UNIVERSAL
LIBRARY
OU_174309
UNIVERSAL
LIBRARY

Madras University Economics Series—No. 5

General Editor :

Dr. P. S. LOKANATHAN,
Ag. Professor of Indian Economics

ECONOMIC CONDITIONS IN THE MADRAS PRESIDENCY 1800—1850

*

Thesis approved for the Degree of Doctor of Philosophy

PRINTED BY G. S. PRESS, MADRAS.

ECONOMIC CONDITIONS IN THE MADRAS PRESIDENCY
1800—1850

BY

A. SARADA RAJU, B.A. (HONS.), PH.D.



UNIVERSITY OF MADRAS

1941

PUBLICATIONS OF THE DEPARTMENT OF ECONOMICS

Books :

1. Some South Indian Villages.
2. Industrial Welfare in India.
3. Indian Agricultural Statistics.
4. Some South Indian Villages—A Resurvey.
5. Economic Conditions in the Madras Presidency.

Bulletins :

6. Economic Life in a Malabar Village.
7. Handloom Weaving in Madras Presidency.
8. The Economic Results of Prohibition in Salem District.
9. Commodity Prices in South India, 1918-38.

EDITOR'S NOTE

A full and detailed economic history of India of the nineteenth century embracing all aspects of the economic life of the people is yet to be written. It would require the organised co-operation of a band of scholars, each devoting his whole time to a study of particular problems extending over the whole range of the country. In the meanwhile all that is possible to make partial studies on a regional basis confined to limited periods of time.

The present work represents one such. It is a study of the economic conditions of Madras Presidency in the half century commencing from 1800. The period is undoubtedly one of great strain and stress, involving a difficult process of adjustment to the changing economic and political conditions. The old economic order was passing away; but in its place no stable structure had yet been built. The village which was the centre of all economic life was being disrupted and its self-sufficiency undermined. It came to be regarded only as a unit of a vast centralised administrative system and its officials the instrument for the execution of the orders of a distant central government. But the break-up of its isolation and its closer contact with the rest of the world did not bring any prosperity to it.

Thus the decay of village life was definitely a set-back. The decline in the cultivation of land which had set in as a result of the previous state of insecurity was arrested, but there was no marked improvement in cultivation as the ryots were unable to bear the weight of the high incidence of the land revenue. They had to be coerced rather than tempted to cultivate. Settled government did not therefore bring about the expected increase in the area under cultivation or in the profitability of agriculture.

Government by a trading company was hardly suited to bring about the economic amelioration of the people so much needed at the time. The East India Company was only interested in the raising of those crops, *e.g.*, indigo and cotton, which were profitable from the commercial point of view. But even that interest was not sustained, and all efforts to improve cultivation were scotched on account of the adoption of a misguided policy of *laissez faire* and free trade, wholly unsuited to the conditions of India which needed a policy quite the opposite of that which was actually pursued.

Laissez faire worked havoc as much in agriculture as in industry. To cite only one instance, even irrigation which was a *sine qua non* of successful cultivation and which directly affected land revenue in which Government was so vitally concerned was either neglected or received scant attention. Under the pressure of a serious threat to the economy of a whole district consequent upon the unfettered flow of water from one river to another the first great irrigation project was undertaken in 1832, but a definite change in the irrigation policy of the Government came only after the report of the Public Works Commission in 1852.

To the artisans and urban workers the period was a specially trying one. It was the age of transition, and as in all periods of transition there was widespread suffering and distress. Even if the Government had been more sympathetic and active, the sufferings of the weavers and other artisans could not have been averted. The decay of cottage and urban industries was inevitable, but the Company's policy only accentuated the distress. Their efforts to promote cotton manufactures received a crushing blow from the opposition of British manufacturing interests; but they consoled themselves with the reflection that what was lost by manufactures would be made up by the increased demand for raw cotton, a view which failed to take note of the difference in the terms of exchange But the vicious fiscal policy by which raw materials were taxed, while foreign goods were given free entry, could not be justified in any circumstances.

Dr. Sarada has in this work presented these and other aspects of the economic condition of the Madras Presidency in an objective manner. She has made use of all sources and materials examined their relative importance and trustworthiness and fully documented her narrative. Of particular interest are her chapters regarding trade and transport and prices. Her account of the influence of the economic policy of the State on famine policy irrigation, and generally on the economic conditions of the people throws a flood of light on the theoretical foundations of such a policy. The conclusions which she arrives at follow from the facts which have been set forth and are marked by the objectivity and impartiality of the student.

P. S. LOKANATHAN.

ACKNOWLEDGMENT

This book is the result of more than two years of research carried on in the Department of Economics under the supervision of Prof. P. J. Thomas. I am greatly indebted to him for his kind encouragement and guidance at every stage of the work and for recommending its publication after it had been accepted for the Degree of Doctor of Philosophy of the University of Madras.

I acknowledge with gratitude the assistance rendered by Dr. P. S. Lokanathan and Mr. K. C. Ramakrishnan both with regard to the mss. and the proofs. I must also thank Mr. N. Sundararama Sastry, Mr. B. Nataraja Pillai and Mr. O. V. Raju for going through the proofs and helping me in preparing the index.

I am deeply obliged to the Curator and staff of the Madras Record Office and the Librarians of the Connemara and Secretariat Libraries for the facilities they afforded me in collecting materials for my work. Lastly I must thank the University of Madras for kindly agreeing to publish this book.

Madras,
December, 1941.

SARADA RAJU.

CONTENTS

PAGES

EDITOR'S NOTE .. v – vi

ACKNOWLEDGMENT .. vii

INTRODUCTION

Scope of the subject—the various sources of information—their characteristics .. xiii–xxi

PART I. GENERAL

CHAPTER I. POLITICAL CONDITION:

Condition of the country at the beginning of the period—internal administration—insecurity state of the various districts—general economic condition .. 3– 11

CHAPTER II. THE VILLAGE COMMUNITY:

General description—appearance of the village—village organization—the Barabaloti-communal expenditure—changes in the British period—administration of justice—introduction of the British system—the decay of the village .. 12– 27

CHAPTER III. LAND TENURES:

Section I. Conditions at the beginning of the period—Land systems—joint villages .. 28– 31

Section II. Relations between landlord and tenant. The Tamil country—*mirasi* rights—*poracudis*—*ulcudis*—the Telugu country—Malabar—*jenmi* tenure—Canara—the *pannaiyal* system—Varam or Batai .. 31– 41

Section III. Changes during British Rule. Early revenue settlements—the village leases, triennial and decennial—introduction of the Ryotwari system—tenures under British rule—the incidence of the land revenue .. 41– 52

PART II. AGRICULTURE

CHAPTER IV. AGRICULTURAL PRACTICES:

Defects in the methods of cultivation—implements—manure—rotation and fallowing .. 53– 61

CHAPTER V. CROP PRODUCTION:

Section I. General. Extent of cultivation—Classification of crops. Multiple crops—General features of crop production .. 62– 67

PAGES

Section II. Cereals. Description of rice cultivation—ragi —cholam—costs of cultivation—yield .. 67- 74

CHAPTER VI. CROP PRODUCTION (Contd.) COMMERCIAL CROPS:

Section I. Indigo. Method of cultivation—Manufacturing Process—Government efforts to foster indigo production .. 75- 81

Section II. Sugarcane. Extent of cultivation—expenses—Method of cultivation. Government policy .. 81–87

Section III. Cotton. Extent of cultivation—Causes which retarded progress—cultivation processes—costs of cultivation—yield—cleaning of cotton—the Company and cotton cultivation—various attempts to improve quality and quantity—results .. 87–101

CHAPTER VII. CATTLE:

The different breeds of cattle—their characteristics—the supply of fodder—the care of cattle—pasturage .. 102–112

CHAPTER VIII. IRRIGATION:

Importance of irrigation—the sources of irrigation—rivers—reservoirs—tanks—wells—early irrigation works—irrigation policy of the state—kudimaramat—irrigation works in the later period—results of new constructions .. 113–132

CHAPTER IX. RURAL CREDIT:

Extent of indebtedness—increase in indebtedness under British rule—its causes—the rate of interest—changes in the relation between debtor and creditor. Takkavi loans—the system in the early and later years of British administration—its defects—discontinuance of Takkavi .. 133–145

PART III. INDUSTRIES

CHAPTER X. STATE OF INDUSTRIES:

Section I. General. Position of industry at the opening of the nineteenth century—the main industries—organisation—the decay of industry .. 146–150

Section II. Iron Industry. Resources of the presidency—manufacturing processes—mining—smelting—condition of iron workers—The Porto Novo Iron works—decline of the iron industry .. 150–162

CHAPTER XI. STATE OF INDUSTRIES (Contd.):

The Textile Industry: Condition of the industry at the beginning of the period—the weaver's equipment organisation and credit—general condition of weavers—the Company and the industry—the Investment—method of provision—the cessation of the Investment—the decay of

PAGES

textiles—causes of the decline—effects of the decay of the industry .. 163–182

PART IV. TRADE, TRANSPORT AND PRICES

CHAPTER XII. INTERNAL TRADE:

Extent of trade—the trading classes—organisation of trade—banking — markets and fairs — trade centres — coasting trade .. 185–202

CHAPTER XIII. EXTERNAL TRADE:

The course of trade—increase in volume—changes in trend and character of trade—decline in the exports of piecegoods—increase of British imports—causes—rise of commercial crops—Land Frontier Trade .. 203–215

CHAPTER XIV. TRANSPORT:

Roads. Condition of roads at the beginning of the period—Government policy—state of roads at the end of the half-century .. 216–221

Navigation. Position at the opening of the century—the decline of shipping—ports .. 221–224

CHAPTER XV. THE COURSE OF PRICES:

Price variations—the course of prices—price lists and index numbers—the depression in the second quarter of the century—causes of the fall of prices—the monetary factor—bullion movements—non-monetary factors—effects of the fall of prices—the depression in industry .. 225–244

PART V. GENERAL ECONOMIC CONDITION

CHAPTER XVI. THE ECONOMIC POLICY OF THE STATE:

Absence of definite policy in the early period—the advent of *laissez-faire*—modifications in regard to agriculture—industry and trade .. 247–255

CHAPTER XVII. CONDITION OF THE PEOPLE:

Section I. Population. Statistics—growth of population .. 256–258

Section II. General Stock and Property. Condition at the beginning of British rule—changes during the half century 258–265

Section III. Work and Wages. Conditions of work—hours of work—wages—position at the end of the period .. 265–270

Section IV. Serfdom. Place of serfs in rural economy—treatment of serfs—extent of serfdom in the early period—disappearance of serfdom—causes .. 270–276

Section V. The Standard of Living. Housing—food—dress .. 276–282

PAGES

CHAPTER XVIII. THE FAMINE PROBLEM:

Famine history—earlier famines—measures adopted by the Company to deal with famine—later famine policy—the influence of economic theory .. 283–291

CHAPTER XIX. CONCLUSION .. 292–294

APPENDICES

I. Sumati Satakamu. Verses 30, 81 and 35 .. 297

II. Specimen Deed of Sale in Joint Villages at the beginning of the nineteenth century .. 298

III. A Common Mortgage Bond, dated 1772 .. 299

IV. Statement showing the sums disbursed by the Company in Rajahmundry District on account of the Investment from 1805-6 to 1828-9 .. 300

V. Imports of Piecegoods and Yarns from the United Kingdom into the Madras Presidency from 1814-15 to 1850-51 .. 301

VI. Exports of Piecegoods on Private Account from the Madras Presidency from 1820-21 to 1850-51 .. 302

VII. Quinquennial statement of Private Exports of Cotton Piecegoods from the Madras Presidency to different places from 1825 to 1851 .. 303

VIII. External Commerce by Sea of the Madras Presidency from 1802-1851 (Private Trade) .. 304–305

IX. Statement of the Imports and Exports of Bullion on Private and Public Account from 1819-20 to 1850-51 .. 306–307

X. Coasting Trade of the Madras Presidency from 1802 to 1850 .. 308

XI. Land Frontier's Trade of the Madras Presidency from 1811-12 to 1850-51 .. 309

XII. Quinquennial Statement of the Chief articles of Export from 1820-21 to 1850-51 .. 310

LIST OF REFERENCES .. 311–316

INDEX .. 317–322

INTRODUCTION

Economic history is generally destitute of striking occurrences. The details of the manner in which the various sections of the community obtain their living are necessarily dull and drab. Progress is so gradual as to be hardly perceptible except over long periods, and the factors that bring about changes are remarkable not for their spectacular nature, but for the 'slow intensity' of their cumulative effects. It is for this reason that the study of economic history has so long been neglected. Lately, however, it has come into its own, and economic historians have no longer to vindicate its claims "against bold, bad men who would question its primacy."

In India, economic history is largely an unexplored field. Political history has been written and rewritten several times within the past few decades, but the economic condition of the people has apparently proved uninviting. This neglect is due partly to the paucity of easily accessible material, and even more to the difficulties of utilizing it. Further, there has been an impression that Indian economic life is practically immune to changes. Mr. Tennant observes that "the simple dress of the Hindu, his rude hut, and his feeble instruments of agriculture are the same at present as they were two thousand years ago; and if the same causes continue to operate, they must remain for many ages without amendment, and without change."[1] Indeed it has been stated that in the East as a whole, "the people does not change."[2] Movement is certainly much slower in India than in the countries of the West, and particularly in the period with which we are dealing, but even here we shall see that evidence of change is not lacking.

Scope of the Subject. It is proposed to discuss certain aspects of economic life in the Madras Presidency during the earlier half of the nineteenth century i.e., the first fifty years of British rule. With the material at our disposal, an attempt has been made to present a picture of the condition of the country and the people at the beginning of the period, and indicate the lines of subsequent de-

1. Tennant, *Indian Recreations*, pp. 103-4.
2. Lane Poole, *Medieaval India*, p. v.

velopment. The background is provided by the first chapter which deals with the general and political conditions of the country at the commencement of British rule. Then comes a description of the village—the hub of Indian economic life,—its organization and its subsequent decay. Chapter III gives an account of land tenures and revenue systems. Government tenures and *mirasi* and other rights have been discussed briefly, because there is already a mass of literature relating to these subjects.

Part II comprises a survey of agriculture. There is a short sketch of agricultural technique, followed by an account of crop production. Certain staple crops are dealt with in some detail, and the section on commercial crops includes a résumé of the improvements attempted by the East India Company. Several important crops such as pepper, tobacco, betelnuts and cocoanuts have not been discussed owing to the lack of material which affords anything beyond a bare description of agricultural processes. The various breeds of cattle and their treatment form the subject matter of chapter VII, and the condition of irrigation works is examined in the next chapter. This section closes with a survey of rural credit.

Agriculture has necessarily taken up a considerable portion of the work; for it was then, even more than at present, the mainstay of economic life. Industry was also pursued by a large section of the population at the commencement of the nineteenth century, but agriculture was the chief occupation of the people. This predominance became even more marked during the period under review owing to the decline of the handicrafts, which will be considered in Part III. There is a brief account of industry in general, while the two great industries, textile and iron, are dealt with separately. Other industries deserving examination, such as leather-making, dyeing, carpet-weaving and glass manufacture have been omitted for want of sufficient material.

The review of industry is followed by that of trade, both internal and external. The organisation of internal trade, banking facilities, trade centres and the main features of coasting trade are successively described. With regard to external trade, the treatment is more dynamic, and the changes in the character and trend of trade that occurred during the half century have been examined at some length. Chapter XIV contains a sketch of the conditions of transport by land and water, while the next chapter is taken up with a study of price movements.

Part V begins with a discussion of state policy and the influence of economic theory in shaping that policy. The general condition of the people is then considered in its various aspects, such as population, stock and wealth, labour and standard of living. Finally, there is an account of famines and famine policy.

Sources. The sources of information on the subject come under two broad classes, i.e., (1) official documents, including the records and special reports, and (2) private writings such as travellers' accounts. The official records constitute by far the most important source. The records of this Presidency go back almost to the founding of Madras and they have been carefully preserved in the Madras Record Office. Several records are being published, beginning with those of the Public Department; but such of them as have already been published are of too early a date to be of use in the present investigation. The manuscript records fall into several categories. Of these, the Public Records are the earliest. They constitute the only source of information for the greater part of the eighteenth century; but with the reorganisation of the administration towards the close of the century, matters connected with commerce, revenue, justice, etc., were relegated to the respective departments, and the Public Records contain only occasional references to economic matters.

For the period under consideration, the Revenue Records are more useful. These, as well as the Public Records, include the Consultations, Despatches to and from England, and a number of miscellaneous and sundry volumes. The Consultations contain the day to day proceedings, i.e., the correspondence with the different authorities. In the periodical Despatches to the Court of Directors, all important questions are referred to them with information on various points, while the Despatches from England include the remarks of the Court of Directors on the subjects brought to their notice, and their instructions to the local government. In the Miscellanies and Sundries are found certain special papers and reports on particular topics coming within the purview of the Department. The Revenue Records furnish a certain amount of information on several aspects of economic life, such as cultivation, industry and trade. But most of the relevant reports, besides a great many more, are obtainable in the records of the Board of Revenue which provide the most valuable material. These records consist of the Proceedings or Consultations, including the Sea Customs Proceedings, the General Reports sent to the Court of Directors

and several miscellaneous papers. Closely allied to the Board's records are the Collectorate Records, i.e., letters sent to and from the various Collectors. These, however, are incomplete; and further, much of the correspondence is found in the Board's Proceedings.

Revenue was naturally the prime concern of the authorities; but the collection of revenue necessarily involved an occasional examination of the economic condition of the country. The letters and reports from Collectors and other officers incidentally afford some information regarding the life of the people. The annual Settlement Reports, in particular, were expected to deal with every subject of economic interest. Detailed instructions were given by the Board of Revenue with the object of obtaining "every information which may tend to promote the prosperity and improvement of the country and the ease and happiness of the people."[3] But unfortunately Collectors usually confined themselves to details of revenue settlement and collection. Few of them attempted a discussion of all the topics specified by the Board; and even those merely indicated the increase or decrease of cultivation, population, looms, shops etc., compared with the previous year. Hence an interminable series of reports have to be gone through in order to obtain a general idea of economic conditions. And in the existing state of indexes—which will be dealt with later—it is by no means easy to get at all those reports.

During the course of the half century, the scope of the Settlement Reports became more and more limited to revenue matters. So much so that when the Collector of Cuddapah began to examine the fall of prices and its causes in his Report for Fasli 1238 (1828-29), he was reminded by the Board of Revenue that a Settlement Report was not "a fit place for entering into long discussions of important and difficult questions," and that "the proper object of these papers is to explain and elucidate the accounts they accompany."[4]

Besides the Settlement Reports, there are various Reports and letters on particular subjects, such as tenures, the cultivation of commercial crops, irrigation works, trade and industry. Some-

3. Minute of the Board of Revenue on the form of Annual Reports, 31st July 1794.

4. Proceedings of the Board of Revenue on the Cuddapah District Settlement Report for Fasli 1238 (1828-29).

times, a circular was sent to all the Collectors with a questionnaire regarding some topic such as slavery, cotton cultivation and prices, in which case we have fairly complete information on the point.

The Sea Customs Proceedings of the Board of Revenue, which begin from 1806 relate to trade and shipping. The earlier Proceedings do not contain much useful matter. But from 1824, they include the annual Reports on External Commerce, which were transferred to the Sea Customs Department owing to the abolition of the Board of Trade. The office of the Reporter of External Commerce came into existence in 1801, and his first report was submitted in 1802. Since then elaborate reports were compiled annually to be sent to the Court of Directors. All of them, however, are not available in the Record Office, since they were often sent away to England without being copied. Thus for several years, we have only abstract statements of the total imports and exports from the Presidency. When complete, the Reports on External Commerce afford some information regarding the nature and trend of the external trade, the quantity and value of the various articles of import and export, and the reasons for increase or decrease. The reports are usually concerned with the commerce by sea, the land frontier trade receiving scant attention. Even the meagre information available in regard to the latter was obtained from the renters of land customs and hence could not be relied on. As for the internal trade between the districts, it was wholly omitted.

