b.)—TELEGRAPH.

The receipts and charges of the Telegraph Department during the last five years were as follow:—

Years.	Receipts.	Charges.	Excess of Charges.	Percentage of Charges to Receipts.
	RS.	RS.	RS.	
1875-76	4,30,213	7,46,281	3,16,069	173.5
1876-77	6,00,301	7,02,130	1,01,829	116.9
1877-78	6,77,838	8,65,673	1,87,835	127.7
1878-79	5,21,478	8,41,105	3,19,627	161.3
1879-80	5,71,571	10,52,257	4,80,686	184.1

The smaller percentages of charge were in the famine years 1876-77 and 1877-78, and were due mainly to the greatly increased use of the Telegraph during that period.

IMPERIAL SERVICES—(D) MILITARY.

The chief heads of income in the Military Department were as follow:—

Heads of Account.	1878-79.	1879-80.	Difference.
	RS.	RS.	RS.
1. Army and Garrison Staff	187	187	—
3. Regimental Pay, Allowances and Charges.	1,72,224	2,89,206	+ 1,16,982
4. Commissariat Establishments, Supplies and Services	9,14,073	10,73,988	+ 1,59,915
5. Remount Establishments, Supplies and Services	43,535	46,088	+ 2,553
6. Clothing Establishments, Supplies and Services	1,68,746	1,24,025	— 44,721
7. Barrack Establishments, Supplies and Services	17,897	13,569	— 4,328
8. Administration of Martial Law	3,592	2,058	— 1,534
9. Medical Establishments, Services and Supplies	2,24,967	39,900	— 1,86,058
10. Ordnance Establishments, Stores and Camp Equipage	3,67,895	2,35,127	— 1,32,768
12. Education	2,128	1,196	— 932
13. Sea Transport Charges	4,263	5,191	+ 928
14. Miscellaneous Services	2,00,817	63,938	— 1,36,879
18. Military Pensions	10,081	1,640	— 8,441
19. Indian Service Family Pension Fund ...	35,554	48,959	+ 13,405
Total ...	21,68,969	19,43,894	— 2,22,065

There has been a gross decrease of Rupees 5,15,848 under some heads and an increase of Rupees 2,93,783 under others. The decrease under (9) and (10) is partly nominal, being due to sums formerly credited to those heads on account of issues of stores to the Civil Department being now deducted *per contra* under the respective grants in order to avoid any exaggeration of the revenue and expenditure. The only other important decrease occurs under (14) and is due to the transfer to the Civil accounts from 1879-80 of the gain by exchange on the Military transactions with London.

The details of the Military expenditure were as follow :—

Heads of Account.	1878-79.	1879-80.	Difference.
	RS.	RS.	RS.
<i>Effective Services.</i>			
1. Army and Garrison Staff	11,12,972	10,58,036	— 54,936
2. Administrative Staff	4,09,662	4,15,987	+ 6,325
3. Regimental Pay, Allowances and Charges.	1,47,44,180	1,47,53,933	+ 9,753
4. Commissariat Establishments, Supplies and Services	50,00,443	47,88,385	— 2,12,058
5. Remount Establishments, Supplies and Services	4,76,983	3,28,333	— 1,48,645
6. Clothing Establishments, Supplies and Services	2,14,724	2,24,411	+ 9,687
7. Barrack Establishments, Supplies and Services	5,76,710	5,49,310	— 27,400
8. Administration of Martial Law	96,615	91,807	— 4,808
9. Medical Establishments, Supplies and Services	10,73,119	9,95,892	— 77,227
10. Ordnance Establishments, Stores and Camp Equipage	14,39,041	9,39,208	— 4,99,833
11. Ecclesiastical	67,059	65,545	— 1,514
12. Education	1,40,172	1,45,290	+ 5,117
13. Sea Transport Charges	1,94,540	4,74,486	+ 2,79,946
14. Miscellaneous Services	22,60,143	20,64,424	— 2,04,719
15. Volunteer Corps	22,522	51,955	+ 29,433
<i>Non-Effective Services.</i>			
16. Rewards for Military Services	23,551	21,374	— 2,177
17. Retired Officers	56,431	70,117	+ 13,686
18. Military Pensions	26,47,559	25,12,699	— 1,34,860
19. Widows' Pensions and Compassionate Allowances	86,609	83,606	— 3,003
20. Superannuation Pensions and Gratuities.	54,503	60,750	+ 6,247
Total ...	3,07,11,633	2,96,95,652	— 10,15,981

There was thus a gross decrease of Rupees 13,76,180 under some heads and an increase of Rupees 3,60,199 under others; the largest increase occurred in (13) Sea Transport Charges, caused chiefly by the conveyance of troops by steamers to Burmah. Of the items of decrease the largest occurred under heading (10), where it was partly due to a special adjustment of Rupees 2,26,301 in 1878-79 and partly to the deduction from charge (instead of a credit *per contra*) of the value of supplies to the Civil Departments referred to in the preceding paragraph.

PROVINCIAL SERVICES.

(a.)—PROVINCIAL PROPER.

The income and expenditure of this section were as follow :—

Income.			
Major Head.	1878-79.	1879-80.	Difference.
	RS.	RS.	RS.
XI. Registration	5,20,375	5,30,164	+ 9,789
XV. Minor Departments	59,541	74,087	+ 14,546
XVI. Law and Justice	3,27,023	2,58,887	— 68,136
XVII. Police	1,01,948	1,63,640	+ 61,692
XVIII. Marine	12,331	17,629	+ 5,298
XIX. Education	1,55,599	1,54,479	— 1,120
XX. Medical	62,351	1,03,993	+ 51,642
XXI. Stationery and Printing	27,020	31,806	+ 4,786
XXII. Interest	2,946	2,701	— 245
XXIV. Miscellaneous	22,198	37,468	+ 15,270
XXV. Public Works Ordinary	1,76,196	1,87,595	+ 11,399
Adjusting Receipts	13,440	2,37,570	+ 2,24,130
Imperial Allotment	14,70,968	18,00,319	+ 3,29,351
Provincial Deficit	1,08,84,938	84,86,120	— 23,98,818
Total ...	1,23,55,906	1,02,86,439	— 20,69,467
Expenditure.			
Major Head.	1878-79.	1879-80.	Difference.
	RS.	RS.	RS.
3. Refunds	15,184	8,515	— 6,669
4. Land Revenue	17,463	29,060	+ 11,637
5. Forest	...	21	+ 21
6. Excise	...	329	+ 329
9. Customs	4,271	8,702	+ 4,431
10. Salt	1,436	6,985	+ 5,549
12. Stamps	...	827	+ 827
13. Registration	3,46,353	3,65,131	+ 18,773
15. Post Office	1,05,905	1,06,702	+ 797
17. Administration	4,080	2,080	— 2,000
18. Minor Departments	1,12,522	1,24,189	+ 11,667
19. Law and Justice	12,63,729	13,73,022	+ 1,09,293
20. Police	37,18,517	39,20,820	+ 2,02,303
21. Marine	7,109	27,832	+ 20,723
22. Education	9,91,301	10,05,461	+ 14,160
23. Ecclesiastical	5,370	5,841	+ 471
24. Medical	7,10,450	6,32,877	— 77,573
25. Stationery and Printing	3,07,590	2,74,096	— 33,494
30. Miscellaneous	2,25,250	3,55,638	+ 1,30,388
31. Public Works	25,30,379	11,51,210	— 13,79,169
Famine Relief	16,36,922	...	— 16,36,922
Adjusting Payments	2,96,832	8,12,262	+ 5,15,430
Provincial Surplus	1,23,00,668	1,01,12,200	— 21,88,468
Total ...	1,23,55,906	1,02,86,439	— 20,69,467

The result of the Provincial transactions is as follows :—

	RS.
Balance to the credit of Provincial Services Proper on the 1st April 1879 (a) 3,50,315	
Surplus of 1879-80	1,74,239
	5,24,554
Amount recoverable from fettered funds	87,788
	6,12,342
Deduct unadjusted items of famine advances ... (b) 3,75,049	
Provincial Credit balance (c) 2,37,293	
	RS.
(a) Amount as given in the last Report, page 246. Deficit balance 38,240	
Additional amount of assignment from the Imperial Revenues on account of the insufficiency of the grant for the famine charges of 1879-80 3,00,000	
	Net surplus ... 2,61,760
Expenditure written back subsequent to the preparation of the last Report 88,555	
	Total ... 3,50,315
(b) This amount does not include outstandings against weavers and cultivators for the purchase of seed-grain and for the improvement of land, as the irrecoverable portion of those advances is not at present known.	
(c) This does not also take into account the transactions connected with the Buckingham Canal Fund.	