The statements of External Commerce are subject to various drawbacks. While the system of administration was still being organised, the difficulties of compilation were great and errors were unavoidable. The Reporter on External Commerce admitted in his first report that it was not possible to distinguish the amounts of articles imported from Bengal, Basrah, etc. The value of imports and exports being calculated from the duties paid at the customs, there was no means of estimating the extent of trade in articles which were duty free. Further, the customs valuation was usually less than the actual value of the goods, and hence trade was really greater in volume than the figures would indicate. However, these defects were gradually remedied and the later reports show considerable improvement.

The General Reports sent to the Court of Directors contain a summary of the Board's Proceedings for the year. In the beginning, reports were sent every few months, but subsequently it became the

practice to send only an annual report. The earlier reports deal mainly with revenue details and the subjugation of recalcitrant zamindars. Later, however, they include abstracts of Settlement Reports, as well as information under certain general heads, such as population, seasons, famine and crops. They are useful as a guide to the Proceedings themselves which are of course much more detailed and comprehensive.

The other records are those of the Commercial and Mint Departments. The Commercial Records comprise the Consultations and the Despatches to and from England. They relate to the provision of the Investment, the sales of the company's imports from Europe and other commercial activities. The Proceedings of the Mint Committee give details of mint operations and occasionally include some useful reports on problems connected with currency, finance and trade.

The great drawback of all the records is that they were intended for administrative purposes. Such information as is obtainable regarding economic conditions is merely incidental, and the correspondence has to be carefully sifted before anything of value is gleaned. Occasionally, there are reports on special subjects connected with economic life, but not all of them are equally informing. On certain topics closely related to revenue administration, such as tenures and prices, (the government share of the produce was converted into money at certain rates calculated from average prices for a number of years) there is a plethora of material, while on other subjects like methods of cultivation and cattle, the information is extremely meagre. Further, there was at that time a regrettable practice of sending valuable reports and statements from one authority to another, and finally to England, without copying them. On the other hand, letters on trivial matters like the increase of a few rupees in a clerk's salary, or again, the "£7 putty case"[5] described by Col. Cotton, are found in half a dozen different places.

5. In the 'Putty case,' a voluminous correspondence was carried on between a committee of military officers, the Military Board, the Secretary to Government, the Governor-in-Council, the Court of Directors and the Board of Control for the consideration of a fine of £7, which was eventually remitted.

Even the material that is available in the records is extremely difficult to get at, since it is scattered among a mass of purely official correspondence. There is also a lack of really helpful guides and indexes. Some of the records, such as the Public consultations the Revenue consultations and the Board's Proceedings have been indexed, but the indexes are most disappointing. An apparently valuable reference leads to a few lines of insignificant matter, while important reports are nowhere mentioned. Hence valuable information is often obtained by accident.

Besides the indexes, there are the following guides and handbooks:—Mr. Wheeler's *Handbook*, Mr. Dodwell's *Report on the Madras Records,* and a number of Guides to the District or Collectorate Records lately published. Mr. Wheeler's *Handbook* indicates the existence of interesting material, but a number of volumes referred to in it cannot be traced now. Mr. Dodwell's Report is useful to a certain extent, and gives some information regarding trade, mining, crop experiments, etc., from the Public Records, but it does not deal with the records of the Revenue Department and the Board of Revenue, which are more important for the student of economic history. Some of the Guides to the District Records are useful, such as the little Handbook for the Ceded Districts, but in the case of others, reference is rendered difficult by the fact that the arrangement is chronological and not according to the subject

One interesting feature of the records is the amount of abstract discussions of economic theory found in them. Trained in Haileybury college under men like Malthus, many of the Company's civil servants were conversant with the literature on the subject, and we frequently find Adam Smith and other economists quoted and their doctrines discussed. The Proceedings of the Board of Revenue and certain Collectors' reports contain elaborate and often verbose exposition of theory. Some of their arguments are interesting and even in advance of their time; and contrary to Mr. Edwin Cannan's opinion,[6] the East India Company did produce several budding economists. Only, being immersed in heavy official duties they had no time to develop their ideas, and their theories did not reach the world. Economic doctrines then exercised a greater influence on policy than in later days, particularly those concerning free trade and *laissez-faire*, the principles of which were adopted in India

6. Review of Economic Theory, p. 3.

earlier than in England. This will be illustrated in connection with prices, famines and in the chapters on State policy.

Among official publications, the most valuable are the *Report of the Public Works Commission* (1852), Balfour's *Report on Iron and Coal* (1885), and the *Report on the direct and indirect effects of the Godavari and Kistna Anicuts* (1858). The various Select Committee Reports on East India affairs, trade, cotton, coffee sugar, slavery etc., are also of great use. The later District Manuals, Administration Manuals, the Famine Commission Report of 1880 and Voelcker's *Report on the Improvement of Indian Agriculture*, have been largely consulted, either because they include a historical treatment of the topic in question or because several of the observations are pertinent to the period under review.

The accounts of travellers are:—Buchanan's *Journey through Mysore, Malabar and Canara, (first ed.* 1807) *A Voyage to the East Indies* by Fra Paolino da San Bartolomeo (1800), Tennant's *Indian Recreations* (1803), Heyne's *Tracts on India etc.*, (1814), Elijah Hoole's *Narrative of a Mission to the South of India* (1829), Dubois' *Hindu Manners, Customs and Ceremonies* (1823), and Victor Jaquemont's *État Politique et Social de l'Inde duc Sud en* 1832. Of these, the most important are the works of Buchanan, Heyne and Dubois. The first in particular affords detailed information on almost every aspect of economic life in pursuance of the instructions of the Governor-General who directed him to make the tour. Heyne's Tracts contain much material regarding industry, especially iron-mining, dyeing and glass-making. There are also scattered references to methods of cultivation and trade. Dubois' work deals mainly with social customs, but incidentally he discusses the general condition of the people, the decline of industry and the extent of rural indebtedness. Other useful publications are, Pharoah's *Gazetteer* (1855), Wheeler's *Handbook on cotton cultivation in the Madras Presidency* (1862), J. F. Royle's *Productive Resources* of *India* and Col. Cotton's *Public Works in India* (1857).

It will be seen that the greater part of the material has been obtained from official records and reports. One serious defect of the sources, therefore, is that they lack variety. In this respect they differ from those of English economic history, for instance, which can draw on different kinds of papers and books, such as official reports, the Domesday Book, Pipe Rolls, the records of gilds and other institutions, Charter Rolls, Town Records and works of

private individuals. Here the sources are all of one type and for that reason it is not easy to assess the value of each piece of evidence. Of the scores of Collectors referred to, there is no means of saying that one Collector is a better authority than another. No doubt some Collectors were more impressionist and some had better opportunities of acquainting themselves with facts. But the reports themselves do not enable one to assess their relative trustworthiness. The statement of an unusually competent man like Sir Thomas Munro, for instance, can be readily accepted, but those of others may be admitted as evidence if they are borne out by the testimony of other sources or if there is corroborative circumstantial evidence. Even the authorities at the time differed in their opinion regarding the same official. For example, Mr. Ellis' replies to a questionnaire on Mirasi rights in 1814 were found to be so acceptable to the government that they published them, but the Court of Directors disapproved of this lest Ellis' views should be taken as the "authoritative conclusions" of the government. Yet in 1856 it was officially declared that Mr. Ellis was considered to be "the very best authority on points connected with Mirasi tenure."[7] If the officials who observed and supervised the work of Collectors had such conflicting opinions, it is not possible at this distance of time to say that one man or Board was a competent witness and another was not.

7. Letter from the Government to the Board of Revenue, 11th February, 1856.

PART I

GENERAL

CHAPTER I

POLITICAL CONDITION

The Madras Presidency was formed at the close of the eighteenth century and in the beginning of the nineteenth. Prior to that period, the East India Company's possessions were confined to the Northern Circars, the Jaghire or the Chinglepet district, and a number of isolated 'factories' along the coast. At the close of the war with Tippu in 1792, the Company obtained a large portion of his kingdom, including Malabar, Salem and parts of Dindigul. At his death in 1799 there was another considerable accession of territory, comprising Coimbatore, Canara and the Wynad, while the administration of Tanjore was taken over from the Raja. In 1800, the Nizam of Hyderabad relinquished the districts of Cuddapah, Bellary and Kurnool—generally known as the Ceded Districts. The next year the Nawab of the Carnatic was relieved of his Subah and Nellore, North Arcot, South Arcot, Trichinopoly, Madura and Tinnevelly were added to the Company's possessions. These territories constitute the present Madras Presidency. No substantial changes have occurred since, except the addition of Kurnool in 1839 and the transfer of North Canara to the Bombay Presidency in 1862.

In this chapter, it is proposed to deal briefly with the political condition of the country at the beginning of the period. The latter part of the eighteenth century was marked by incessant warfare. Internecine war was certainly no new phenomenon, but this was a period of almost complete anarchy. The decline of the Moghul Empire let loose all the disruptive forces in the country and the presence of two rival European powers, ready to fish in troubled waters, only intensified the confusion. Kingdoms, boundaries and administrations changed with kaleidoscopic rapidity, political intrigue was rampant and the country was constantly disturbed by the clash of arms.

In such circumstances, the districts were naturally reduced to extreme distress. The frequent march of rival armies, with their attendant evils of plunder and devastation, ruined the country. When Hyder invaded the Carnatic he left behind him a black trail of desolation and misery. It was marked by the burning of villages

and the indiscriminate slaughter of all the inhabitants who did not fly from their homes. The Jaghire and parts of North and South Arcot were literally reduced to a desert and a human being was hardly to be seen.* It was years before the districts recovered from these ravages, and indeed the terrible memories of Hyder "kalabam," as it was called, survived more than a century.[1]

Internal Administration

The havoc caused by war was intensified by a pernicious system of administration. Rulers engrossed in military operations and political intrigue would have little time for other things, and the internal administration presented a picture of unparalleled corruption and iniquity. In fact the entire administration consisted of raising the maximum revenue and the upkeep of the necessary heirarchy of officials and armed force for the collection of that revenue. Often the rulers relieved themselves of all trouble by farming out the right of revenue collection in particular areas to the highest bidder. The Nawab of the Carnatic was in the habit of making assignments of the revenue collection in the districts to his creditors. All these renters were left to reimburse themselves by exacting from the people as much as they could, and in the shortest possible time, before the caprice of the government or the fortune of war nullified their contracts. They were a set of men utterly without principles and every kind of injustice and oppression was practised on the people.

Elsewhere revenue management was relegated to local Chieftains—Rajas, Zamindars and Poligars. They regarded themselves as petty kings and were indeed able to exercise the most arbitrary authority within their districts; and the Government allowed them to do so, as long as the revenue was forthcoming. They in turn often rented out portions of their districts or appointed subordinate officers to collect the revenue. In the case of all these farmers of revenue—for they were little more—their one object was to mulct as much as possible from those over whom they were placed in authority and give their superiors the minimum compatible with safety. Naturally there was much collusion between the several parties, and corruption and bribery were rampant. The ultimate burden fell on the cultivators and artisans who had to

* Place's Report on the Jaghire, 6th June 1799.

1. Sreenivasa Raghava Iyengar, *Memorandum on the Progress of the Madras Presidency during the last forty years*, 1893, p. 20.

submit to enormous exactions which left them nothing beyond the barest subsistence.

The land revenue was enhanced to ruinous proportions and, further, there was a great miscellany of imposts known under various names. A loom tax or Moturpha was levied on the chief industry of the country. A large variety of other taxes on every conceivable profession and occupation was also levied, sometimes included under the Moturpha and sometimes not. The collectors in charge of the districts at the beginning of the nineteenth century found that there were 30 to 50 kinds of artisans, petty traders, etc., who had been subject to these duties. Even the meanest and poorest—fishermen, potters, dhobies, etc.—were not exempt. While industry was thus discouraged by a direct tax on labour, internal trade was almost paralysed by an oppressive system of sayer or transit duties. An impost was laid on the transit of every article of exchange including chillies and onions.[2] The amount of the duty was regulated by no fixed principle, but varied according to the caprice of the sayer collectors in each district and each taluk. A multiplicity of chowkis where the levy was made—often one for every ten miles—further harassed the trader, and payment of the duty at one chowki did not exempt him from a demand at the next. Thus the entire system of internal administration was characterised by extortion and injustice. As Mr. W. Thackeray (one of the ablest of the early civil servants and a member of the Board of Revenue, who was directed to make a tour of some of the districts and report on their condition) said: "The open violence of armies has done less injury to the Peninsula perhaps than the fines, fees, exactions and contributions which have been imposed by the tyranny or permitted by the weakness of the State."[3]

Insecurity

In order to enforce their demands and maintain their authority, these local tyrants kept up a large body of armed peons. Every petty Poligar and Zamindar had a band of retainers numbering 2000 to 3000 and more. In the Ceded Districts alone, it was computed that there were about 30,000 armed men in the service of the Poligars at the period of their transfer to the Com-

2. General Reports of the Board of Revenue, Vol. 21, p. 293

3. Thackeray's Report on Malabar, Canara and the Ceded Districts, 7th September 1807.

pany.[4] Aided by these military peons the local chiefs committed the greatest excesses. Rapine and incendiarism constituted a feature of the times. Poligars who possessed large estates allowed them to lie uncultivated while they plundered their neighbours and one another.[5] The inhabitants had no recourse but to fly to the adjacent hills and jungles whence they watched the destruction of their crops and homes. Villages were forced to buy immunity from their attacks by paying enormous sums as indemnities. It was a common practice for the people to obtain the protection of some powerful neighbouring Poligar who in return for a consideration refrained from plundering them and also saw that nobody else did so. Thus the Rajah of Burragum in Ganjam gave two villages to a neighbouring Zamindar in order to restrain him from ravaging his country.[6] A similar state of affairs existed in the south, and most of the villages used to retain bands of these robbers in their service. The popular Tamil saying கள்ளனுக்கிட்டுக் கள்ளனுப்பிடு must have had its origin in these days.

The depredations of the Zamindars, Poligars and other freebooters continued for several years after the British conquest; and only after a determined and energetic attack on them by Lt. Col. (later Sir Thomas) Munro, Captain Mcleod, and others, were they disarmed and brought to habits of peace. The early reports of collectors teem with accounts of the turbulent state of the country. Peace and security were maintained only at the point of the sword. From Coimbatore the Collector reported in 1791 that when the Company's troops were withdrawn, the inhabitants fled to the jungles and hills, ploughs stood still and ripe grain rotted in the fields.[7] Malabar was infested with robbers and travelling was nowhere safe,[8] and even in 1816 it was observed that the country was constantly exposed to plunder by predatory bands.[9] Munro reported from Canara in 1800 that though the activities of freebooters had been restrained to a considerable extent and robberies

4. Report from Munro, 20th March, 1802.
5. Fullarton's letter to the Court of Directors, 7th Jan. 1785, p. 21.
6. Circuit Committee Report, Ganjam, 1788, p. 5.
7. From Mr. Corbett to the Board of Revenue (Conquered Territories), 18th March 1791.
8. From the Sea Customs Collector, Malabar, to the Reporter of External Commerce, 24th Jan. 1804.
9. General Reports, Vol. 23, p. 144.

and murders were on the decline, they were still frequent and no village was safe without a guard.[10]

State of the Various Districts

Harassed by rival armies, extortionate renters and zamindars and despoiled by gangs of robbers, the condition of the country was indeed deplorable. The Northern Circars had suffered so severely from war and mismanagement that at the period of their acquisition by the Company not only the forms, but "even the remembrance of civil government seemed to be wholly lost."[11] James Grant in his political survey of the Northern Circars declares that after the territory came under British rule, it enjoyed uncommon peace and security and that while the rest of the Carnatic was being depopulated and denuded of wealth there was an actual increase of wealth in the Circars.[12] The Circars were certainly free from war for several years, and there was perhaps more security than in other districts (though the Zamindars were as turbulent as any of the Poligars of the Ceded Districts and the South), but there was no great advance in prosperity. The condition of the Circars, judging from the Circuit Committee Report, was by no means flourishing. Although the Circars was the earliest to come under British rule, it was in a "wretched state," and the Governor-General himself admitted in the course of a letter to the Court of Directors in 1792, that this deterioration was due to maladministration.[13]

As for the Jaghire, the Mysore Wars had entailed such a sweeping destruction that at the end of the war in 1784 "hardly any signs were left in many parts of the country of its having been inhabited by human beings than the bones of the bodies that had been massacred; or the naked walls of the houses, choultries and temples, which had been burnt. To the havoc of war succeeded the affliction of famine, and the emigrations arising from successive calamities nearly depopulated the districts."[14] When to these were added all the evils of a corrupt administration, the natural result was a remarkable diminution of revenue, cultivation and population.

10. Letter from Munro to the Board, 31st May 1800.
11. *Fifth Report from the Select Committee on East India Affairs,* 1812, Vol. III, p. 15.
12. *Ibid.*, p. 17.
13. *Ibid.*, p. 203.
14. Place, Report on the Jaghire, 6th June 1799.

The Nellore District was not greatly affected by the wars, bu it experienced the full effects of administrative mismanagement The cultivators were so oppressed by limitless extortion that many of them gave up agriculture and took to the rearing of cattle.[1] There was no wealth, trade was circumscribed within the narrowes limits and transport was expensive and precarious. As for the Ceded Districts, no part of the country was so disturbed and backward. Its 30,000 armed peons were a regular menace to peace and prosperity. Munro bears testimony to the ruin of the country by the combined effects of maladministration, war and famine. Agriculture, manufacture and commerce were equally depressed. As for communications, the country was marked by ar almost entire absence of roads and facilities for transport.[16] Ever in 1807 after Munro's strenuous efforts towards recovery, about one-third of the land formerly cultivated was lying waste, and the cultivated area was but half the total cultivable land.[17]

Speaking of Arcot, Munro observed in 1824 that Hyder's invasion, and the oppressive system of administration had depopulated the country and reduced it to a deserted state from which it did not recover even after a quarter of a century and more of peace and good government.

Tanjore seems to have been the only district which did not present a picture of desolation at the beginning of the nineteenth century. Even here, mismanagement during the last Raja's reign had led to the neglect of agriculture, manufactures, and commerce and the emigration of inhabitants on a large scale. According to Fullarton, everywhere the country was "marked with the distinguishing features of a desert."[18] Fullarton, however, must have exaggerated the situation. As he himself observes, the district possessed the full complement for renewed cultivation; and this is borne out by the rapid improvement that was effected in Tanjore during the early years of British rule. Of Coimbatore, the Collector stated that the population had been reduced to less than half and livestock to about one-fifth.[19]

15. Nellore Settlement Report for Fasli 1211.
16. Report from Munro, 12th August 1801.
17. Thackeray's Report, 7th August 1807.
18. Mr. Petrie's evidence before the Select Committee, 1782.
    R. C. Dutt, *Economic History of British India*, pp. 104-5.
    Fullarton, Letter to the Court of Directors, 7th Jan. 1785, p. 226.

As for Canara, its condition is thus described in a letter from Munro dated 31st May 1800: "Hyder Ali received Canara, a highly improved country filled with industrious inhabitants enjoying a greater proportion of the soil and being more comfortable than those of any other province, under any native power in India. . . . . Canara has, however, now completely fallen from this state of prosperity. The evils which have been constantly accumulating upon it since it became a province of Mysore, have destroyed a greater part of its population, and rendered its inhabitants as poor as those of the neighbouring countries. Its lands which are now saleable, are reduced to a very small portion." "In the vicinity of the Ghats, the lands are not only unsaleable, but the greater part of them is waste and overgrown with wood. It is reckoned that the population has been diminished by one-third within the last forty years, and there can be little doubt but that its property has suffered a much greater reduction. Gairsappa, Aṇkola and Kundapur, formerly flourishing places, contain now only a few beggarly inhabitants; Honewar, once the second town in trade after Mangalore, has not a single house; and Mangalore itself is greatly decayed."

"Punjamahe or Sunda Payenghat, is nearly in the same state, with respect to cultivation, as the most desolate district of Canara; but Sund Balaghat is much worse than either. It is nearly a complete desert. It has not throughout its whole extent a cultivated spot of a mile square, except a few small openings thinly scattered."

Malabar had suffered similarly, though not to the same extent. The depredations of rival armies had thrown much land out of cultivation.[20] Hyder's system of financial extortion and military despotism, and the unrestrained excesses of the Moplas in Tippu's reign had led to a considerable decline in agriculture and the almost complete extinction of industry. According to local accounts the population of the district which had been roughly two millions[21] at the time of Hyder's conquest, had been reduced by three-fourths at the close of the eighteenth century.[22] But this is certainly an

20. General Reports, Vol. 6, p. 46.

21. The manuscript report gives 20 millions as the population of Malabar, but this is no doubt a copyist's error. In 1801-2 when a survey was made of the whole Presidency the population of the district was computed at 465594.

22. Letter from the Sea Customs Collector of Malabar to the Reporter of External Commerce, 24th Jan. 1804.

exaggeration. Even in 1851-2, after half a century of steady increase, the population of Malabar was only about 1½ millions. However, allowing for all exaggerations there was undoubtedly a marked diminution in the numbers of the people. As to commerce, the restrictions placed by Tippu certainly had an unfavourable effect, though the decline was not so general as in the other districts.

Economic Condition—General

Thus the main features of social and economic life in the Presidency were insecurity to person and property, dwindling production and population and disturbed conditions of industry and trade. Mr. Hodgeson, Member of the Board of Revenue, who was deputed to tour some of the districts and report on their condition declared, "In no province, Tanjore excepted, is the population equal to the occupancy of the whole arable land. Large tracts of arable waste, of waste land, and land covered with jungle will be found in each district."[23] Francis Buchanan who was directed by the Governor-General to make an exhaustive inquiry into the state of the newly conquered territories in 1800, repeatedly refers to the desolate condition of the districts through which he passed, and states that cultivation was evidently only a fraction of its former extent. Livestock had diminished equally with the population and in some cases[24] even more. Since there was more land than labour, the former had very little if any sale value except in Tanjore and to some extent in Malabar. Irrigation was greatly neglected by Government as well as by the people, and the numerous tanks—the heritage from past rulers—were in a state of ruin.

With regard to industry, we have no means of estimating the actual position of manufactures on private account, but from the correspondence regarding the Company's "Investment," we may infer that the coastal villages and towns where the European nations had established 'factories' did not suffer as much as the inland tracts. But even here, affairs were by no means satisfactory. The disturbed state of the country and financial stringency owing to expenditure on wars and various kinds of remittances which constituted the "drain," had led to a considerable decline of industry, and the Commercial Despatches of the period constantly refer to the difficulties of procuring an adequate investment.[25] Commerce was

23. J. Hodgeson's Report on Tinnevelly, 1807, p. 3.

24. Coimbatore, Vide *Supra.*

25. Commercial Despatches to England, 15th March 1792, 6th August 1796. 15th October 1798. 9th August 1799. etc.

similarly restricted. Madras was the only place with a fairly extensive trade by sea, and even inland trade was, as has been noted, greatly circumscribed by the inland duties. Communications were entirely undeveloped, there being no made roads and no bridges. Wheeled traffic was practically unknown outside a few towns, and goods were transported by pack cattle. Even such roads as existed could not be freely utilized owing to the general insecurity.

Such was the condition of the Presidency at the commencement of the British régime. We shall now study the changes effected by half a century of peace and settled government. As agriculture was the main occupation of the people, we shall take it up first, and begin with the village which was the centre of rural life, and next with the conditions under which agriculturists owned and leased land.

CHAPTER II

THE VILLAGE COMMUNITY

At the period of the acquisition of the Madras Presidency by the British, the country was teeming with villages. The only exceptions were Malabar and Canara, where villages of the usual type were rare, the people living mostly in and around scattered estates.[1] For the rest of the territories, the unit of social and economic life was the village.[2] Sir Charles Metcalfe,[3] Sir George Birdwood,[4] and a host of others have expatiated on the antiquity, the vitality and the general excellence of village life. Suffice it to say here that the village was the very heart of South Indian social economy and forms the basis of the present investigation. At the dawn of the East India Company's rule in South India, the village community still retained considerable vigour in spite of the devastating effects of revolution, war, famine and misrule.

General Description.—The village had a definite geographical area, and comprised some hundreds of acres of arable and waste land. Politically, it was "a little republic or rather corporation, having within itself municipal officers and corporate artificers." It was an entity with a singular capacity for survival. Through all the vicissitudes of political and economic life, "the names, boundaries, interests and even families continue for ages."[5] This is not surprising when one sees the minute and elaborate directions that are given for the fixing of boundaries.[6] The salient feature of these miniature republics was the spirit of co-operation, which was indeed the secret of their continued existence through centuries of

1. W. Thackeray's Report on Malabar, etc., 7th Sep. 1807.
Papers relating to the Village Panchayat and other Judicial Systems of Administration, 1812-16, p. 265.
2. Proceedings of the Board of Revenue, 5th Jan. 1818.
3. *Report from the Select Committee of the House of Commons,* 1832, Vol. III, App. 84, p. 331.
4. Birdwood, *Industrial Arts of India,* p. 320.
5. General Reports, Vol. 14, p. 171.
6. A. Appadurai, *Economic Conditions in Southern India,* 1000—1500 A.D., 1936, Vol. I, pp. 93-95.

time. Mr. Place, Collector of the Jaghire, states that each inhabitant had the assistance of the rest, the produce was the fruit of common labour, and profits and losses were shared. There was co-operation not only in production, but also in marketing, for "one man goes to market, while the rest attend to cultivation and harvest."[7] He must however, have generalised from a certain type of village, for there is not much evidence of the existence of such a "communistic" system in the British period. Mr. J. Hepburn who served in various capacities in Madras and the Southern Districts between 1796 and 1820 does indeed speak of corporate villages where there was a community of stock, and different sections of the inhabitants looked after the various branches of economic and political life.[8] But he has not made it clear whether he is referring to conditions in his day or earlier. Mr. Fraser, Collector of Nellore, gives more positive evidence of joint ownership and cultivation in a letter to the Board of Revenue dated 18th November 1820. But the system was by no means common.[9] It was confined to the joint villages which will be described in the next chapter.

We have not sufficient material for anything beyond a rough estimation of the extent, population and wealth of these villages, but they must have varied considerably. Some villages were very small, containing perhaps a hundred acres of land, with just one house and a few huts. Several villages consisted of one to ten houses, with a population of 5 to 50. Some indeed were very large, comprising thousands of acres of land, with a population of a thousand to two thousand. In the Northern Circars, large villages had a population of 1000 to 2000 and small ones, 100 to 200.[10] From Mr. Place's Report on the Jaghire, we find that villages contained about 100 houses and a population of 450, while very few had 300 houses and 1,500 inhabitants. But the district, it should be noted, had suffered in an unusual degree during war and famine. So we may reckon that the average village comprised a hundred to two hundred houses and population varying from five hundred to a thousand. Similarly with regard to wealth—a district

7. Report on the Jaghire, 6th June 1799.
8. General Reports, Vols. 27 and 28, p. 266.
9. Wilks, *Historical Sketches of the South of India*, 1810, Vol. I, pp. 118-119.
10. Letter from the Chief and Council of Masulipatam to the Board of Revenue, 26th April 1793.

yielding a revenue of 50,000 Pagodas* would contain about a hundred villages, some of which could raise as much as 5,000 pagodas, while others could hardly contribute 100.[11]

These villages formed distinct societies by themselves, self-sufficing in the matter of most of the fundamental necessities and even of several of the comforts of life. As regards food, the arable lands yielded all the grain required by a predominantly vegetarian society. On the pasture lands grazed the cattle and sheep that provided milk and all its products, as well as wool, meat and manure. From the common waste, the villagers collected what little fuel they required, while patches of garden land, often at the back-yards of houses, were utilized for raising vegetables, and where circumstances favoured, fruit trees.

As for clothing, cotton was grown to a greater or lesser extent in nearly all the districts, and where it did not grow, it was imported from the neighbouring districts. The cotton weaving industry also was diffused throughout the country, but there were several celebrated centres such as Chicacole, Masulipatam, Arni, Madura, etc. Spinning in particular was essentially a home industry which further provided a spare-time occupation for the women and offered the farmers work during the slack season. In the matter of housing, the simple mud and wattled huts of the vast majority certainly did not require imported skill, and for the rest, there were the village artisans such as the carpenter and the smith, who also provided agricultural implements. Thus, it was only for the supply of a few comforts and luxuries, and for salt, that the people looked outside the village.

Appearance of the Village.—The distinctive feature of the early nineteenth century was the universal existence of fortifications, reflecting the extreme insecurity of the times. Francis Buchanan tells us that at the beginning of the century "the smallest village of 5 or 6 houses was fortified," at least by a round stone wall, about six or eight feet high all around it; this must have been doubtful shelter indeed; and the security was probably more psychological than actual. Larger villages had "square forts flanked by towers," while those still larger were even more strongly guarded by forts which were practically citadels. Besides this,

* 1 pagoda=3½ Rupees.

11. *Fifth Report*, Vol. III, p. 167.

the village was surrounded by a hedge or weak mud wall.[12] In the Ceded Districts, Munro observed that the most insignificant village was provided either with a fortification or a mud fort.[13] Where compact villages did not exist, as in Malabar, individual gardens were usually surrounded by "a high bank and deep gully."[14] In Madura, villages containing 5 to 10 houses were provided with both fort and rampart.[15] Mr. Place, announced in 1799 with satisfaction that he had planted bamboos in every village of the Jaghire.[16] Everywhere these fortifications were guarded and kept in repair at great pains. But with the advent of Pax Brittanica, fortifications became less and less necessary. We do still hear occasionally of fortifications and villages with stockades or wattled bamboo defences, particularly among the hill tribes,[17] but there were not many. At the end of the half century we find that such protective works were the exception and not the rule.[18]

Coming to the village itself, in the centre was a cluster of rude huts, with here and there a house more pretentiously built, the abode of the village headman or other dignitaries. Among the straggling lanes that connected the dwellings, the central one, generally leading to the village shrine, was the agraharam, occupied by Brahmans, while the remaining castes were grouped together in the neighbourhood. A little removed from the rest of the houses was the Malapalam or Paracheri where lived the lowest classes—the outcastes who performed menial services in the village. Nearest the dwellings were the arable lands, divided into strips of varying sizes, and often fenced, as a precaution against wandering animals. Further away stretched the pasture lands which were common to all, and farthest away lay the wastes, forest etc., whence the inhabitants, as has been said, procured fuel. Such was the general appearance of the village.

Village Organization.—Every village was a corporate unit, comprising within itself the entire machinery of local administration in

12. Buchanan, *Journey from Madras through the Countries of Mysore, Canara and Malabar,* 1870, Ed. Vol. I, p. 22.

13. Munro's Report on the Ceded Districts, 12th August 1801.

14. Thackeray's Report on Malabar, Canara and the Ceded Districts, 7th Sep. 1807.

15. From Turnbull's account in Jan. 1817. See Capt. B. S. Ward, *A Geographical and Statistical Memoir of Madura and Dindigul,* 1895, p. 127.

16. Place's Report on the Jaghire, 6th June 1799.

17. Vizagapatam *District Manual,* 1869, p. 90.

18. Pharoah's *Gazetteer.*

an establishment of hereditary servants called the "barabaloti" or the twelve men.[18a] The components of this barabaloti differ in the various accounts given. Mr. Wilks for instance, in his *Historical Sketches of the South of India*, mentions the potail, karnam, shroff, taliary, toti, nirguntee, jotishee, smith, carpenter, washerman; barber and silversmith. Mr. Hodgeson, member of the Board of Revenue, excludes the shroff and jotishi, but includes the potter and the dancing girl. Mr. Ellis, collector of Madras, Mr. Place, Lt. Col. Sykes, and Munro give a varying list of functionaries and artisans. No doubt every village had more or less of these officials and artisans "according to the population of the village and its consequent means of supporting them."[19] On the West Coast however, as there was no aggregation of dwellings, the usual appurtenances of village corporate life were lacking, except for one or two, such as the accountant and some artisans who were indispensable.

First among the village officers was the headman, variously termed Potail, Nattamkar, Maniakkaren, Monigar, Naidu, Reddi, Peddacapu, etc. He was the local representative of whatever government it was that held sway in those days of frequent and rapid changes, and he stood between the villagers and dynastic vicissitudes, so that village activities continued uninterupted—राजा रामो वा रावणो वा (whether the king be Rama or Ravana). It must be remembered that government at that time began with revenue collection and practically ended there, and the people did not ask for anything better, provided they were allowed to pursue their

18a. NOTE:—The account of village officials and their duties is taken from the following works and reports, etc. *Fifth Report*; Wilks' *Historical Sketches*; Ellis' Mirasi Papers; Place's Report on the Jaghire; Hodgeson's Report on Dindigul 1808; Minute of the Board of Revenue on Tenures, 5th Jan. 1818; Munro's Report dated 30th November 1806 and 15th May 1808; Judicial Letter from England, 29th April 1814; North Arcot Settlement Report for Fasli 1213 (1803-4); Victor Jaquemont's *Etat Politique et Social de l'Inde du sud en* 1832; and Lt. Col. Sykes' article on Land Tenures of the Deccan in the Journal of the R.A.S., Vol. II, 1835, p. 208 and 225, etc. The only difference observable is regarding the number and designation of these officials. There is practical unanimity as to their functions, privileges, etc.

19. Hodgeson's Report on Dindigul, 1808, p. 5.

avocations in peace. This headman was the inhabitants' medium of contact with the central administration. He was the "natural and permanent authority of the country," and "whoever rules the province they (headmen) rule the village."[20] The headman collected and remitted the sircar share of the produce; he acted also as the munsiff, the magistrate and the head of the village police. With the people in council he apportioned the lands which individual ryots should cultivate for the coming year, and also their share of the kist. Such were the duties of the headmen in general but in actual practice both their powers and duties must have varied considerably according to the political and economic conditions at the time. When the headman was a minor or was incapacitated by sickness, the work would be done by a relative and if no near relative was available, a stranger was appointed. Although the substitute performed all the duties, he received only a portion of the emoluments. As a rule no large salary was attached to this office, for the position was one of honour. The potail was generally a man of wealth and worth, which together with the great confidence that the inhabitants reposed in him enabled him to wield considerable influence.

The official next in importance was the karnum or patwari, the keeper of the village accounts. On the West Coast he was called the Shenabogue (Canara) or Menon (Malabar). He was a kind of general assistant to the headman. His duty was "to register the Mirasdars or proprietors of the village; to note down all changes, to attest all deeds of sale or transfer or assignment and to keep an account of the cultivation and produce."[21] This office, as well as the headman's, was hereditary so long as the duties appertaining to it were properly performed. The karnum was supposed to be a rapacious and untrustworthy person as several verses from Nitisatakas etc., testify.[22] Ryots were obliged to perform gratuitous services for him,[23] and it was a notorious fact that there was perhaps "no karnum who in any one year gave a perfectly true account of village cultivation."[24] The potail and karnum existed everywhere. Some villages had more than one of these different

20. Col. Munro's Letter to the Board of Revenue, 15th August 1807.
21. Place's Report on the Jaghire, 6th June 1799.
22. *Sumathi Satakamu,* verses 30 and 85 (see Appendix I).
23. B. Heyne, *Tracts on India with Journals of Tours in the Peninsula and account of Sumatra,* 1814, p. 67.
24. *Fifth Report,* Vol. III, p. 205.

officers, while others shared one potail or karnum among two or more villages. In general, however, every village had one potail and one karnum.

Among other village servants was the shroff or moneychanger, the notagar as he was known in the south. He had to test and sometimes to take care of money. Another officer called nirgunti looked after irrigation. This office, however, was not universal. It was dependent on the existence of "wet" lands, and the number varied with their extent. Yet another of the barabaloti was the taliari, whose duty it was to watch the grain heaps on the common threshing floor before the division of the produce, to obtain information regarding all breaches of law in his village, and to escort and protect persons travelling from one village to another. The taliaries seem to have been a highly efficient class of people. Munro declared that "there is perhaps no race of men in the world who are equally dexterous in discovering thieves."[25] The fact that they were held personally liable for all robberies in the village upto 5 pagodas[26] was no doubt conducive towards this remarkable dexterity. Mr. Thackeray coming to the Ceded Districts after Munro also testifies to the excellence of the village police, while the Board of Revenue considered that the institution of the taliari office in every village was "the best security of internal police."[27] They were remunerated like the rest by the usual Inam lands, a small levy on each house and some trifling presents from the travellers whom they protected.

Last among the regular servants of the village were the boundary man, and the toti also called the vettyan or the oograny. The former preserved the limits of the village as may be surmised from his name, the latter was the village peon attached to the headman. The vettyans guarded the villages and kept an eye on the crops. In Coimbatore we hear that the greater part of the population divided itself into twelve sections, one of which served as the village watch and ward every month. But as a rule special servants were appointed to discharge these duties. Besides the above mentioned servants, every village had its priest, astrologer, smith, carpenter, barber, leather worker and in several villages also the physician, the dhobi, the musician and ministrel, while in the southern districts, there was usually also the dancing girl.

25. Papers re:—The Village Panchayat and other Judicial Systems of Administration, 1812-16, p. 16.

26. *Chingleput District Manual*, p. 246.

27. *Fifth Report*, Vol. III, p. 428.

The village officials were remunerated by lands granted rent-free or on a favourable quit-rent, and by fees contributed by the ryots. Occasionally they were paid directly from the revenue either in cash or in kind. The lesser village servants in particular were usually rewarded in kind,—with further perquisites on the occasion of marriages and other ceremonies. The dues of these officers constituted the first charge on the ryots and it was only after they were deducted that the division of produce between Government and ryot took place. The payments, though designated fees, often contained an element of compulsion and thus partook of the nature of a tax. Thus it is said that if a farmer did not pay the usual fees due to a watchman, the latter could attach his bullocks till his claims were settled. The share of the crops which was appropriated for the village servants varied generally from 5 to 12 per cent of the gross produce, though in Chingleput and Madura the proportion was higher. Mr. Hodgeson reports that towards the close of the eighteenth century, the deductions on this account amounted to 40%,[28] leaving only 60% to the ryot. But this must be an exaggeration, for it would leave hardly anything to the ryot after paying the government due which was usually about half the gross produce.

As has been stated, the potail guided the administrative machinery, but all questions of importance were discussed and decided by the villagers themselves in council. In earlier days there seems to have existed an annual assembly of all the inhabitants which deliberated upon questions of policy, and besides this, there were various executive bodies elected for the year in joint villages, such as the Garden Committee, the Irrigation Committee, the Gold Committee, (which probably fixed the rate of exchange of different coins) the Committee of Justice etc.[29] It is not clear how far these committees functioned at the beginning of the nineteenth century. The report of Mr. J. Hepburn already referred to describes such an organization, but we cannot be sure that it actually functioned in his time. Col. Munro states that "in all the villages, the ryots are in the habit of meeting and debating upon the subject of rent" at the approach

28. Report on Dindigul, 1808, p. 6.

29. Annual Report on *South Indian Epigraphy*, 1899, Part II, paras 58-73. The Uttaramallur and Ukkala Inscriptions.

D. Lakshminarasimham, *Prachina Haindava Prajaswamika Prabhutvamu*, pp. 84-113.

of the cultivating season.[30] Other reports in the beginning of the century also indicate the existence of annual meetings where the villagers decided the extent of land which each man was to cultivate and also his share of the revenue burden.[31] But we have no evidence that other subjects than the land revenue were discussed in these councils. No doubt the system had weakened due to the successive misfortunes which fell particularly thick in the eighteenth century.

Communal Expenditure.—The most important item of communal expenditure was of course the remuneration of village servants. That has already been dealt with. As regards other items, *i.e.*, expenditure for social or religious purposes, we have not much information, but the existence of a *Grama Kurch* or village fund indicates that there must have been some provision for such expenditure. We occasionally hear of communal funds being utilized for jatras or fairs held in connection with religious festivals at various centres. The *Grama Kurch* continued in Zamindari areas for a considerable time after the advent of British rule, but the disruption of the village community led to its disappearance in Ryotwari tracts.