(b).—UNFETTERED LOCAL FUNDS.

The receipts and charges of the Cattle Pound Fund, the only fund which falls under this class, were as follow :—

Receipts.				
	1878-79.	1879-80.	Difference.	Percentage.
XVI. Police	RS. 2,56,631	RS. 1,98,694	RS. — 57,937	22'6
XXV. Public Works Ordinary	27,920	...	— 27,920	100'0
Total ...	2,84,601	1,98,694	— 85,907	30'2
Charges.				
	1878-79.	1879-80.	Difference.	Percentage.
18. Minor Departments	RS. 32,913	RS. 22,899	RS. — 10,014	30'4
20. Police	1,50,633	1,15,529	— 35,104	23'3
30. Miscellaneous	2,336	1,764	— 572	24'5
31. Public Works Ordinary	40,480	12,707	— 27,773	68'6
Adjusting Payments	63,544	41,794	— 21,750	34'2
Total ...	2,89,906	1,94,633	— 95,213	32'8

The transactions of the year show a surplus of Rupees 4,001, which is probably due to the number of pounds having been increased during

the year from 5,619 to 5,679. The above sum added to the last balance raises the closing balance on the 31st March 1880 to Rupees 2,33,788.

LOCAL FUNDS FETTERED.

The transactions of those fettered funds only which are classified in the details of the combined account given at page 233 above are as follow :—

Income.							
	Local Fund Act IV of 1871.		Other funds.		Total.		Difference.
	1878-79.	1879-80.	1878-79.	1879-80.	1878-79.	1879-80.	
I. Land Revenue	RS. ...	RS. ...	RS. 1,65,006	RS. 1,27,503	RS. 1,65,006	RS. 1,27,503	— 37,443
III. Forest	...	...	2,23,094	2,60,418	2,23,094	2,60,418	+ 37,324
VI. Provincial rates	39,69,170	43,69,808	21,49,823	25,47,560	61,18,993	69,17,368	+ 7,98,375
XVI. Law and Justice	...	...	78,780	74,413	78,780	74,413	— 4,367
XVII. Police	...	...	22,088	22,436	22,088	22,436	+ 348
XIX. Education	30,704	37,830	...	...	30,704	37,830	+ 7,126
XX. Medical	26,177	21,440	...	...	26,177	21,440	— 4,737
XXII. Interest	...	15,051	...	1,443	...	16,494	+ 16,494
XXIV. Miscellaneous	6,37,789	5,35,967	1,31,146	38,359	7,68,935	5,74,326	— 1,94,609
XXV. Public Works	3,47,007	4,52,554	43,537	52,350	3,90,594	5,04,904	+ 1,14,310
XXVI. Irrigation and Navigation. Adjusting Receipts	3,27,218	1,50,094	55,663	87,788	3,60,376	2,37,882	— 1,22,494
Total ...	53,38,065	55,92,744	29,02,345	32,12,330	82,40,410	87,95,074	+ 5,54,664
Expenditure.							
	Local Fund Act IV of 1871.		Other funds.		Total.		Difference.
	1878-79.	1879-80.	1878-79.	1879-80.	1878-79.	1879-80.	
2. Interest	RS. 13,850	RS. 14,424	...	...	RS. 13,850	RS. 14,424	+ 574
3. Refunds	32,636	3,706	...	...	32,636	3,706	— 28,930
4. Land Revenue	14,159	14,170	23,47,807	25,16,971	23,61,966	25,31,141	+ 1,69,175
5. Forest	...	...	1,53,943	1,00,660	1,53,943	1,00,660	— 53,283
8. Provincial rates	...	...	32,391	31,493	32,391	31,493	+ 898
17. Administration	40,118	49,570	...	...	40,118	49,570	+ 9,452
19. Law and Justice	...	...	...	1,500	...	1,500	+ 1,500
20. Police	...	...	11,939	19,841	11,939	19,841	+ 7,902
22. Education	3,85,861	3,85,481	...	...	3,85,861	3,85,481	— 380
24. Medical	3,53,348	4,37,988	...	...	3,53,348	4,37,988	+ 79,640
29. Pensions	...	753	...	...	...	753	+ 753
30. Miscellaneous	5,81,239	4,86,588	4,503	2,011	5,85,742	4,88,599	— 97,143
31. Public Works	25,50,931	26,01,883	77,486	27,202	26,14,467	26,29,085	+ 14,618
32. Irrigation and Navigation. Adjusting Payments	13,440	2,10,844	14,516	27,026	14,516	13,440	— 1,076
Total ...	39,76,632	42,05,497	26,43,099	27,96,508	66,19,731	70,02,005	+ 3,82,274