Changes in the British Period.—During the half century that followed the establishment of the Company's rule, this system of village management underwent considerable changes. At first the old method was continued. But with the introduction of the new judicial system, all the offices connected with revenue collection and judicature were abolished except that of the karnums or putwarries. By Regulation XXIX of 1802, an office of record under a karnum was established in every large village or group of two or three small villages. Subsequently spasmodic efforts were made to revive the old village establishment to some extent. Thus in 1815, a Commission was appointed for revising the internal administration of the Presidency. The members were most favourably impressed with the old village administrative system under the Potail ; and on their recommendation a Regulation was passed in 1816 by which village headmen were appointed Munsiffs ; but they were not vested with municipal authority, and no privilege or emolument was attached to the office. Further the Revenue officials in some of the districts seem to have been against

30. Letter from Munro, 30th November 1806.
31. Srinivasa Raghava Iyengar, *op. cit.*, App. A, Sec. II, pp. xxi-xxii.

the system. Speaking of this in regard to Tanjore, Mr. W. Robinson observed in 1864: "when the village laws first gave to these communities some status and to their headman some powers, the measure was opposed by the then Collector and his officials, an opposition which was only overcome, if my memory serves me rightly, by actual or threatened suspension when the measure was introduced." Probably the revenue officials feared that it would lead to an infringment of their powers. In such circumstances the system naturally had little chance of working satisfactorily, and indeed this was admitted by the authorities themselves.[32] During the period of the village leases, some of the officers, particularly the potails, were reinstated, but the arrangement worked haltingly and weakly, and at the expiry of the village leases, it again fell into disuse. An enquiry by the Board of Revenue in 1831 showed that the office of head villager had often been held in abeyance, and that even where it existed he was not always remunerated.[33] Now and then attempts were made to fix the proportion of the village *beriz* (rent) due to the gramatans or potails, karnums. etc.,[34] but no systematic procedure was followed.

The karnum's was the only office which survived in full vigour. The services of a registrar of village accounts were indispensable even under the new mode of revenue collection. The duties of the village police continued to a certain extent to be performed by the taliar, but the control over them was transferred from the poligars and others to the collectors as a first step towards ensuring peace and tranquility.[35] The shroff or notagar seems to have suffered by the new system and at the end of this period he had become obsolete.[36] But in every Collector's catcherry there were one or more shroffs—no doubt to test money. The village artisans and others did continue, as indeed they were bound to. They had nothing to do directly with the revenue collection, and most of them were necessary adjuncts to the village society. Even the institution of the dancing girl appears to have flourished under the patronage of the Company's administration, and it is said that in certain parts of the country, collectors and other revenue officers maintained an establishment of these dancing girls who were often

32. General Reports, Vols. 46-49, p. 703.
33. *Ibid.,* Vols. 50-52, p. 570.
34. *Ibid.,* Vols. 62-64, pp. 348-9.
35. *Fifth Report,* Vol. III, p. 425.
36. Correspondence re: Revision of Village Establishments in the Madras Presidency, 1867.

sent to welcome distinguished visitors by dancing before them all the way to the house.[37] None of the village artisans, however, received any allowance from the state.

Administration of Justice.—Throughout the country, village justice was dispensed by the potail assisted by the karnum. The potail was at once "judge, magistrate and collector within his village. In the former of these capacities, he settled the disputes which occurred within it, assisted in cases of importance by a panchayat or native jury—whose judgment was subject to an appeal to the Amildar or collector of the province."[38] This was in regard to questions of property or personal right. In the case of caste or religious disputes, the trial was conducted by the different tribes assisted by panchayats. Where the collector was appealed to, he either decided the case himself or formed a panchayat to help him.[39]

Panchayats were constituted in two different ways. For the original panchayat each party nominated two members and the head of the village nominated one. But as the members of this panchayat were likely to become parties themselves, recourse was often had to another method, by which the potail first chose them and the disputants were allowed to challenge and get any of them changed on reasonable objections. Here the number varied from five to fifteen or more. In a matter concerning a share of a *sarvamanyam* or rent-free village held by brahmins, the whole proprietary body would sit as "Panchayat." In all ordinary cases where the litigants were of different castes, the members of the panchayat were chosen from the various castes to ensure a just decision.[40]

There is a concensus of opinion among those who had an intimate knowledge of the system that the panchayat had a high "character for justice." It has been said that "when the officers of government do not interfere, the decisions of the panchayat thus constituted are generally just." Col. Munro declared that trial by panchayat was as much the common law of India as that by jury was in England. "The native who has a good cause always applies for a panchayat, while he who has a bad one seeks the decision of the collector or judge because he knows it is much easier to de-

37. F. Buchanan, *op. cit.*, 1870 Ed., Vol. I, p. 475.
38. Papers re: The Village Panchayat, p. 9.
39. *Ibid.*, p. 45.
40. *Ibid.*

ceive him."[41] Col. Wilks describes the panchayat as an "admirable instrument of practical decision."[42]

Introduction of the British System.—Soon after the assumption of sovereign rights, the Company decided that a new judicial organization based on the British, should be introduced. Judges were appointed in all the districts, and provincial courts of appeal and circuit were instituted. The Governor in Council formed the final Court, but appeal was allowed to the King.[43] The Collector also had judicial powers and if the parties desired it, panchayats were sometimes formed to decide disputes.

The working of this system, however, was vitiated by several defects. The new procedure, following as it did the lines of the British, was overstocked with " cumbrous formalities " that rather embarrassed than aided litigants, with the result that arrears accumulated fast. In the Zillah courts alone there were 31,482 suits undecided in December 1807.[44] Further, the village headman who was always in requisition as witness was subjected to great inconveniences, being called to and fro often 50 or even 100 miles to the detriment of his cultivation in order to give evidence for some petty dispute involving perhaps 10 rupees, which the potail himself could have settled more easily, speedily, and probably more justly.[45] The unfamiliar mode of administering justice, besides, necessitated the employment by the parties of vakils or licensed pleaders who were generally considered a rapacious set of men. The remuneration of these vakils as well as the high fees imposed on litigants by the court, debarred many from applying to the courts. According to one of the Collectors, Mr. Ravenshaw, it was " cheaper for complainants to submit to be plundered than to seek redress."[46] On one occasion a case was tried successively by the various judicial bodies including the Privy Council and involved an expense of 20,000 pagodas (Rs. 70,000) to the complainant, " yet the parties could not obtain their right."[47] The villager had to travel for miles and wait for months and years before his suit was decided. In litigation

41. Munro's Letter to the Board of Revenue, 15th August, 1807.
42. Wilks, *op. cit.*, Vol. I, p. 501.
43. *Fifth Report*, Vol. III, p. 187.
44. Papers re : the Village Panchayat, pp. 1 and 7.
45. Proceedings of the Board of Revenue, 27th November 1820.
46. Papers re : the Village Panchayat, pp. 7 and 9.
47. Place's Report on the Jaghire, 6th June 1799.

arising from embezzlement and exaction where a large number of persons were concerned as witnesses or sufferers, justice was so tardy that "in the ordinary way many of the parties or witnesses die before the court can examine them." An instance in point was the case of Causy Chetty, a subordinate in the Collector's office at Coimbatore, who was believed to have appropriated from government and ryots about six lakhs of pagodas. He was sent to jail, his property sold, and about 30,000 pagodas recovered. Later he was released and he preferred a case against Government for damages, and altogether caused an inconceivable amount of trouble and expense.[48] It is not surprising therefore, that many people were averse to seeking redress at the Zillah courts.[49]

The greater part of the difficulties of the Company's administration arose from the unfamiliarity of the rulers with the people's customs and character. Col. Munro remarking on the strange mixture of fraud and honesty says that innumerable dealings were going on incessantly with little or no documentary evidence, but on the other hand, the people would unhesitatingly perjure themselves about water, village boundaries, caste privileges etc., or for the sake of a relative, friend or fellow villager.[50] Further even at that time, the ryots seem to have evinced a propensity for litigation, notwithstanding all the difficulties enumerated above. "The ryots in particular.....think nothing of coming a hundred miles with a complaint though the matter in dispute does not probably amount to two rupees." Possibly if the inconveniences did not exist, the arrears would have been greater. The increasing subdivision of holdings and the vast amount of petty transactions carried on by small dealers constituted further difficulties for the judges, as all disputes concerning big or small sums involved the same questions of law.[51]

The various limitations of the system led to the appointment in 1815 of a commission to examine and revise it. The Commissioners were strongly of the opinion that the old system of village panchayats should be revived under the management of the potail. Accordingly by Regulation IV of 1816, headmen of villages were appointed munsiffs, with power to try civil suits involving Rs. 10

48. Proceedings of the Board of Revenue, 27th November 1820.
49. General Reports, Vol. 29, p. 229.
50. Munro's Letter to the Board of Revenue, 15th August 1807.
51. Papers re: the Village Panchayat, pp. 170-171.

and less, and by Regulation V of the same year, they were empowered to summon panchayats and to decide suits involving any sum provided the parties desired it and agreed to abide by the decision. The reinstatement of headmen, however, was merely nominal. The fixing of the 10 Rupee limit curtailed their powers greatly, and naturally they were not very enthusiastic. When asked to report about the working of the Regulation of 1816, the Collector of Masulipatam stated that the headman's position was much degraded and he contented himself with putting his signature to the village accounts.[52] Reports from other districts are not available, but there is no doubt that conditions were similar everywhere. We have already seen the result of subsequent attempts to revive the old system.

The Decay of the Village.—While the above changes were taking place in the judicial system, village municipal life underwent a fundamental transformation. By the end of the half-century, we find few traces of a corporate organization in the village. The officials who had managed the affairs of the village had formerly received regular emoluments and enjoyed security of tenure as well as various privileges. They were also vested with considerable authority and were immune from external interference as long as the revenue was remitted with punctuality. Since they were paid servants, the villagers could see to it that their duties were performed efficiently. But with the introduction of the British system, only a few of them, i.e., karnum and the police officials were paid, and even these were incorporated into the centralized administrative machinery, and were therefore no longer responsible to the village community. No provision was made for the others, since the authorities were not interested in retaining them. These officials therefore, were at once relieved of their duties and privileges. The loss of position, power and prestige by the potail has already been noted. This resulted in a lack of interest on his part and such attempts as were made to reinstate him necessarily proved ineffective.[53] No self-respecting potail, who, a short time ago, wielded considerable powers and influence, would be content to resume the office merely to try suits involving less than ten rupees, and that with few chances of remuneration. As for the

52. Letter from the Collector of Masulipatam, 18th Aug. 1823.
53. Letter from the Collector of Masulipatam, 21st Nov. 1823.
General Reports, Vols. 46-49, p. 703.
Revenue Consultations, 14th April 1846.

lesser servants, such as the barber, washerman, smith, etc., being deprived of their small freeholds and customary dues, they sold their services at the market rates.

The village itself was no longer a little republic, but became a unit of a vast centralized system. The village councils disappeared since the individual settlements of the ryotwari tenure obviated the necessity for villagers meeting together to debate upon the rent. Village co-operation for protective and irrigation works was rendered increasingly rare and difficult; though isolated instances of communal action still occurred throughout the period and later, as in the case of the Pinnapeddas of the Anantapur district who settled irrigation questions most satisfactorily among themselves, and the Pettandars of the Northern Circars who constituted an unofficial, but highly useful, "panchayat" for the trial of petty disputes.[54] The new centralized method of judicial administration, again, militated against village corporate existence, for, with the establishment of courts of justice, trial by panchayat fell into desuetude. Assailed by these various influences, the village community lost its vigour by degrees and finally disappeared.

The decay of village life was certainly a loss to the country. Politically there was a definite set-back. The people lost their habits of self-reliance and began to look up to a paternal Government for every trifle. Village solidarity became weakened, and healthy co-operation and mutual assistance became a thing of the past. This was a great disadvantage, especially to the pauper ryots who increased in numbers, and it was the more so in view of the growing *morcellement* of holdings. In the absence of collective bargaining, each petty ryot had to sell his produce as best as he could and as soon as possible. The result was a glut during the harvest time and ryots were obliged to have recourse to the moneylenders in larger numbers. Similarly with regard to irrigation, owing to the lack of responsible local officials on the one hand, and the decay of the feeling of community of interest on the other, there was a great neglect of such works. As against these various drawbacks the new order of things entailed one advantage, i.e., a wider contact with places outside; the village gradually became less isolated and self-contained than before.

Such were the villages of the first half of the nineteenth century. The number of these villages did not vary greatly. In 1802, the

54. *Report of the Madras Forest Committee*, 1912, Vol. I, p. 18.

number of inhabited villages for about half the Presidency was estimated at nearly 20,000,[55] and in 1850-51 the total number for all the districts was about 42,500. Assuming that the other half of the presidency included about the same number of villages as the first in 1802, this indicates no marked increase if we make allowance for the revival of deserted and ruined villages, which were numerous at the close of the eighteenth century.[56] A few villages decayed owing to commercial and other causes, while some villages were growing into towns.[57] Frequently collectors tried to form villages, particularly in the earlier period. Thus two pettahs or villages were proposed to be created in 1878-9, one for farmers near a tract of cultivable waste granting them cash advances and exemption from rent payment for the first year, and another for weavers, with exemption from loom-tax and stamp-duty.[58] Settlements of weavers in particular were often attempted,[59] but not many were successful, for the people were usually averse to changing their abodes.

The above account describes a society predominently Hindu; Mohammedans who formed but a small proportion of the population were mostly dispersed in the towns, around the courts of princes, as merchants, artisans or soldiers. Christians were few except on the West Coast where they actively participated in trade.

55. General Reports, Vol. 7, p. 77.
56. Place's Report on the Jaghire, 6th June 1799.
Munro's Letter, 31st March 1800.
Letter from Mr. Corbett to the Board of Revenue, 18th Mar. 1791.
57. Pharoah's *Gazetteer*.
58. General Reports, Vol. II, p. 62.
59. Letter from Mr. Kenworthy to the Board of Revenue, 6th December 1793.

CHAPTER III

LAND TENURES

1. *Conditions at the beginning of the period*

Land Systems.—The village communities described above were familiar with three different methods of revenue settlement, the Zamindari, Ryotwari and Mouzawar. Where the ruler required a lump sum and wished to be relieved from the tedium and inconvenience of individual settlements with a large number of ryots, he resorted to the zamindari system. Here the right of collecting the revenue of several villages was auctioned to chiefs, sowcars and other professional renters, who agreed to pay a stipulated annual revenue. These zamindars were at one time considered to be the hereditary proprietors of the land by some of the highest authorities both in this Presidency and in Bengal.[1] No doubt some of them had an ancient title, but most of them were just agents for the collection of revenue.[2] And indeed the term "zamindars" meant merely "tenants or holders of land."[3] Long continued possession, however, gave them a hereditary proprietary title in their estates, which was later confirmed and extended by the permanent settlement. Some of the advantages claimed for the zamindari system were that it would lead to the growth of a respectable body of landowners and that ryots would be free from vexatious interference on the part of circar servants, while it would minimise expense for the Government.[4] But since all collections in excess of the circar demand constituted the zamindars' remuneration, rack renting was a common evil of the system.

In the case of the ryotwari tenure, individual landholders dealt directly with the officers of Government, and each was responsi-

1. Letter from Government to the Board of Revenue, 4th Sep. 1799. Proceedings of the Board of Revenue, 9th Sep. 1799. Hodgeson's Memoir on the Advantages of a Permanent Settlement, *Fifth Report*, Vol. III, p. 482.
2. Thackeray's Report on Malabar, Canara and Ceded Districts, 7th August 1807.
3. James Grant's Political Survey of the Northern Circars, *Fifth Report*, Vol. III, p. 29.
4. Hodgeson's Memoir, *Ibid.*, p. 482.

ble solely for the rent of his own holding. Ryots could vary the amount of their revenue obligations every year by acquiring fresh land or relinquishing part of what they held. "The occupant holds under an annual lease from the Government, and enjoys all the advantages of absolute proprietorship subject to the payment of the revenue due on the land he holds during the year."[5] This method of assessment involved greater difficulties of management than the zamindari or mouzawar, but on the other hand "by retaining in the hands of Government all unoccupied land, it gives it the power of gradually augmenting the revenue, without imposing any fresh burden upon the ryots, as long as there is an acre of waste land in the country."[6]

The last form of tenure was the mouzawar ganganah, according to which settlements were effected with reference to the village as a whole, the revenue being farmed either to an individual or to the village community. The landholders were left to determine among themselves their several obligations. This system dates from the remotest antiquity. The Board of Revenue in a survey of the different modes or revenue settlement at the beginning of the nineteenth century declared that the mouzawar ganganah was "at least as old as the Age of Manu,"[7] and in fact it was even earlier. Further, it prevailed over the major part of the Presidency at the period of the British advent, and deserves special notice.

Joint Villages.[8]—With the evolution of proprietary rights, the entire estate, arable and waste of the villages, came to be held by groups of landlords. At first, community of rights seems to have prevailed to the fullest extent, and all the lands were held and cultivated in common, the produce being divided among the landowners after deducting the dues of Government and of the village officers and servants. This form of tenure survived at the opening of the

5. Macleane, *Manual of Administration of the Madras Presidency,* 1885, Vol. I, p. 104.

6. Letter from Col. Munro, 15th Aug. 1807.

7. General Reports, Vol. 14, p. 174.

8. The information regarding joint villages has been obtained mainly from Place's Report on the Jaghire, Ellis' Mirasi papers, Hodgeson's Report on Tinnevelly, 1808, Baden-Powell's *Land Systems of British India,* Vol. III, and the various District Manuals, which include a historical account for the period under review. There is not much difference of opinion between these authorities regarding the character of these villages.

nineteenth century in the *samudayam* or *pasung-carei* villages of the Jaghire, North and South Arcot and the Tamil districts generally.[9] In the countries north of the Coleroon, there predominated a variation of the *pasung-carei* village known as *kareiyidu*, where land was held jointly, but temporarily assigned in shares for cultivation, the shares being redistributed by lot every year or at certain other periods according to custom.[10]

As for the Telugu districts, the authorities were at one time under the impression that private property did not exist there, and hence no inquiry was made into the subject. Later, however, they received fuller information, and the Board found that joint ownership was in evidence especially in the *Veesabudi gramas* which were found extensively in Cuddapah and to a certain extent in the other Telugu districts.[11] Here the revenue was fixed for the village as a whole, (thus involving joint and several liability) but cultivation was carried on separately, each proprietor undertaking to pay a fixed share of the assessment. "From this division of the lands into shares the settlement took its name of *veesabudi*, namely, a village settlement by shares in ready money."[12] A peculiar feature of the *veesabudi* villages was the challenging system by which if a ryot considered that his field was over-assessed and that of his neighbour under-assessed, he could offer to pay a higher sum and take up the latter's holding. The favoured ryot had either to exchange or submit to an enhanced rate.

A modified form of the joint village was that known as *arudi-carei gramam*, in which the arable lands were permanently distributed, but all other rights and privileges were exercised in common. Waste lands, and even lands reclaimed from the waste after the original division, belonged to the village community as a whole. Regarding this there is a difference of opinion. Mr. Bayley in his Memorandum on Mirasi Tenures (p. 17) declares that mirasidars, the proprietors in these villages, claimed no rights in the waste land. But Mr. Ellis, Mr. Place, Mr. Hodgeson, and the Board of Revenue believed that they did. There is no doubt that the earlier authorities

9. F. W. Ellis, Papers relative to Mirasi right, p. 3.
10. Hodgeson, Report on Dindugal, 1808, p. 30
Place's Report on the Jaghire, 6th June 1799.
Ellis' Papers relative to Mirasi Right, p. 3.
11. Minute on Tenures, 5th Jan. 1818.
Letter from the Collector of Nellore, 18th Nov. 1820.
12. Proceedings of the Board of Revenue, 5th Jan. 1818.

who actually saw the working of the system were better informed, and Government indeed admitted this right. This tenure was also termed *palabhogam* in contra-distinction to *ekabogam* or *yajamana gramas,* where full proprietary rights were enjoyed by a single person, who either cultivated it by means of labourers or leased it out to tenants.[13] Mr. Ellis stated that in some of these villages, the land was communal property, but distributed by the *yajaman* or headman, who among other privileges enjoyed a particular manyam and received the *cuppatam* or landlord's grain fees.

The number of shares into which these joint villages were distributed differed considerably, and bore no definite relation to the size of the village. Some contained but ten shares, while others of equal extent might be divided into a hundred or more. The division was no doubt a survival from the time when the village "was first born" and the number probably corresponded to the strength of the original settlers. Even though the number of proprietors grew in the course of time, the shares remained the same. Thus, in the village of Poolatoor in the Jaghire, though there were thirty landlords, the land continued to be held in the original 4 shares, and these thirty proprietors possessed one or more shares of a share.[14] Some villages were partitioned into a few major holdings, the owners of the other lands being considered inferior to the former and hence bound to render them certain fees. The transfer of a share required the consent, even though nominal, of all the other co-sharers. In earlier years this right of co-sharers must have been more than nominal and even later, deeds of sale always ended with a clause saying that they required authentication by all the other proprietors.*

2. *Relation between Landlord and Tenant*

The Tamil Country.—The landlords in the joint villages were known in the Southern districts as *caniyatchikar* (கணியாட்சிகர்) and claimed a hereditary right in the soil or *caniyatchi,* more generally termed *mirasi.* Mr. Ellis, the authority on *mirasi* tenures, states that these landlords also known as *mirasidars,* possessed a right over the entire extent of village land, arable and waste. Mr. Bayley, however, is of a different opinion, and believes that Ellis expounded *mirasi* in theory rather than in practice, and that

13. General Reports of the Board of Revenue, Vol. II, pp. 86-7.
14. Place's Report on the Jaghire, 6th June 1799.

* See Appendix II.

Tanjore was the only place where *mirasi* right existed. The balance of evidence is in favour of Mr. Ellis' view. Mr. Place furnishes ample testimony for the existence of *mirasi* in Chingleput. Indeed it was found also in North and South Arcot, Tinnevelly and to some extent in Madura, Dindigul and Trichinopoly.[15] It is true, as Mr. Bayley says, that the discussions on *mirasi* right are lengthy and confusing, but this much is clear—that *mirasidars* had a definite proprietary claim to the land. Mr. Place at one time believed that *mirasidars* had only a right to the usufruct of the soil, but later, after he had more opportunity to study the question, he admitted that they had an "undoubted hereditary property in the soil."[16] That this proprietary right was complete is further evident from the usual form of deeds of sale, a specimen of which is given in Appendix II. The claim extended over "all the nunjah (wet lands), punjah (dry lands), islands, water, stone, topes, jungles, riches, treasure, and every well which sinks beneath, or every tree that rises above, the earth; with every general benefit of every sort, from father to son, through every generation." The *mirasidars* either cultivated their lands by means of labourers or leased them out to tenants, and from both these classes of cultivators, they received fees called *thunduvaram* (துண்டுவாரம்) in recognition of their proprietary right.

Poracudis.—The tenants admitted to the cultivation of the village lands and known as *pyakaries,* (பைக்காரி) were of two classes. The first were the *poracudis* (பொரக்குடி) who were merely tenants-at-will, cultivating some of the *mirasidar's* lands for a year, or a longer period, according to arrangement. In *pasung-carei gramas* they held their lands as tenants of the *mirasidar* body as a whole, in *arudi-carei gramas* from each *mirasidar,* and in *eka-bhogum* villages from the single *mirasidar.*[17] At the expiry of their lease, the *poracudis* were liable to eviction and their rents to enhancement, though this did not happen often. On their part, the *poracudis* could, at the end of their engagement, leave the village for another; and hence an alternative name for the *poracudi* was *sukhavasi,* for "not being bound to any particular spot, he may

15. Place's Report on the Jaghire, 1799; Ellis, Mirasi Papers, p. 643; Hodgeson's Report on Tinnevelly, 1807; Baden-Powell, *op. cit.,* Vol. III, pp. 13-16.

16. Place's Report on the Jaghire, 6th June 1799.

17. Minute of the Board relating to Tenures, 5th Jan. 1818.

take what belongs to him and go where he pleases."[18] *Poracudis* usually belonged to another village and came over temporarily to cultivate the lands they leased, and as an inducement for them to bring their capital and labour, they always received a higher *varam* or share of the produce than the other class of *pyakari* who resided in the village.

Mr. Harris, Collector of Tanjore, considers *poracudis* as mere labourers and practically classes them with the serfs.[19] But all evidence points to the fact that they were tenants and not labourers, and Mr. Harris himself admits that they found the stock for their farms, while the labourers did not. Mr. Read on the other hand makes the mistake of calling the *poracudi* a non-cultivating tenant. He divides the peasantry into three classes—the lowest of which he calls *zeedgars* who receive a share of the produce and some money. The remaining two were *kudis* (tenants), one of whom cultivated the land, and the other did not, the latter being known as *sukhavasis* who "as their name indicates, do not touch the plough."[20] It is evident that he is confusing the tenures. What he is attempting to describe is the position of the agrestic serf, the *ulcudi* and the *poracudi*. We have seen that another name for the *poracudi* was certainly *sukhavasi*. It did not, however, mean, as he seems to think, a person who lives at ease, but a person who may live where he pleases and is not "bound to any particular spot."

The body of *poracudi* tenants was swollen in the course of time by men whom the government brought in to cultivate lands left untilled by the *mirasidars*; for a condition of the *mirasi* tenure was that all the lands had to be cultivated either by the *mirasidars* themselves or by their tenants, and if for any reason, the proprietors neglected to utilise arable lands the government could substitute outsiders and realise the revenue.[21] In all cases, the *poracudis* possessed no rights of occupancy and cultivated their lands from year to year by arrangement, either with the land-holders or with the government; and they as well as the other *pyakaries* paid fees or *swastiyam* to the proprietors.

18. Place's Report, 6th June 1799.
    F. W. Ellis, Papers re: Mirasi right, pp. 37-8.
19. Letter from Mr. Harris to the Board, 9th May 1804.
20. Baramahal Records, Sec. VI, p. 32.
21. Ellis, Mirasi Papers, p. 10.

Ulcudis.—A class of tenants who had a stronger interest in the soil than the *poracudis* was that of the resident ryots known as *ulcudis*. These could never acquire absolute rights of property, but their tenure was decidedly superior to that of tenants-at-will. In some cases, when the same family of *ulcudis* held lands in a village for a certain term of years,—about a hundred years or four generations,—they acquired a quasi-proprietary right in the fields they occupied, and could not be dispossessed as long as they rendered the customary dues. *Ulcudi* lands were inherited from father to son, as in the case of *mirasi,* and the holding reverted to the owner only in the absence of heirs, or in the case of desertion. The *ulcudi* "holds his land in a subordinate species of *mirasi* and possesses them not in absolute, but in definite property, for though he cannot transfer them by sale, gift, mortgage or otherwise, yet he cannot be removed from them and they descend, like the *cani-yatchi-mirasi* of the village, to his posterity; he pays the sircar revenue, the *tunduvaram,* often no more than a pepper corn, and all dues rendered by the *mirasidars* and *poracudis,* but he receives none."[22] The *ulcudis* have been compared by Mr. Place and Mr. Ellis to the copy-holders of England. There may be an analogy in some respects, but it is not complete. The *ulcudis* had certainly no such strong right as was conferred on the latter by law. They could not alienate their farms. In some cases indeed, the *ulcudis* seem to have obtained the right to mortgage their holdings but they could never sell them. The share of the produce enjoyed by these tenants who always resided in the villages was invariably about 5% less than that of the *poracudi.*

A less common tenure than the *pyakary* was that by mortgage which was much rarer in the Tamil country than in Malabar and Canara. The borrower offered a part or the whole of his lands as security and the creditor cultivated the lands and paid the government dues. A general stipulation of mortgage deeds was that the owner could redeem his land only after the crops were harvested,[23] obviously in order that the mortgagee may not be put to any loss. These and other features of a mortgage bond where the mortgagee is in possession, are seen in Appendix III.

The Telugu Country.—With regard to tenures in the Andhra country, little is known. Collectors from Munro onwards decided

22. Ellis, Mirasi Papers, p. 35.
23. See Appendix III.

that private property did not exist in these districts, and hence no attempt was made to examine the question of landlord and tenant. Evidently the idea was that if all were tenants of the Government, there could be no question of leasehold rights. In their minute on the tenures of the Presidency dated 5th January 1818, the Board of Revenue remarked that "notwithstanding the Northern Circars are the oldest possessions of the British Government on the coast, and some of the most able of the Company's servants have been employed in the Ceded Districts, we possess less information of the ancient Hindu tenures of land in Telingana than of those in any other part of the peninsula," and they ascribe this paucity of information to the long-continued Mohammedan occupation which destroyed all rights in the soil. It is doubtful if *all* proprietary rights were destroyed, but we have no evidence of such rights. That private property existed in the Telugu country before the Mohemmedan conquest is clear from the numerous deeds of gift, sale, transfer, etc., recorded in the inscriptions of the Hindu period.[24] Various similarities in the structure and organization of the Telugu and Tamil village communities suggest that tenures in Andhradesa corresponded at least originally to those further South. "From the marked distinction still maintained between *cadeems* and the *pyacary* ryots.....from the word *caniyatchi* being well understood and employed in Telingana to designate private landed property.....the Board have little doubt that the Tamil *mirasi* or a very similar tenure was at one time established throughout the Northern Districts."[25] Even earlier, a similar statement was made that the "property known by the term *mirasi* is well understood and acted upon, however much it may have lost of its original value."[26] Here, the *pyakaries* were once the tenants of the *cadeems* who may be compared to the Tamil *mirasidars*, while the *veesabudy* villages of Cuddapah and Godavary must have been the Telugu counterparts of the *pasung-carei gramas*. But by the close of the eighteenth century, we find from the Board's minute that the right of *mirasi* had disappeared from Nellore to Ganjam. The *cadeems* had evidently lost most of their rights and privileges and were levelled down to an equality with the *pyakaries*, except for the fact that

24. South Indian Inscriptions, Inscriptions 312, 318, 347 and 356 of 1896; Inscriptions 363 and 365 of 1905.

V. Rangacharya, *A Topographical List of the Inscriptions of the Madras Presidency*, pp. 584, 657, 674.

25. Minute of the Board, 5th Jan. 1818.

26. General Reports, Vol. 17, p. 137.

land-holders had a hereditary title to their farms as long as the revenue was paid. In Masulipatam however, there is clear indication of the existence of *mirasi* right at the beginning of the nineteenth century in a report dated 5th January 1802.[27] But, as this is a single piece of evidence, no authoritative conclusions can be drawn from it. We can only suppose that something like *mirasi* did exist but in so weak a form that it could hardly be recognized. The fact was that not a single deed of the sale of land by individuals could be traced in any of the Telugu Districts.[28] In the eighteenth century the ryots were subjected to such extortions that they became more anxious to relinquish than to acquire land.

Malabar.—Tenancies in Malabar provided a prolific subject to most writers on South Indian land tenures at the beginning of the nineteenth century. Mr. Thackeray, one of the earliest inquirers into Malabar tenures, tries to explain about a dozen terms, and then concludes as follows. "The other terms and tenures I do not understand. The Vakils in the zillah courts will have an ample field in arguing and explaining these tenures which it would require many years' practice to understand thoroughly."[29] Mr. Thackeray indeed seems to have been greatly confused. He mentions all the tenures and terms in use, but is apparently unable to distinguish between them.

The question of tenant right was complicated by the wide prevalence of mortgage tenures, for the landlords of Malabar, termed *jenmkars*, were in the habit of mortgaging most of their estates in varying degrees. The creditors cultivated the lands and rendered to the land-lords the excess, if any, of the produce over the interest that was due to them. "In many cases the lands were so deeply involved that the *jenmkar* received only a handful of grain or a measure of ghee as an acknowledgment of his title."[30] A gradation of contracts enabled the *jenmkar* to alienate as much or as little as he chose, of his interest in the land, all the time retaining his ultimate right of redeeming the property. A peculiar feature of the Malabar mortgages was that, besides the fact that there was no foreclosure, the land itself could redeem its mortgage by the

27. Baddulurupadu Report, p. 7.
Masulipatam Dist. Records, Vol. 3071.
28. Board's Minute, 5th Jan. 1818.
29. Thackeray's Report on Malabar, Canara and the Ceded Districts, 7th Sep. 1807.
30. General Reports, Vol. 20, p. 174.

efflux of time : for after a certain period—usually twelve years, or at the time of succession to property—the *jenmkar* had the right to renew the bond, and at each renewal, there was a reduction of 20% in the mortgage amount; and thus after 60 years the land would automatically become free.[31]

Among the various methods of leasing land, the Board of Revenue mentions *pattam*, *kanam pattam*, and *kuzhikanam pattam*. *Pattam* or *verum pattam* was literally a "plain lease" of land for a year or more as stipulated in the contract, and the status of the lessee or *pattamkar* was that of a tenant-at-will. When the mortgagee took charge of the estate it was described as *kanam pattam*, while in *kuzhikanam pattam* the tenant was given a piece of land for a period of twelve years or so, free of all charges, on the condition of improving the property and planting productive trees. On the expiry of the contract the *jenmkar* resumed the holding, and was expected to reimburse the *pattamkar* for all improvements. The *jenmkar* however, did not always do so. Mr. Thackeray refers to three different tenures, *kyvedooth*, *atti* and *attikuzhikanam* all nearly the same, where the mortgagee takes possession and pays the *jenmkar* the excess, if any, over charges. We may take it that these are the same as the *kanam pattam* of the Board.

In all these tenures the lessees advanced a certain sum of money which could be regarded either as a loan or as a security for the due remittance of rent. In return for the enjoyment of the usufruct of the soil the *pattamkar* paid a fixed rent either in money or kind, but never a share of the produce as in the eastern districts. The position of the *pattamkar* corresponded to that of the *pyakary* of the Tamil country except for the twelve year period of undisturbed occupancy which was peculiar to Malabar, and the fact that the *pyakary's* tenure was occasionally permanent and hereditary, but the *pattamkar's* never so.

Canara.—In Canara every variety of tenure prevailed, ranging from the temporary holder who had no rights whatever, to the tenant who was such only in name.[32] Tenancies and mortgages

31. Thackeray's Report, 7th Sep. 1807.
A Collection of papers relating to the Value of Land in the Early years of the Nineteenth Century, p. 14.
Minute of the Board of Revenue, 5th Jan. 1818.

32. Reports from the Collector of Canara, 31st May 1800, 1st July 1801 and 30th April 1802.
Thackeray's Report, 7th Sep. 1807.
Minute of the Board of Revenue, 5th Jan. 1818.

were indeed common in Canara, though not to the same extent as in Malabar. Usually, the landlord leased out as much of his estate as would suffice to discharge his revenue obligations by means of the rent obtained, and retain the rest under his own management. The most secure of the lessees were the *mulgueníes* who "on condition of the payment of a specified invariable rent to the *mulee* or landlord and his successors, obtained from him a perpetual grant of a certain portion of the land, to be held by them and their heirs for ever."[33] Sometimes, as in the case of the *kanam* tenure of Malabar, the landlord received the year's rent in advance, the tenant deducting the interest from the produce.[34] *Mulgueníes* could not be evicted except for non-payment of rent, and even then only after they had been completely recompensed for all improvements effected by them. They could employ under-tenants to cultivate part of their holdings and they possessed even the right of mortgaging their holdings though they could never sell them. In the case of a class called *nair mulgueny*, the lessee was at perfect liberty to dispose of his land as he pleased, by sale, transfer, bequest or otherwise. Further, in the absence of direct heirs, adoption was allowed.[35] These tenants, therefore, were proprietors of the land in every sense of the term.

The tenants-at-will were known as *challi-gueníes*. Their rents could be raised and they were liable to dispossession at the termination of their leases.[36] As rents were payable either in grain or in money, landlords could and did raise them by converting money payments into grain and *vice versa*, as it pleased them. However, in the case of tenants holding land for more than one or two generations, landlords were more lenient and their tenure was more secure, approximating to that of the perpetual lease-holders. They had thus an incentive to improve the land, which is generally absent in tenancy-at-will. In rare cases where the tenants had effected very extensive improvements and had occupied land for a long period, their status was raised to that of *mulgueníes*, accompanied by a considerable enhancement of rent. Mortgagees who took possession of the land were in the position of *challi-gueníes*, and could be turned out on the repayment of the debt.[37]

33. Minute of the Board of Revenue, 5th Jan. 1818.
34. Baden-Powell, *op. cit.*, Vol. III, p. 151.
35. *Fifth Report*, Vol. III, p. 333.
36. Proceedings of the Board, 5th Jan. 1818.
37. Baden-Powell, *op. cit.*, p. 121.

The Pannaiyal System.—The cultivation of the lands that were not leased out i.e., of the *pannai* or home farm lands, was performed over a great part of the country by serfs.[38] They were variously known as *pannaiyal*, (men who worked the *pannai*) *padiyal*, (men who were paid by the measure) *Muladalu*, *adami* etc. In the Tamil country these serfs belonged mainly to the Pariah, Pallar, and Palli castes. Of these, the Pallis were the slaves of Brahmans and the Pariahs and Pallar served the other castes. The serfs of the Malabar *jenmis* were recruited from the Chermakkal, Panian, Pallar, Kanakken and other castes. Serfs were attached to the soil and generally transferred along with it, but in Malabar where property was individual and not communal, they were frequently sold apart from the land. Here slaves were even put up to public auction to enable the owner to discharge his revenue dues.[39] In the Telugu districts serfdom was generally supposed to have been extinct, but we shall see later, in connection with the question of labour, that it did exist to some extent.

Serfs worked for their proprietors in turn (*murai*) and were provided with a house and yard. They were given gifts of money, grain and cloth on the occasion of festivals, besides their regular remuneration. In joint villages the serfs belonged to the community as a whole but apart from these, *mirasidars* had separate slaves who were sometimes sold apart from the land, but always employed on it.[40] Serfs in India held a secure and recognized position in the village economy, and being well treated as a rule, they seldom thought of leaving their farms. " They give the landlords the usual share of the produce like any other ryots ; the only difference is, that the immemorial custom of the country requires that they should remain attached to the soil." Serfdom was thus a form of land tenure, and serfs had rights of occupancy in the soil cultivated by them and their ancestors, while they paid the customary rent. In Tanjore, Mr. Harris conferred on them proprietary rights over their house and little bits of land along with other classes of ryots. Mr. Trevelyan declared before the Select Committee of 1840 that " serfs are as much owners as the person we call the landlord himself, for they generally have rights in the soil in common with landlords."[41] They were supposed to claim mirasi or hereditary private

38. *Report on Slavery in India,* 1838, p. 395.
39. Proceedings of the Board, 5th Jan. 1818.
40. Ellis, Mirasi Papers, Appendix pp. lxxix-lxxx.
41. *First Report from the Select Committee on East India Produce,* 1840, pp. 91-92.

property in the "incidents of their villeinage" and to possess a right to cultivate the village lands even if particular serfs happened to be long absent from their fields. This view, however, is not warranted by facts. No doubt instances did occur, where serfs, who for some reason or other had left their lands returned to their masters after some years and were reinstated in their farms,[42] and the masters who had probably been inconvenienced by want of hands must have been glad to get them back. But in no sense of the word were they proprietors of the soil. They were the property of the land-owner and one might say—part of the agricultural 'stock' of the land. When land was mortgaged, these men went along with it, and similarly they were redeemed together.