In this Report the transactions of Local Funds under Act IV of 1871 are reviewed separately from those of other funds.

LOCAL FUND ACT IV OF 1871.

The above statement shows that there has been a gross increase in the receipts of 1879-80 over 1878-79 under some of the heads in connection with this fund amounting to Rupees 5,28,362 and a decrease

under other heads to the amount of Rupees 2,83,683, or a net increase of Rupees 2,44,679, or 4.6 per cent. on the aggregate.

The increase in Provincial Rates is due to the gradual improvement in the agricultural prospects and the consequent recovery of the arrears of cess which accumulated in some districts after the famine, and also to the opening of eight new toll-gates during the year under review; and in Public Works to larger credits to the Public Works Department on account of Road and Ferry tolls.

The decrease under Medical is partly nominal, the actuals of 1878-79 having been unusually large; in Miscellaneous it is due to a falling off in private contributions and to arrear recoveries of rents in 1878-79; and under Adjusting Heads to a special temporary grant of Rupees 1,68,845 having been given from Provincial Funds in 1878-79 on account of deficits which occurred in that year in the balances of some of the Local Fund Circles.

On the expenditure side there was a gross increase under some heads amounting to Rupees 3,52,736 and a decrease of Rupees 1,23,871 under others, making the net increase Rupees 2,28,865.

The increase under Medical is due to the resort of a larger number of patients to Local Fund dispensaries, to extension of vaccine operations, and to Rupees 57,091 (the contribution from this fund to Municipalities) having been included in 1878-79 under the head "Miscellaneous" instead of "Medical." The increase under Adjusting Payments is due to larger contributions towards the support of the Medical College and to the refund to Provincial Funds of the special aid of Rupees 1,68,845 given in the previous year.

The decrease under Refunds is due to the refund of Rupees 23,768 last year in the North Arcot district on account of the unexpended portion of the grant for famine purposes out of the Mansion House Fund, and in Miscellaneous it is due partly to Rupees 57,091 having been included under "Miscellaneous" in 1878-79 instead of "Medical" as stated in the preceding paragraph, and partly to smaller expenditure on Petty Local Establishment and other charges of a miscellaneous nature.

In the aggregate the expenditure of the fund now under review fell short of the income by Rupees 13,61,433 this year and Rupees 13,77,247 last year. These sums added to the balance of Rupees 5,82,539 with which the former year opened would raise the balance at the close of 1879-80 to Rupees 33,21,219. The actual balance was Rupees 60,517 more on account of advances and loan accounts.

OTHER FETTERED LOCAL FUNDS.

The balances of these other fettered funds, except two which were closed during the year under review, rose from Rupees 11,76,568 on the 1st April 1878 to Rupees 18,10,851 on the 31st March 1880. There was a gross increase of Rupees 6,46,164 in seven funds against a decrease of Rupees 11,881 in one fund, viz., the Police Lodging Fund.

The increased balances occurred in the following funds:—

Name of the Fund.	Balance, 31st March 1880.	Increase.	Percentage.
	RS.	RS.	
Village Service	12,30,149	2,96,452	31.7
Jungle Conservancy	2,14,569	1,55,839	265.3
Canal and Ferry	2,17,274	84,059	63.1
Convict Labor	92,544	99,195	
Irrigation Cess	36,481	9,288	34.1
Bhadrachalam Road	2,391	1,084	82.9
Bearers' Fee	2,076	249	13.6

There has been no alteration in the invested capital of the Village Service Fund since 1878-79, that capital being as follows:—

	RS.
Kurnool	4,40,500
Salem	4,30,900
Trichinopoly	1,50,000

The two fettered funds which ceased to exist are the Buckingham Canal and the Bungalow Fee Funds. The former has been included in the transactions of Provincial Services under Sub-division 2, and the latter has been closed by the adjustment of a small outstanding balance on account of which the fund had hitherto been kept in existence.

LOCAL FUNDS EXCLUDED.

The transactions of the funds which fall under this class are as follow:—

Receipts.

Name of Fund.	1878-79.	1879-80.	Difference.	Opening Balance, 1st April 1878.
	RS.	RS.	RS.	RS.
1. Educational Building	69,818	69,435	—	31,472
2. Endowment	14,458	9,036	—	1,006
3. Port	2,70,756	2,73,183	+	4,38,333
4. University Fee	52,069	54,291	+	...
5. Cantonment	6,742	12,534	+	...
6. District Road	...	320	+	110
Total ...	4,33,843	4,09,499	— 24,344	4,71,969

Charges.

Name of Fund.	1878-79.	1879-80.	Difference.	Closing Balance, 31st March 1880.
1. Educational Building	Rs. 91,548	Rs. 67,885	Rs. 23,663	Rs. 24,292
2. Endowment	8,264	9,792	1,528	5,332
3. Port	2,15,794	1,84,655	31,139	5,81,883
4. University Fee	47,368	58,992	11,624	...
5. Cantonment	4,400	12,160	7,760	2,516
6. District Road	398	...	398	32
Total ...	3,67,772	3,33,484	34,288	6,14,055

LOANS.

Loans.

The following statement gives the amount of loans granted by Government from time to time and the amounts outstanding on the 31st March 1880:—

Account of Loan Transactions in 1879-80.

Persons and Corporations to whom Loans have been granted.	On what account.	Amount of Loan sanctioned.	Rate of Interest.	Balance from last year.	Amount advanced.	Total.	Amount repaid.	Balance.	Amount of Interest received and credited to Revenue.	Balance of Interest unpaid.	
										Rs. A. P.	Rs. A. P.
Madras Municipality.	For Water-supply Project, 1869; 1873	14,30,000	4	14,30,000 0 0	...	14,30,000 0 0	...	14,30,000 0 0	77,878 9 0	...	...
Negapatam do. ...	For constructing a Market, 1874	25,000	4½	16,663 10 8	...	16,663 10 8	2,083 5 4	14,583 5 4	759 8 1	...	...
Coimbatore do. ...	For improvement of Water-supply, 1876	4,000	4½	2,800 0 0	...	2,800 0 0	400 0 0	2,400 0 0	112 2 10	...	...
Do. do. ...	For erecting tiled houses ...	2,000	5	2,000 0 0	...	2,000 0 0	445 14 2	1,554 1 10	239 0 7	...	...
Ootacamund do. ...	For completion of certain roads, 1875	12,420	4½	11,251 11 6	...	11,251 11 6	517 10 1	10,734 1 5	430 8 7	...	...
Coonoor do. ...	For erecting Market-sheds, 1875	7,248	4½	4,518 14 8	80 5 4	4,599 4 0	82 4 4	4,516 15 8	198 6 7	...	...
Mangalore do. ...	For improvement of Market, 1875	9,150	4½	6,405 0 0	...	6,405 0 0	915 0 0	5,490 0 0	230 2 7	...	...
Singapet Local Fund Board.	For constructing an Iron Girder Bridge across the Koriyaar, 1873; 1876	1,92,790	4½	1,90,690 0 0	...	1,90,690 0 0	6,509 8 10	1,90,180 7 2	8,740 15 6	...	...
Tinnevely Local Fund Board.	For repairing the bridge over the Sattur river, 1873.	30,000	4½	6,961 14 2	...	6,961 14 2	4,000 0 0	2,961 14 2	177 10 7	...	...
Chettur Local Fund Board.	For the completion of the Tamraich Ghat Road and approach in Wynaud, 1874	80,000	4½	60,979 7 11	...	60,979 7 11	4,635 4 9	55,344 3 2	3,148 8 0	...	...
Tellicherry Local Fund Board.	For the completion of the Peta Ghat Road and construction of a new leather strait in Wynaud, 1875	60,000	4½	52,811 0 3	...	52,811 0 3	...	52,811 0 3	2,356 14 0	...	...
Ramnad Zamindari.	For the liquidation of debts of the Estate, 1875	12,72,830	5	12,72,830 0 0	...	12,72,830 0 0	...	12,72,830 0 0	1,05,792 2 3	...	...
Do. do. ...	For repairs and improvement of the Estate, 1875	2,00,000	5	1,00,000 0 0	50,000 0 0	1,50,000 0 0	...	1,50,000 0 0	2,750 13 6	5,049 5 7	...
Bangampalle Navab.	For the liquidation of the debts of the Estate and for repairs and improvement, 1875; 1877	3,00,000	6	2,83,000 15 7	...	2,83,000 15 7	13,886 5 0	2,69,110 10 7	17,240 9 8	...	...
Maisur State ...	Advanced on account of Finance, 1873	80,00,000	5	80,00,000 0 0	...	80,00,000 0 0	291 1 4	80,00,000 0 0	4,00,000 0 0	...	...
Jacchendar of Sandur.	For roads, 1873	2,500	4	1,732 14 9	...	1,732 14 9	...	1,471 13 5	67 4 3	...	...
Vattangudi Estate ...	For purposes of cultivation, &c. repairing Irrigation Works	7,120	4½	1,386 12 0	...	1,386 12 0	1,386 12 0	...	47 12 1	...	...
Sirasaunga Zamindari.	For repairing Irrigation Works	1,50,000	6½	23,000 0 0	53,000 0 0	78,000 0 0	15,000 0 0	61,000 0 0	2,874 6 11	...	...
Punganur do. ...	For the relief of the poor	20,300	...	20,300 8 0	...	20,300 8 0	...	20,300 8 0	...	...	...
Total ...	Total ...	1,18,27,368-8-5	...	1,15,03,431 13 6	1,03,080 5 5	1,10,11,512 2 10	49,653 1 10	1,15,61,869 1 0	7,13,101 7 0	5,049 5 7	...