Varam or Batai.—The division of the produce between landlord and tenant was known as *varam*. The *Melvaram* was the king's share, *tunduvaram* the owner's share, and *kudivaram* the tenant's share.[43] In the north the landlord's share was termed *koroo* and that of the ryots *Madipaloo*,—(literally the share of the plough handle). The usual rate of division between owner and tenant was half and half, but the division varied considerably according to circumstances.[44] Where cultivation was attended with great labour and risk, the tenant received from 55 to 58% of the gross produce. This is certainly not low, considering that the landlord had to pay the revenue and other dues out of his share. In the case of nunjah (wet) lands, the rate depended on the facility of irrigation; and according to the Trichinopoly District Manual, where land had to be irrigated from wells the cultivator's share would be as much as 65 to 70%. However, we have no other evidence to show that such high rates were common. In the Circars, the usual rate in the case of paddy land was 2/5, for dry grains 2/5 to ½ and for cotton and oil seeds generally, though not universally, ½. Serfs in some parts are stated to have received a third of the produce, but this seems to be too high a proportion and in general they probably received considerably less. In Coimbatore on the other hand, only ⅛ of the total produce was allotted to them.[45] The share of the *ulcudis* was 45 or 50% of the

42. Place's Report on the Jaghire, 6th June 1799.
43. Baden-Powell, *op. cit.*, pp. 119-20.
44. Hodgeson's Report on Dindigul, 1808, p. 7.
Trichinopoly *District Manual*, p. 180.
Report of the Circuit Committee, 25th April 1788.
Chingleput District Manual, pp. 258-9.
Baden-Powell, *op. cit.*, Vol. III, p. 123.
45. Proceedings of the Board of Revenue, 25th Nov. 1819.

gross outturn while the *poracudis* who came from outside obtained 5% more. Where *poramboke* or very poor land had to be cultivated, the terms were more favourable to the tenant. When the landlord took half the produce, he usually provided the stock and paid the village dues and the government revenue. The system of sharing provided automatic redress when seasons were adverse, but on the other hand, the tenant could not benefit greatly during favourable seasons. Further, since profits accruing from improvements were shared between proprietor and tenant, it offered no incentive for the introduction of better methods of cultivation.

While *varam* prevailed in wet lands, a *teerva* or fixed money rent was raised from the dry fields, at a certain rate for a certain measure of lands, the rate of *teerva* varying according to the crop. Thus a fixed sum of money was paid for an acre of land cultivated with a particular dry grain and another sum was charged if the same acre was sown with some other grain. In the Telugu districts, *varam* or *paloo* was followed even on dry land, and money rents were usual only in the case of tobacco and sugarcane. Here the rate was not regulated according to the produce, the tenants paying a fixed money rent for the ground.

3. *Changes during British Rule*

* *Early Revenue Settlements.*—We shall now deal with the revenue system introduced by the British. The history of the early revenue settlements is rather confusing. It is indeed as Baden Powell says, "a record of a series of experiments in assessments, reductions and enhancements, changes in one direction and another following each other in somewhat bewildering order."[1] The company on its acquisition of power successively and concurrently tried the various tenures before mentioned, in different parts of the country. In the Northern Circars which were obtained in 1765, at first annual, and then triennial and quinquennial settlements were effected with the zamindars who were already in possession. On a similar basis those lands which did not belong to the zamindars called *havelly,* were leased out to renters. The Jaghire

* Taken from Baden-Powell, *Land Systems of British India,* pp. 12-37, R. C. Dutt, *Economic History of British India,* pp. 120-4, Macleane's *Manual of Administration of the Madras Presidency,* foot-note, pp. 112-115, and the District Manuals.

1. Baden-Powell, *op. cit.,* Vol. III, p. 26.

acquired in 1780, was divided into several large estates and auctioned at annually increasing rents for nine years. But the renters bid too high and within a few years most of the estates reverted to Government through default. Then followed a period of confusion when every Collector followed his own method or methods. With the exception of the system of village leases successfully tried for a few years in the Jaghire by Mr. Place, all the experiments were highly unsatisfactory. A Committee of Circuit was appointed to examine conditions in the Northern Circars and the Jaghire, but was not able to suggest any real remedies.

Meanwhile the Home Government began to favour a permanent settlement with the zamindars on the Bengal model, and accordingly between 1802 and 1805, it was introduced into the Presidency in spite of the unfavourable reports of the local authorities. The *havelly* lands in the Northern Circars were parcelled into *mootahs* or large blocks and put to auction, and the estates in the Jaghire were also permanently settled. A similar procedure was adopted in the newly acquired Baramahal district, but the results were not favourable. By this period, fresh territory had been obtained—the Baramahal and parts of Madura and Malabar in 1792, Coimbatore, Canara and parts of Salem and Tanjore in 1799, the Ceded Districts in 1800, and Arcot, Nellore, Trichinopoly, Madura, and Tinnevelly in 1801. The mismanagement of the Jaghire and Circars having brought discredit upon the Civil Service, military officers were appointed over several of the new districts. Prominent among these were Captain Read and his assistants, Munro and Macleod, who first adopted the ryotwari principle that was later extended over the greater part of the Presidency. Individual settlements were effected in Coimbatore, Madura, Dindigul, Malabar and Canara, and continued for several years; and between 1800-1807, Munro introduced this system in the Ceded Districts.

The Village Leases.—Now the Board of Revenue acquired a partiality for the time-honoured village system, which was believed to be best adapted to the country.[2] The revenue had indeed for ages been settled with reference to the village. During the troublous times following the Mohammedan invasion large districts had been assigned to zamindars and renters, and separate assessments on individual holdings were not rare; but the village was still, as we have seen, the unit of communal life, and settlements were in general effected for the village as a whole. Between 1808 and

2. Letter from the Board of Revenue to Government, 25th April 1808.

1822 village leases, first triennial and then decennial, were tried in Nellore, Ceded Districts, North and South Arcot, Tanjore, Trichinopoly and Tinnevelly. Collectors received orders to adopt it at first on an experimental scale, but with a view to ultimate permanency. The Board started with high hopes, but several unforeseen difficulties vitiated the successful working of the new system.[3] The prices of grain reached an unusually low level during this period and the distress of the agriculturists was aggravated by a series of unfavourable seasons. According to the Board of Revenue, the establishment of Courts of Justice resulting in the emancipation of the ryots from the arbitrary authority of the officers of Revenue was a further complicating factor. For it enabled ryots to refuse to take up more land than they could profitably cultivate, as they had been forced to do formerly.[4] This was no doubt annoying to the Collectors who had to effect the settlements, but it could hardly be a reason for the unsatisfactory working of the village leases in particular. The same difficulty would have been felt, even if the ryotwari system had been adopted. It was more probably due to competition and dissensions between the renters, their tendency to squeeze the undertenant, and above all an excessively high assessment. During the first few years of British rule the maximum revenue was raised by "Collectors newly appointed to newly acquired territory, unfettered by judicial regulations, at a distance from control, excited by the hope of increasing the Public Revenue and establishing their own official reputation;"[5] and those assessments formed the basis of the new settlement. The collections could not have lasted even under favourable circumstances, and least of all under the conditions described above. To some extent, the decay of the village community, and of the feeling of village solidarity, which had already begun, must also have prevented the village leases from functioning efficiently.

The decennial leases were expected to improve matters by introducing comparative stability and indeed they were fairly satisfactory at the beginning. The Collectors of Cuddapah, Nellore, Tinnevelly etc., reported in the first year that the settlements had progressed as favourably as could be hoped for.[6] But an ex-

3. Letter to Government, 1st August 1811; General Reports, Vol. 19, pp. 135-8.
4. Minute, 9th May 1811.
5. Letter from the Board to Government, 23rd Jan. 1812.
6. Proceedings of the Board, 8th March 1815.

tension of the term of the lease was no remedy for over-assessment, low prices, adverse seasons and other difficulties mentioned previously. The Court of Directors also was strongly opposed to the village system almost from the beginning, while some of the very officers who were entrusted with the execution of the new scheme were prejudiced against it, as for example Mr. Chaplin of the Ceded Districts, Mr. Graeme and others.[7] In such circumstances the system could not, and did not, receive a fair trial. Further, the village leases were not actually what they had been in former times and what the Board intended them to be, i.e, settlements with a village through the headman or body of headmen who would be responsible and substantial men of the village, and who worked merely as the representatives of the people and not for profit. The new renters often belonged to other villages and were poor men intent on making hay while the sun of the decennial leases lasted.

The leases thus in practice turned out to be a kind of zamindari system with smaller units and without the benefit of the traditions of the landed aristocracy which might act as some check to oppression. Ryotwari-biassed collectors and compilers of District Manuals present harrowing pictures of the condition at the time. At the expiry of the leases in Nellore, large balances had accumulated, renters and ryots were ruined and cultivation and industry were brought to a standstill.[8] Speaking of the triennial leases, the Collector of Cuddapah declared that among the renters "few or none have been benefitted by their bargain, nearly all have been losers, some have been ruined," while Mr. Chaplin, Collector of Bellary, considered that the renters' losses were such that fear of dispossession of mirasi, jealousies, competition, persuasion, intimidation, boosting of the leases, etc., would have to be called in before they could be persuaded to undertake the decennial leases.[9] As for the decennial leases, the effects were so disastrous that according to the District Manual, the people of Cuddapah still looked back upon those days "as a veritable hell upon earth." "Plundering and blundering was the order of the day. It was one incessant scene of extortion from the under-tenants, and of absconding and punishment of the renters."[10] In Bellary the Collector observed

7. Revenue Despatch from England, 16th December 1812; Mr. Graeme, Letter to the Board, 7th August 1811.
8. Nellore *Dist. Manual*, p. 527.
9. Bellary *Dist. Manual*, p. 160.
10. Cuddapah *Dist. Manual*, p. 127.

that many villages returned to Government "exhausted in resources and population," and with heavy balances, long before the leases closed. He characterised the system as unknown and unsuited to the country.[11]

The system, however, was, as we have seen, an ancient one; and neither unknown nor unsuited to the country. The strong indictments of the village leases are evidently due to a prejudice against them. There were certainly balances in many districts and instances of the ruin of renters did occur. But the same thing happened when the zamindari settlement was introduced, and the cause in both cases was not the *system* but the high assessment. As for the diminution in cultivation, which was certainly not as great as was made out by the Collectors, it must be attributed to the fall of prices and the adverse seasons, already noted. The decline of industry was part of a general process going on throughout the country, and unconnected with the leases. On the other hand, a quarter of a century of the ryotwari system did not improve the province greatly. Mr. Mellor, one of the ablest collectors of Bellary reported in 1846 that substantial ryots were ruined and heavily in debt, cultivation had deteriorated, lands became unsaleable and the district impoverished.[12] This view is borne out by the further testimony of Mr. Pelly, a later Collector of the district.[13]

In the Southern districts, the reports were less uniformly depressing and the leases are stated to have been "fairly successful." In Tinnevelly, despite the disadvantages of low prices and unfavourable seasons there was "an extension of cultivation," and greater punctuality in revenue realization than before.[14] (Even in Cuddapah the collections during these years were extremely high. D.M. p. 127). In North Arcot the leases were not productive of any great dissatisfaction.[15] As for South Arcot there was a slight increase in cultivation though the condition of the ryots did not improve. However, in all the districts over-assessment was a general complaint, and further the seasons do not seem to have been particularly advantageous. In Nellore, for instance, there

11. Bellary Settlement Report for Fasli, 1232 (1822-3).

12. Report from Mr. A. Mellor on the Operation of the Ryotwari System, 25th July 1846.

13. Letter from Mr. Pelly to the Board of Revenue, 22nd Nov. 1853.

14. Letter from the Collector of Tinnevelly to the Board, 5th December, 1812; Tinnevelly *Dist. Manual*, p. 73.

15. North Arcot *Dist. Manual*, Vol. I, pp. 119-120.

were only two good years out of ten. The end of the decennial leases saw large balances outstanding in the Presidency as a whole.[16]

Introduction of the Ryotwari System.—The village leases thus functioned under unfavourable conditions of over-assessment, lack of co-operation between the authorities, adverse seasons and depressed state of agriculture and industry. If a reduction in assessment had been effected, the system might have had a better chance, but the Court of Directors were now convinced that the village leases were a washout. On the other hand, they had developed a strong predilection for the ryotwari system, influenced no doubt by Munro who had returned home, and their opinions were communicated to the local Government. In vain the Board of Revenue protested that the ill success of the village leases was due not to any inherent defects but to the excessive rents based on "the fallacious data" of the previous ryotwari collections. When Munro returned as Governor, the ryotwari system superseded the village system. The Government's principal objections to the village system were that headmen were often very rapacious and untrustworthy and that it was incompatible with the "progressive improvement of the country" and especially with the "increase of revenue"[17] which was the criterion of that progress. The result was that with the exception of the permanent zamindari lands in the Northern Circars, Jaghire and Ramnad, comprising from one-third to one-fourth of the Presidency, all the districts were settled on a ryotwari basis.

Tenures under British Rule.—The introduction of the ryotwari system led to the disappearance of the joint villages described earlier. When the assessment for each individual owner was fixed separately, there could be no question of the joint ownership of the village arable and waste. The right over waste land formerly claimed and enjoyed by *mirasidars* was gradually abrogated, and *mirasi* rights as a whole suffered a marked decline. In Chingleput where the *mirasi* system had been well-recognized at the opening of the nineteenth century, there were few traces left, and according to the District Manual, it remained only as a "troublesome ghost." The change indeed must have begun even earlier. As Baden-Powell observes, "probably the desire for separation (on the part of the joint landlords) began the work; then Mohommedan over-

16. General Reports, Vols. 44 and 45, pp. 65-66.
17. Proceedings of the Board of Revenue, 11th Aug. 1808.

assessment destroyed the value of the proprietor's share; then renting and revenue-farming displaced old proprietors by new occupants, and finally modern revenue systems completed the change ".[18] From the very beginning of British Rule, outsiders were admitted into the cultivation of village lands. Occasionally *mirasidars* protested against this and took the case to a court of law. Mr. Ellis in his Mirasi Papers mentions one such instance where the *mirasidars* gained their point and obtained recognition of their interest in waste land. But the principle of the ryotwari settlement was against the alienation of the claim over waste by government, and the *mirasidars'* right finally disappeared.

Since the village revenue system which was formerly predominant disappeared, tenancies divided themselves into those under ryotwari and zamindari landlords. In the Ryotwari areas, the different kinds of tenants became merged into one class i.e., that of tenants at will. The *ulcudis* lost their rights of occupancy and their rents became liable to enhancement at the expiry of their term. Their interest thus ceased with the harvest and hence they had no inducement to improve the land. Occasionally in *inam* lands, tenants who cultivated the same lands for some generations enjoyed tolerable security, but in general the position of under-tenants was that of *porakudi pyakaris*. Mr. Nicholson states that the position of tenants was most insecure and that they kept moving from farm to farm every year.[19] This was perhaps the case in Coimbatore, but there is no evidence of such extreme instability in the other districts. Mr. G. S. Forbes attributes the disappearance of the distinction between *ulcudi* and *poracudi* to the decay of the village community which was the only body interested in maintaining that distinction.[20] This however was not the only cause. It was a concomitant of the disappearance of joint villages and *mirasi* tenures referred to above.

On the West Coast, the conditions of tenancy do not indicate such a great change as in the Tamil districts. According to Pharoah's *Gazetteer,* which is about the only work of the middle of the nineteenth century that deals with the subject, the position of the *kanamdar* or tenant was not very different from what it had been

18. Baden-Powell, *op. cit.,* Vol. III, p. 126.
19. Coimbatore *District Manual,* Vol. III, p. 298.
20. *Madras Legislative Council Proceedings,* 1905, p. 237.

in earlier days. Only, on the renewal of lease after every 12 years, the *jenmi* made the lessee pay as fine a percentage of the sum advanced, amounting at times to 20%, and sometimes an additional loan and some miscellaneous fees.[21] Evidently, either the custom had changed since the beginning of the century or the compiler was misinformed. Other changes must have been gradually taking place, for later we find that as in the other districts, the position of the tenant became less secure than formerly, and the system of *kuzhikanam pattam* fell into disuse.[22]

As for the zamindari lands, the same regulations that conferred permanent proprietary rights on the zamindars required that under-tenants be given pattahs defining the conditions of their engagement and that no more than the customary rent should be exacted. The Board of Revenue in 1799 declared that though the zamindari tenants had no proprietary rights strictly speaking, they had full occupancy rights as long as they paid the rent. However, in spite of all the regulations, the position of these ryots was not entirely satisfactory. In many cases an iniquitous system of extortion and bribery left them little beyond the barest subsistence. The means of legal redress were not always available to poor and ignorant ryots. Oppression of the ryots, however, was by no means universal, individual zamindars being often kind and lenient. In the "home farm lands," the tenants were no more than tenants-at-will with "non-occupational rights" in the strictest sense of the word. With regard to agrestic serfdom, we find that it existed throughout the period, but in a rapidly declining condition. The process of decline and its causes will be dealt with later on in the account of labour.

We thus find that some classes gained, while the position of others deteriorated. The landlords of the Telugu districts were able to enjoy a security of tenure which they had not known for a long period, and the *jenmkars* of Malabar and the proprietors of Canara were confirmed in their rights. Further, all classes of landlords benefited by the introduction of a fixed assessment, regulated by certain principles, in place of the almost limitless extortion of pre-British days, an extortion which was checked only by the ryot's ability to pay or by bribery and collusion with the agents of revenue collection. The ryots also obtained immunity from the

21. Pharoah's *Gazetteer,* pp. 525-6.
22. *Madras Council Proceedings,* 1905, p. 252.

various forms of oppression practised by renters and others described previously.

On the other hand, the Tamil *mirasidars* lost some of their privileges, and *ulcudi* tenants were deprived of their quasi-proprietary right. The latter were thus reduced to an equality with the other tenants-at-will. The shelving of the village system was also unfortunate to a certain extent. It was undoubtedly the system most in keeping with local institutions. When the share of each land-holder was allowed to be determined by the villagers themselves, the apportionment of lands and of the revenue burden would have been most equitable. Village corporate activities would thus have been strengthened and the decline of the village community might have been retarded, though not arrested. The government revenue establishments on the other hand, would have been relieved of a considerable portion of their duties. As for the ryotwari system, its effect on the condition of the country and the people was certainly not so salutary as its sponsors expected, though the defect was in the assessment rather than in the system. The mode of revenue collection was changed, but the high assessment which vitiated the working of the village leases was retained.

The Incidence of the Land Revenue.—The injurious effects of the high rates on ryots and on cultivation were apparent from the beginning of the century, and even earlier. In 1795 Munro wrote: "Were we to abandon our oppressive mode of taxation, the country instead of rice and dry grain, would be covered with plantations of betel, coconut, sugar and cotton." The fundamental prerequisite of his ryotwari system was a reduction of the assessment by 25%.[23] His recommendation, however, was not given effect to, and the high rates continued. In a report from the Ceded Districts dated 25th August 1805 he estimated the proportion of land which the ryots were forced to cultivate at not less than 12% of the whole cultivated area; and if every restraint were removed, he believed that they would probably relinquish ¼ of the land occupied. The assessment was so high that only the better class of farmers could pay the full revenue in ordinary seasons.[24] It was also stated that this resulted in an unsettled system of culti-

23. Report to Mr. Read on the Lease Settlement, 31st July 1796. Letter to the Board of Revenue, 11th August 1808.

24. General Reports, Vol. 19, p. 184.

vation, the poorer ryots wandering from farm to farm and even from district to district in search of better conditions.[25] But this was not very common. It was confined to the Ceded Districts where property rights were nebulous owing to long Mohommedan occupation; and even here it was not general. Munro observed that most of the ryots held the same field for many years and only about 20% had a tendency to migrate.

The fall of prices in the second quarter of the century accentuated the effects of the high assessment. As early as 1821, Mr. Campbell, Collector of Cuddapah reported as follows. "The principal farmers of former days are reduced to poor and dispirited bankrupts.....and I have frequently found the ryots compare to me with regret, their present condition under the British Government, with the comparative ease they formerly enjoyed, even under the dominion of Tippu Sultan."[26] Ryots were driven from the highly assessed fields to the inferior and lower assessed ones, so that the best black lands were lying waste. Even the "middling" ryots were in an extremely precarious position and the slightest misfortune, such as the loss of a crop, a bullock or long illness reduced them to ruin. The Board of Revenue had to admit that "an overstrained anxiety for a full treasury had in a great measure been the cause of the district being reduced to its present state." A very similar statement was made with regard to Tinnevelly by the Collector of that district;[27] while in North Arcot the assessment was found to be "excessive beyond measure" and productive of great hardship among the ryots.

The land revenue demand was indeed more than the country could bear, being half and even more than half the gross produce. In fact the Presidency was the most highly taxed in this respect. It has been computed that for every 100,000 of the population, the amount realized as land revenue was Rs. 10,05,455 in Bengal, Rs. 16,71,965 in Bombay and Rs. 23,12,465 in Madras.[28] It is not surprising that much of the revenue was realized by torture throughout the period. The ryots of Cuddapah who looked back with regret to the rule of Tippu Sultan were no doubt exaggerat-

25. *Ibid.*, Vol. 34 & 35, p. 50.
Thackeray's Report on Malabar, Canara and the Ceded Dts, 7th Sep. 1807.
26. Report to the Board of Revenue, 20th April 1821.
27. General Reports, Vol. 30, p. 139.
28. *Letter from J. B. Norton to Robert Lowe,* 1854 p. 98.

ing the felicity of the "good old days," but there was nevertheless some truth in their statement. Formerly the people were certainly subject to greater exactions, but the levy was irregular, and evasion was always possible. Now, however, the revenue was rigorously collected. Remissions were indeed granted if crops were lost, but there was no relief when the crop was deficient, which was a frequent occurrence. The result was a considerable increase in agricultural indebtedness, as we shall see later.

By the middle of the century conditions in Cuddapah had improved owing to the reduction of the assessment, but in Bellary, in spite of a similar reduction (which, however, came late) poverty and depressed conditions of agriculture and industry were even more marked than before. Mr. Mellor, Collector of the district, declared in 1846 that "ryots formerly substantial and capable of laying out their capital on the land and in liquidating the circar demand" were now heavily involved in debt and that but for the aid of the Collector through his revenue subordinates, "one half or at least one-third of the highly assessed lands would ere this have been thrown up. Husbandry is not carried on efficiently and consequently the land seldom yields the return it ought and is capable of."[29] It was reported in 1853 that only 17% of the farmers were able to pay the kist without recourse to money lender or merchant, while 49% had to mortgage crops and stock, and the remaining 34% were obliged to sell their crops and even their stock immediately after the harvest.[30] In Canara it was found that the Government demand absorbed the whole of the landlord's share,[31] and in N. Arcot, not only were "the best lands kept out of cultivation by the exorbitancy of the charge against them, but throughout all classes of land the quantity under the plough was greatly restricted by the same cause."[32] The Collector of Nellore testified to "the increasing difficulty with which the cultivation engagements are known to be concluded and the cultivation itself kept up, the increasing difficulty experienced in making the collections," and the general impoverishment of the ryots owing to the pressure of the land tax

29. Report on the Operation of the Ryotwari System, 25th July 1846.

30. Letter from Mr. Pelly to the Board, 22nd November 1853.

31. Letter from Mr. Maltby, Collector of Canara to the Board, 9th Aug. 1853.

32. Letter from Mr. Bourdillon. Collector of N. Arcot to the Board, 28th Aug. 1853.

which was rendered doubly intolerable by the great fall of prices.[33] Another Collector observed that cultivation was "unwillingly pursued" and "unwillingly extended" and the revenue compulsorily kept up by Tahsildars.[34] Indeed, it was the account of the Collector of Nellore in his Settlement Report for Fasli 1260 (1850-51) that impressed the government with the gravity of the situation. This led to a general inquiry in 1853-4 into the rates of assessment and the effects of the depression in prices; and in the course of the enquiry the above state of affairs was revealed. In Chingleput it was found that the land revenue was not only excessive but unequal in its incidence and that the demand was realized only in favourable seasons.[35] Similar complaints of over-assessment and the consequent distress of the ryots came from Salem and even from Malabar where the land tax was usually considered to be moderate.

As for the other districts the pressure of land revenue was not so severe owing to increased cultivation of the more remunerative crops such as cotton, sugar and indigo, as well as rice, improved irrigation facilities (which conferred immense benefits on the districts concerned) and other causes. Almost all the Collectors however, favoured a reduction of the assessment. Their proposals were carried into effect in the course of the second half of the century.

33. Letter from Mr. Elton, Collector of Nellore to the Board, 19th May 1853.

34. Letter from Mr. Ratcliffe Ag. Collector of Nellore to the Board, 13th April 1853.

35. Letter from Mr. Smollett, Collector of Chinglepet to the Board, 22nd July 1854.

PART II

AGRICULTURE

CHAPTER IV.

AGRICULTURAL PRACTICES

We shall now take up agriculture. Before dealing with the various crops and the problems connected with their cultivation, we shall briefly discuss agricultural methods in general. The Indian ryot's methods have for long been described as primitive and imperfect. In fact, before the publication of Dr. Voelckers' report on the subject, the central theme of most accounts of agriculture was the backwardness of Indian cultivation.

According to several contemporary accounts, it appears that at the opening of the nineteenth century, agricultural methods were extremely defective,[1] and were based largely on custom and superstition.[2] The implements of cultivation were considered to be the last word in crudeness and inefficiency.[3] The plough was a "crooked stick" which only scratched the surface of the soil, the cattle were miserable and starving creatures that could hardly draw the plough. The application of manure was defective and irrigation was insufficient. As for rotation of crops, the principle was little known and imperfectly practised, while seed selection was seldom or never attempted. Buchanan repeatedly refers to the slovenliness of cultivation in the districts through which he passed and declared in short that "want of skill is conspicuous in every direction."[4]

At the end of the period we find similar indictments of the methods of cultivation.[5] The several district manuals compiled twenty and thirty years later present much the same picture.[6] According to Voelcker, tillage, especially in the first stages, was often superficial, and ryots had an "aversion to ploughs that turn

1. Letter from Mr. Harris, Collector of Tanjore, Board's Proceedings, 1800, pp. 7106-7 ; B. Heyne, *op. cit.*, p. 14.
2. Mr. Macleod's Annual Report on Dindigal, 20th Feb. 1794.
   Mr. Thackeray's Report on Malabar, etc., 7th Sept. 1807.
3. Buchanan, *op. cit.*, Vol. I, p. 87.
4. *Ibid.*, Vol. I, pp. 20 and 239, Vol. II, p. 1.
5. Replies from Collectors to Board's Circular, 27th June 1865.
6. North Arcot *District Manual*, p. 309.
   Coimbatore *District Manual*, p. 188.
   Robertson's Report on the Nilgris, pp. 31-2.

a broad slice and form a wide furrow."[7] Weeding and harrowing were frequently inadequate, and much water and seed were wasted.

At the same time, there is another view of the subject. We frequently find references to good cultivation, often of the best type. Mr. Harris, Collector of Tanjore, who complained strongly against the carelessness and ignorance of the ryots in his district, admitted that there were some who followed superior methods. According to Mr. Macleod, rotation was practised wherever feasible and as much manure was applied as was available.[8] Dr. Wight, who was appointed in 1834 to examine agricultural conditions in the Presidency and report on the means of improvement, and who was later for several years Director and Controller of the Madras cotton farms, declared that the Indian system was by no means as defective as it was reported to be, and was indeed decidedly superior to English "middle class farming."[9] Again, Lord Ellenborough, Governor-General of India, emphatically asserted in the course of a Minute on cotton cultivation in 1840 that "in the details of cultivation the natives of India have little or nothing to learn from agriculturists of other quarters of the globe." When an inquiry was made into the system of agriculture in 1865, Mr. J. W. B. Dykes, Collector of Nellore reported that cultivation in certain parts of the district was of a very high standard and compared favourably with the best farming in Belgium and Germany.[10]

At a later period, Mr. Nicholson, after discussing the backwardness of cultivation of the poorest farmers continues: "On the other hand, the art is both excellently known and practised by the average and substantial ryots." He is of the opinion that in garden cultivation particularly, the ryot was "passed master of his art" and that there was little that he did not know. On irrigated lands every requirement of advanced cultivation was fulfilled with regard to ploughing, manuring, care of cattle, etc. There was no wastage of seed, and great attention was bestowed on irrigation, weeding and cleaning.[11] And this was no " fancy picture " but was generally followed in the better class of gardens. Even dry cultivation, which received less attention, was far from despicable. Dr. Voelcker stated that, considering everything, Indian agriculture

7. J. Voelcker, *Improvement of Indian Agriculture,* p. 43.
8. Report on Dindigul, 20th Feb. 1794.
9. Bellary District, Printed Selections, Vol. 19, p. 161.
10. Letter from J. W. B. Dykes to the Board, 12th Oct. 1865.
11. Coimbatore *District Manual,* pp. 184-5.

was "wonderfully good" and garden cultivation in particular was often superior to that "in any part of the world."[12]

The truth lies midway between the two different views expressed above. It must be admitted that in their circumstances, the ryots managed to do far better than might be expected; and they were indeed well versed in non-scientific agriculture. But their knowledge was purely empirical, and it was further vitiated by defective appliances, superstition and, above all, want of resources. The criticisms made by Buchanan and others were undoubtedly justified with regard to several parts of the country. And for all the praises sung by Voelcker and the rest, there is no denying that conditions were very unsatisfactory. At best there was a good balance secured at a low level of efficiency. The fact is that in the agricultural, as in the physical, mental and spiritual spheres, India is a land of contrasts and extremes, and the picture of Coimbatore presented by Nicholson of "a miserable tillage on poor upland soil by poor ryots, side by side with excellent culture on the better lands by a better class of ryots" is perhaps typical of the whole Presidency.

Implements.—The implements of agriculture were few and simple. By far the most important, and in some parts practically the only one worth the name, was the plough. Its construction was much the same in all the districts. It was generally a crooked tree or branch or a piece of wood with a pointed end, to which a pair of bullocks was yoked by means of a simple wooden pole and yoke. Much has been said of the shortcomings of this primitive plough, its clumsy construction and inefficiency. But the justification of the ryot was that under the circumstances, it was the best that could be utilized. One great advantage of the wooden plough was its cheapness both with regard to cost and repair. The wood was procured for nothing, and it was generally constructed and repaired free of particular charge by the village carpenter who was maintained by annual fees. The ryots had only to pay for the iron required. Even when, owing to the decay of the village community or for some other reason, the plough was purchased, it was very cheap. The price varied from As. 8 to Re. 1-8 or Rs. 2 at the most.[13] Yet another advantage was its lightness, for the cattle of most of the districts were not very strong, and the ryot, besides, was accustomed to carry the plough on his shoulders

12. Voelcker, *op. cit.*, p. 11.
13. Proceedings of the Board of Revenue. 1840, p. 6082.

from field to field. Further, rice and other cereals required only light ploughing. Indeed deeper ploughing would be positively harmful.

Dr. Wight seems to have been favourably impressed by the Indian cultivating methods in general and the plough in particular. Of the "crooked stick" as it was called, he states that for all its unprepossessing appearance, in actual performance it could compare favourably with the latest English ploughs. "If we designate our instrument a plough, then the native one is more properly a cultivator. It performs the functions of a plough, a grubber and even a harrow for covering the seed." He noted with admiration that it was constructed on the same principle as the English Grubber, or Smith's Steam Cultivator.[14] The Collector of Nellore also stated in 1840 that the local plough was better than the imported English implement.[15] These certainly had sufficient opportunity to form an accurate judgement, but they were no doubt carried away by their enthusiasm and made exaggerated statements.

The other implements commonly in use were the sickle, the hoe and harrow, several kinds of levellers, a *manvetty* (*mamooty*) the axe, seed drill, rake, a *gorru* serviceable alternatively as a plough, harrow or seed drill and a small *guntaka* or grubber and lever.[16] All or most of these implements were found in the northern districts of Masulipatam, Kurnool, Nellore, etc., but the accounts relating to the southern districts mention only a few.

These differences in equipment account, in some degree, for the superiority of agriculture in some districts over others. The table on page 73 will show that for wet and dry grains, the yield and profits were far higher in Vizagapatam and Masulipatam than in the southern districts. In Coimbatore, where implements were very few, the profit per acre was less than 12 as. Even in the case of cotton the yield was much better in the northern districts, particularly Ganjam and Vizagapatam. (See page 93). In Malabar, where equipment was most imperfect the yield was often as low as three-fold and seldom more than sixteen-fold of the seed sown.[17]

Manure.—The most noteworthy feature was that the quantity was deficient, and the method of applying it unsatisfactory. There

14. Bellary District, Printed Selections, Vol. 19, pp 160 and 161.
15. Board's Proceedings, 1840, p. 6082.
16. B. Heyne, *op. cit.*, p. 74.
17. Thackeray's Report on Malabar, etc., 7th Sep. 1807.

was an adage that given a sufficiency of water and manure, the ryot could raise a crop even from stones. As it was, even good soils failed to yield any considerable return. Defective manuring was not due to want of knowledge. On the other hand, the ryots, we are repeatedly informed, were perfectly sensible of the efficacy of manure and the value of the different substances that could be utilised; and several proverbs on the subject, current in the various districts, seem to prove it. But in spite of all the proverbs, manuring was not approached from a scientific view point and both quantity and quality left much to be desired. The use of cattle dung as fuel deprived the land of much of its most valuable requirements. Buchanan observed that it was the most common fuel used in parts of the districts through which he toured.[18] With the dwindling of free forest and waste the poorer ryots were obliged to use dung as fuel to an increasing extent. About 1860, Mr. W. R. Robertson calculated that in the Madras City dung cakes were used at the rate of 100 per month per adult in many middle class families, and this comprised one-third of the fuel employed. The use of dung as fuel was not, however, universal. The best cultivators, particularly in Coimbatore, Cuddapah, Bellary and other places never burnt cattle dung, but used twigs, loppings from trees and hedges, stalks, saw dust, etc. If it was burnt it was generally due to necessity, as no other fuel was available, and not to ignorance or carelessness.

By the end of the half century there seems to have been a distinct improvement with regard to manuring. In replying to a general inquiry by the Board of Revenue in 1865, Collector after Collector remarked that ryots were extremely careful and diligent in procuring as much manure as possible and using it to the best advantage.[19] Manure was so much in demand that prices were rising and in some parts even the well-being of cattle was sacrificed

18. Buchanan, *op. cit.*, Vol. I, p. 126 (1870 ed.).
19. Lettter from the Collector of Coimbatore to the Board, 11th August 1865.
    Letter from the Collector of North Arcot to the Board, 17th August 1865.
    Letter from the Collector of Tinnevelly to the Board, 22nd September 1865.
    Letter from the Collector of Cuddapah to the Board, 3rd October 1865.

for the sake of quantity.[20] According to Mr. J. O. Minchin, Collector of Kurnool, "No agriculturists in the world are more alive to the value of manure than those of India, and with regard to their high garden cultivation, there is little which, under their peculiar circumstances they have to learn from European science."[21]

The ryots used every kind of manure available; cattle and sheep dung, house and village sweepings, ashes, leaves, green and dry.[22] In several parts of the country, cattle were kept in the house and often littered. Elsewhere, cattle were penned on the field itself for months and sometimes throughout the year. Sheep folding also was practised to a great extent in all the districts. In Tinnevelly, Nellore and other places, large flocks were bred and maintained specially for this purpose. Itinerant shepherds allowed their flocks to be utilised by farmers in return for a meal or two and a few measures of grain per day. Where the available supply proved insufficient, manure was bought in cartloads and applied to the fields.[23]

Other substances used as manure were leaves, ashes, house-sweepings, paddy and other husks, fruit skins, bark, muck from the tan-pit, milk hedge, varagu and other straw, flowers, oil seed refuse and indigo seed. Fish manure was used to a certain extent near the coast, but bones were not, due partly to prejudice and partly to the demand for export. For betel and other gardens, offal and blood were also applied. In the alluvial tracts, river silt was spread over the fields and soil mixing was practised throughout the Presidency.

The quantity of manure applied varied considerably. In Canara it was said that for every cubit of land a basket of cowdung was necessary. Usually garden lands received most of the available supply, while wet fields came next and dry fields last. In Nellore, garden lands were manured at least once a year, and often twice. The wet lands had their turn every alternate year and the residue was applied to dry lands once in 3, 4 or 5 years. In North

20. Letter from the Collector of Madura to the Board, 8th November 1865. Letter from the Collector of Canara to the Board, 14th August 1865.
21. Letter to the Board, 3rd November 1865.
22. Macleod's Report on Dindigul, 20th Feb. 1794. Thackeray's Report on Malabar, etc., 7th September 1807.
23. Buchanan, *op. cit.*, Vol. II, p. 425.

Arcot, it was stated that a cawni (1.3 acres) required 40 to 50 cart-loads. If sheep folding was resorted to 300 to 500 sheep were penned on one cawni for three or four nights at the rate of 2 or 2½ As. per night per 100 sheep.

Rotation and Fallowing.—The principle of rotation of crops seems to have been generally recognized and followed to some extent. Certain crops were known as పసిది or recuperative (in tamil குறுமை and others as పిడ్డ or exhaustive (குடு) and the latter were seldom sown on the same field continuously. Thus tobacco was usually followed by dry grains or gram[24] and cotton was hardly ever raised on the same land consecutively. Sugarcane, which was also very exhaustive, was alternated with some other crop.[25] Mixed cropping was really a variation of the principle, and it was a practice which further secured the ryot against possible loss due to inclemency of season; for even if one crop was lost the other would remain. Hence the proverbs గొడ్డు పయరు వేయరాదు and అయితే ఆరిక, కాకుంటే కంది, దున్ని చల్లితే శనగ. In the Telugu districts in particular, mixed cropping was very common. Frequently a cereal crop and a leguminous one were sown together, and the latter continued on the ground after the former was reaped.

Rotation, where it was practised, depended on the district, soil, crop and season. In Nellore, much of the land was cultivated with jonna or millet, with a crop of castor oil or varagu intervening now and then. In certain parts of the district a more regular system was in evidence.[26] The chief rotation appears to have been between varagu and jonna and occasionally horsegram, korra, indigo or ragi. In Vizagapatam, though the methods of cultivation were in other respects comparatively advanced, there was little attempt at rotation except in the case of sugarcane and cotton.[27] The ryots of Kurnool regularly alternated exhaustive crops with recuperative ones while mixed cropping was also common.[28] In Godavari, green gram, castor oil and gingelly were grown in rota-

24. Macleod's Report on Dindigul, 20th Feb. 1794.

25. Baramahal Records, Sec. IV, p. 2.

26. Letter from J. W. B. Dykes, Collector of Nellore to the Board, 12th October 1865.

27. Letter from D. F. Carmichael, Collector of Vizagapatam to the Board, 23rd August 1865.

28. Letter from J. I. Minchin, Collector of Kurnool to the Board, 3rd November 1865.

tion as second crops on wet fields while tobacco, cholam and castor were sown mixed.[29]

Turning to the south we find that in North Arcot, sugarcane and betel were always followed by a recuperative crop.[30] The principle of rotation was understood to a certain extent in Madura and Tinnevelly,[31] and Buchanan noted several types of rotation with regard to dry grains in Coimbatore. In Tanjore and other districts, however, there was little attempt at any system of rotation.[32] It is a significant fact that though there are innumerable proverbs in Tamil regarding methods of cultivation, time of sowing, reaping, etc., there is no mention of rotation and but a single reference to fallowing.[33]

Fallowing was generally practised in many of the districts, though the extent to which its utility was understood and availed of varied. The fields of Tanjore were left fallow every alternate year or once in three or four years according to necessity. In Nellore the poorer lands were frequently left fallow immediately after they showed signs of exhaustion. The better soils of Kurnool were continuously cropped, but the poorer ones, after being cultivated for three years were left fallow for three or four years. In Coimbatore fallowing was a general feature, the field being often tilled, and left uncultivated for a season. In Canara, there was neither rotation nor fallowing, but in certain parts there was a system of cultivation known as "kumeri" where a crop was grown only once in a series of years and not again until the field became a jungle when it would be burnt and another crop sown.[34]

Comparing the accounts of the earlier part of the nineteenth century with later ones, we do not find much improvement in agricultural technique. The only exception was manuring which has already been discussed. In other respects there seems to have been no progress. At least, the available material furnishes very

29. Letter from J. Fraser to the Board, 19th Aug. 1865.
30. Letter from D. Robinson to the Board, 17th Aug. 1865.
31. Letter from W. H. Levinge to the Board, 8th Nov. 1865.
Letter from A. Wedderburn to the Board, 22nd Sep. 1865.
32. Letter from G. L. Morris to the Board, 31st July 1865.
33. C. A. Benson, *Tamil Proverbs relating to Agriculture*, Agricultural Department, Bulletin No. 63.
34. Letter from W. M. Cadell to the Board, 14th Aug. 1865.

little evidence of it. And this lack of change is no new feature. It has characterised India for centuries, for agricultural conditions in this country tend to be static rather than dynamic.