Special
advances.

The following is an account of the special advances outstanding in connection with the late famine :—

On what account.	Outstanding on the 1st April 1879.	Further Advances in 1879-80.	Total.	Recoveries in 1879-80.	Balance outstanding on the 31st March 1880.
Purchase of seed-grain...	RS. 2,76,581	RS. 26,195	RS. 3,02,786	RS. 1,77,308	RS. 1,25,478
Weaving ...	8,32,112	1,430	8,33,542	1,94,474	6,39,068
Improvement of land ...	9,86,099	84,517	10,70,616	4,47,665	6,22,951
Total ...	20,94,802	1,12,142	22,06,944	8,19,447	13,87,497

It will be seen that the total outstanding balance has been reduced from 21 lakhs to 14 lakhs.

ADVANCES UNDER LAND IMPROVEMENT ACT.

Land
advances.

Besides the foregoing special transactions advances were under ordinary circumstances made to cultivators under the Land Improvement Act. The following is an abstract of the transactions on this account :—

Balance outstanding on the 1st April 1879	RS. 25,565
Advances made in 1879-80	64,076
Recoveries in 1879-80	89,641
Amount recovered in excess	26,909

The above excess is due to a mistake. There was really a sum of Rupees 36,779 outstanding on the 31st March 1880 in six districts. The actual amount of the advances made in 1879-80 was Rupees 2,325 only, which was paid to the cultivators in the districts of Tinnevely and Kurnool; the remaining portion of the sum of Rupees 64,076, which was entered above under this head, consisted of debits by adjustment in the accounts on account of previous years' transactions.

GENERAL REVENUES.

Imperial
revenues.

A statement is appended showing the chief sources of the Imperial revenue derived from each district, from which it will be seen that there has been an increase of Rupees 36,95,288 or 9.5 per cent. in ten districts and a decrease of Rupees 23,40,571 or 5.9 per cent. in the other eleven districts (exclusive of Maisur). The net result is an increase of Rupees 13,52,969 or 1.7 per cent. in all the districts.