This state of affairs has often been attributed to the ryots' ignorance, carelessness and superstition. Dr. Wight reported to Government that "the apathy, not to say aversion of the people to all improvements ..... is proverbial and is dwelt upon in nearly all the reports."[35] It formed "an almost insuperable obstacle to the success of many of the measures proposed for their benefit." This was largely true, but the point may be over-stressed. It must be remembered that the position of the ryot was such as to preclude the possibility of experiment and speculation. The vast majority of the agriculturists were so poor that they were obliged to borrow money at exorbitant rates to cultivate the coarsest of grains, and even for very subsistence. The slightest mishap to the crop left them destitute of the bare necessities of life. Further the agricultural charges, excluding the revenue assessment, were usually more than double the profits, and the net return rarely exceeded Rs. 2 or 3 per acre, constituting interest on capital and insurance against risk as well as return for labour.[36] As Dr. Wight himself admitted, it was hardly to be expected that in such circumstances the ryots "would willingly depart from the beaten track and enter on a new and untried field of adventure, however promising the speculation." They would require at least some guarantee against loss. Principles of rotation, however much they may be appreciated, had often to give way to the exigencies of the market and where, as was very frequently the case, each farmer possessed only one or two fields, a system of rotation was out of the question. Such things as improved implements and more and better manure meant capital and were therefore seldom possible. Many of the ryot's deficiencies could be removed by the spread of knowledge and the establishment of Government agencies that would introduce and popularise advanced methods of agriculture, but the chief desideratum was an improvement in his economic position.

35. Dr. Wight's Report on Agriculture, 20th May 1836.
36. See next chapter, p. 73.

CHAPTER V.

CROP PRODUCTION

SECTION I—GENERAL.

The soils and climate of the Presidency favoured the production of a great variety of crops. Contemporary accounts of the various districts teem with references to the country's manifold potentialities in respect of agriculture. Speaking of Tanjore, Col. Fullarton declared that "no spot upon the globe is superior in productions for the use of man." In Tinnevelly, rice and other important staples of commerce could be grown in abundance in the irrigated lands, while the dry tracts yielded large quantities of cotton.[1] Tinnevelly was certainly one of the chief cotton growing districts at the beginning of the nineteenth century. Turning to the north, we find that the alluvial soil of Guntur ensured the success of various kinds of grains, provided there was a constant supply of water, and Rajahmundry, in the opinion of Dr. Roxburgh (who was the Company's Botanist and conducted an experimental farm there for several years), contained some of the finest lands in India which were fit for the cultivation of a large number of products ranging from sugarcane to mulberry trees.[2] Mr. C. N. White, Member of the Board of Revenue, who had served in the Presidency from 1776, observed at the close of the eighteenth century that in the Northern Circars in general, cotton, indigo, sugarcane and other crops could be raised to any extent, and that indeed the whole country from Cape Comorin to Ganjam possessed "so many natural advantages of situation and climate and so rapid a progress of vegetation that innumerable sources of industry and wealth might be introduced by way of manufacture."[3] There is no doubt some exaggeration, but this is not just an instance of official opinion having no relation to facts. As regards sugar, his view is corroborated by Munro who asserted that sugar cultivation in the Presidency could be increased to any

1. Fullarton's Letter to the Court of Directors, 7th January 1785, pp. 5 and 19.

2. *Report on Sugar Trade*, 1822, App. III—Papers respecting the Culture and Manufacture of Sugar in British India, p. 2.

3. Minute by Mr. C. N. White, 25th March 1793, *Fifth Report*, Vol. III, pp. 135-6.

extent, provided there was a reduction of the duty on it.[4] Ganjam and Rajahmundry had long been famed for their sugar, and the well-known Aska sugar, after which a great many varieties are now called, came originally from Aska paragana in Ganjam. In respect of cotton, the great extension of cultivation in Rajahmundry and Masulipatam, and to a certain extent in Guntur and Vizagapatam during the course of the half-century, indicates that he was not mistaken. According to Pharoah's Gazetteer, in the middle of the nineteenth century, a considerable amount of cotton was grown in Guntur, but there was still scope for much improvement. Cultivation in Ganjam also was capable of a large extension.[5] Even indigo was raised in abundance in Ganjam and to some extent in Vizagapatam. On the whole it appears that the country was capable of producing several crops on a large scale.

Extent of Cultivation.—During the course of the half-century that followed the establishment of the Company's régime, the possibilities envisaged in the foregoing statements were not realised to any great extent. True there was some increase in agricultural production, particularly in regard to a few crops.[6] Rice cultivation showed considerable progress in nearly all the districts, and especially in Tanjore at the beginning[7] and in the Kistna and Godavari districts towards the end of the period. Cotton, which till the close of the eighteenth century had been insufficient even for the home demand, received a great impetus in the nineteenth century, thanks to the interest which the Company had in supplying the nascent industry of Lancashire with the raw material, and it soon became one of the staple exports of the Presidency, the area under the crop being nearly a million acres in 1852. The production of indigo rose rapidly, especially in Cuddapah, Salem and South Arcot, and about the middle of the nineteenth century, the exports alone amounted to 7,000 chests annually,[8] while sugarcane cultivation made considerable strides in the 'forties.[9] Coffee and tea were introduced towards the close of the half-century and the former in particular was successfully cultivated on the hills. Other crops in regard to

4. Arbuthnot, *Memoirs of Sir Thomas Munro*, p. 498.
5. Pharaoh's *Gazetteer*, pp. 64 and 9.
6. General Reports, Vols. 27 and 28, p. 262.
7. *Ibid.*, Vols. 25 and 26, p. 96.
8. Bellary Printed Selections, Vol. 19, p. 127.
9. Letter from the Collector of North Arcot to C. R. Cotton, 26th July 1839.

which an extension of cultivation was perceptible were pepper and ginger in Malabar.

Thus there was indeed progress in some degree, but it was by no means commensurate with the country's potential capacity. From the land revenue returns we find that there was no remarkable increase in the area under cultivation during the first half of the century.[10] In 1856 a little more than 12 million acres were under the plough amounting to only ⅕ of the total cultivable area, and there was no prospect of improvement in the near future. In the first quarter of the century especially, a drastic decline in cultivation was noticeable in more than one district. The next two decades however, witnessed a considerable expansion in the area under crops in most of the southern districts and in a few of the northern districts. In Chinglepet in particular, cultivation rose from 88,769 cawnies in 1828-9 to 162,828 cawnies in 1850-51, the reason being the increasing demand in Madras and outside for food and commercial crops. But in other Telugu districts conditions did not improve greatly. In 1846, Mr. Mellor, Collector of Bellary, wrote : "the universal complaint and request of the ryots is to be allowed to reduce their farms, a convincing proof that cultivation is not profitable.....were it not for the aid of the Collector through his revenue subordinates, one-half, or at least one-third of the highly assessed lands would ere this have been thrown up."[11] Though the number of pattah holders had increased, they were a wretched lot and cultivation declined. With regard to new crops again, the attempts to introduce several exotic varieties of cotton, sugarcane, etc., did not meet with marked success and on the whole, the "many natural advantages of situation and climate" referred to in the Fifth Report do not seem to have been sufficiently utilized.

A general feature of Indian agriculture was what the Board of Revenue described as the "immutability" of the "produce of the land in this part of India." The Board believed that it was in the nature of things that rice must continue to be raised on wet lands, dry grains and pulse on dry lands, and that, though the cultivation of certain crops could occasionally be increased to a small extent, it would be limited not only by soil and climate, but by "the proxi-

10. *Statement showing the growth of and the changes in the Revenue of the Madras Presidency since* 1800, pp. 4-7.

11. Report from the Collector of Bellary to the Board of Revenue, 25th July 1846.

mity of towns or the means of transporting the surplus.[12]" In view of the enormous extension of cultivation in the latter half of the century with the introduction of railways, etc., the inadequate progress of the earlier half may certainly be attributed in a large measure to the difficulties of communication and marketing. But there were other causes also. There was the incidence of the land revenue, which has already been dealt with. Ryots who were saddled with land against their will, as often happened, had hardly the means or the spirit to think of experiments—either in the matter of new crops or new methods of cultivation. With regard to Government efforts, except for spasmodic attempts to introduce a few foreign varieties of cotton, sugarcane, etc., which we shall notice presently, little was done to improve agriculture before the creation of the Agricultural Department. To some extent, the *vis inertia* of the ryots who seldom took kindly to any innovation, was also responsible for the unsatisfactory condition of cultivation. The complaint of the Collector of Ganjam that the people in his district "never will undertake anything their fathers never did before them" may be applied to a large section of the population of the Presidency.[13]

Classification of Crops.—The crops produced in South India are generally divided into three classes: wet or *nunjah* (நஞ்சை) dry or *punjah* (புஞ்சை) and garden. In the telugu districts they are distinguished as *pallam* (పల్లము), *mettu* (మెట్టు) and *tota* (తోట) Among wet crops the most important were rice and sugar-cane. The garden productions which required heavy irrigation were betel-nut and leaf, tobacco, plantain, chillies and onions. Among the dry crops were cotton, indigo, the various pulses, ragi, cholam and kambu.

The above classification holds good only in general. Not infrequently 'dry grains' were cultivated with the aid of artificial irrigation, while wet crops depended solely on rainfall. Thus in the Baramahal, jawari, thuvarai, ragi, chana and cholam were among the chief nunjah productions.[14] In Malabar on the other hand, owing to the heavy monsoon rains which seldom, if ever failed, artificial irrigation was superfluous even for rice. Indigo, jonna

12. General Reports, Vols. 27 and 28, p. 281.
13. General Reports, Vols. 27 and 28, p. 350.
14. Baramahal Records, Sec. VI, pp. 1 and 27.

(cholam), cotton and various other crops were grown both as dry and as wet crops.[15]

Multiple Cropping.—In several parts of the country it was usual to obtain two or more harvests a year from the same field, for the tropical climate of the Presidency allowed "an almost indefinite succession of crops"[16] limited only by the availability of a constant supply of water. According to Buchanan many of the irrigated lands in Chinglepet, Coimbatore, Mysore and Canara produced rice and other grains twice a year. In Tanjore two or three luxurient crops of rice were the rule,[17] while the regular monsoons of Malabar ensured double crops.[18] With regard to the wet fields of Salem, it is said that "when plentifully watered, they produce four crops, but such as are watered from talabs or wells yield only two or one",[19] and in parts of Vizagapatam, three harvests were common in the irrigated taluks.[20]

The advantages of multiple crops, however, were partly counteracted by the low yield which was a marked feature of Indian agriculture. The average cereal crop yield all over the Presidency was estimated to be about 11 bushels per acre (88 lbs) while in England it was more than 30. It was stated that "millions of acres average four bushels or less, and often fail to return even the seed sown", and again "the quantity of the produce whether of cereals, of pulse, or of cotton, even on the famous black cotton soil, is so small as to suggest that the soils generally have descended to their "normal unit of productiveness."[21] The low yield may be attributed partly to unscientific methods of cultivation. In the absence of seed changing inbreeding and the continued cultivation of inferior seeds on inferior soils by defective methods must have had deleterious effects on both quality and quantity. Partly also, it was due to the excessive burden of the land-tax. The assessments were so high that the ryots were driven from the finest fields to the inferior lands which were less heavily assessed; and which being farther from the village and more difficult to watch, doubled

15. Nellore *District Manual*, pp. 391-5; Bellary Printed Selections, Vol. 19; p. 125.
16. *Report of the Famine Commission*, 1880, App. I.
17. Fullarton's Letter to the Court of Directors, 7th Jan. 1785.
18. Pharoah's *Gazetteer*, pp. 503-4.
19. Baramahal Records, Sec. VI, Part I, p. 27.
20. Pharoah's *Gazetteer*, p. 29.
21. *Agricultural Commission Report*, 1888, App. C, p. 62.

both labour and expense, while the crop deteriorated in quantity as well as in quality. It is not surprising that the "simple ryot" was found to be "lamenting that the earth like its inhabitants begins now to degenerate in this Kaliyoog."[22] Later in the period, the same result—poorer lands being taken up and the consequent diminution of the yield—was brought about by the increasing pressure of the population.

SECTION II.—CEREALS.

Rice.—The most important of the crops was rice which was very extensively grown all over the Presidency. It was the chief food of the people in South India, and the straw was in great requisition as cattle fodder. It predominated in the wet cultivation, but considerable quantities were raised on dry lands also. The principal rice producing areas were Tanjore, Canara, Malabar, Rajahmundry and Tinnevelly,[23] while it was also grown to a great extent in Ganjam and Nellore.[24] Tanjore owed her prosperity entirely to her rice cultivation, rendered so successful by her remarkable network of irrigation channels. Even in the time of Col. Fullarton, when the country was in the throes of war and cultivation was greatly restricted, abundant crops of rice were produced,[25] and when agriculture was given a new lease of life with the establishment of peace, production extended so rapidly that the district which up to 1807 consumed almost the whole of her produce, was practically able to capture the Madras market from Bengal, within a decade.[26] By the middle of the nineteenth century three-fourths of the total area under cultivation in Tanjore was occupied by rice.[27] Indeed in the southern districts as a whole, the first quarter of the century witnessed a remarkable progress in cultivation which the Board of Revenue attributed to the increase of the population consequent on continued peace.[28] With regard to the northern districts, the Circars were, at the close of the eighteenth century,

22. General Reports, Vols. 34 and 35, p. 74.
23. Thornton's *Gazetteer*, 1854, Vol. III, p. 332.
24. Pharoah's *Gazetteer*, pp. 9 and 36; Nellore *District Manual*, pp. 388, 91.
25. Fullarton's Letter to the Court of Directors, 7th Jan. 1785.
26. General Reports, Vols. 25 and 26, p. 96.
27. Letter from G. L. Morris, Collector of Tanjore to the Board, 31st July 1865.
28. General Reports, Vols. 27 and 28, p. 262.

regarded as "the granary of the Carnatic during the north-east monsoon in like manner as Tanjore is reckoned on, for the other season."[29] Rice cultivation here increased greatly during the course of the half-century and especially towards the end with the construction of the Kistna and Godavari Anicuts. In Malabar and Canara, several heavy crops were raised,[30] particularly in Canara where rice was the staple of the export trade.[31]

There were many varieties of paddy grown throughout the country. In Nellore there were about ten[32] while in Rajahmundry it is said that no less than thirty different kinds of rice were raised.[33] The superior sorts of rice took a longer time to ripen and were cultivated only to a small extent. The coarser varieties which could be harvested in 3 to 5 months were most commonly grown.

According to Dr. Heyne, there were generally four crops a year in the Carnatic, of which two were from the same field. The first was the Cauroo Punta. The seed was sown in May and the produce harvested in September, and it yielded about fifty-fold. A second crop, also called the Cauroo Punta was sown a little later and produced forty-fold. The third harvest was the Sambha, sown in August and September and reaped in January-February, producing forty-fold also. The last was termed the Navara Punta (నవారపంట) cultivated between November and May. Here the return was lowest being 20 to 30 cullums for every cullum[34] sown.[35] These returns, forty-fold and fifty-fold, seem to be very high compared to present day figures and suggest that there has been a deterioration of the soil. A wide margin must also be left for the accuracy of data which were no doubt largely obtained at second-hand.

Methods of Cultivation.—The methods of cultivation were broadly the same all over the Presidency, but in several parts there were slight local variations, arising generally from the adequacy or otherwise of the water supply and quality of the soil. Throughout the Presidency, three modes of raising plants were distinguishable, the dry seed, the

29. *Fifth Report*, Vol. III, App. XIII, p. 7.
30. Watt, *Commercial Products of India*, p. 836.
31. *Madras Administration Manual*, 1886, p. 17.
32. *Nellore District Manual*, p. 388.
33. Pharoah's *Gazetteer*, p. 36.
34. A cullum=24 Madras measures.
35. B. Heyne, *op. cit.*, p. 5.

sprouted, and the transplanted.[36] In the first, the seed was sown in the paddy fields straightaway, the expenses were low and the produce correspondingly scanty. For "sprouted" cultivation, the seeds were steeped in water till they germinated and then transferred to the field. According to the last method, the seeds were first sown in well-prepared nursery beds, and after the seedlings were several days old, they were transplanted in the paddy fields. This method was more laborious and expensive in the first instance, but worth while in view of the heavier yield. Sometimes there were two transplantings, first from one nursery bed to another and finally to the field, and here the outturn was even more considerable.

The following account of cultivation processes has been taken from Mr. Mcleod's Report on Dindigul dated 20th February 1794, Thackery's Report on Malabar, Canara and the Ceded Districts, 7th September 1807, various references scattered throughout Buchanan's "Journey," Heyne's "Tracts on India," and Wight's Report on Agriculture, dated 20th May 1836.

The ploughing operations commenced as soon as the first rains had softened the soil. After several ploughings—their number depending on the soil, the previous crop and the method of culture followed—the ground was manured as best as the ryot's means permitted. The seed was then sown immediately, if it was the "dry seed" system, either broadcast as in most of the southern districts, or by means of a drill, as in the northern districts. In the case of "transplanted" cultivation the nursery beds were ploughed seven to ten times and highly manured with all kinds of farm-yard manure. The seed was then sown and the ground turned up. Water was let in at regular intervals, and weeding was frequently resorted to for about a month when the paddy was transplanted to the field.

The subsequent operations in all cases were generally confined to regular weeding, watering and occasionally thinning the plants where they appeared too thick by transplanting them elsewhere. Weeding was less frequently required in the case of transplanted cultivation, since the young plants were stronger and better able to resist the weeds. A constant and ample supply of water was the greatest essential, and it was required in increasing quantities

36. Buchanan, *op. cit.*, Vol. I, pp. 57-8; *Kurnool District Manual*, p. 165.

as the plant grew older. The usual condition of paddy fields after one or two months was one of flood. In some cases indeed, water was used to excess. Nicholson states that in Coimbatore there was often twelve inches of water in the paddy fields. When the crops were attacked by diseases, pests, etc., picking and weeding were occasionally resorted to, but in most cases the ryots left it to nature. Even in the second half of the century, it has been stated that ryots in Kurnool did nothing except sometimes "invoking the aid of the Panchapandavas and scattering an offering of rice and sweetmeats in the fields, with what result may best be imagined".[37]

The crop was harvested in three to six months according to the variety of the paddy and the method of cultivation adopted. The coarser kinds, as has been said, took a shorter time to ripen; and when transplanted, the paddy was ready to be gathered about a month earlier than if it was broadcast. On being cut, the crop was often heaped up in the fields and allowed to dry for several days, after which it was removed to the threshing floor and threshed, either by hand or by treading it out with cattle. The rice was separated from the husk by pounding it in a mortar. Paddy was usually kept stored for a year or more before consumption, for old rice was considered the best. In Vizagapatam, grain was generally preserved in large wicker-work baskets smeared all over with cowdung "to make them impervious." Rice was often stored in large granaries in open places. These consisted of large excavations with a narrow opening permitting a man to descend. After being filled with grain the opening was closed with a stone and earth was thrown over it. This method of storing grain was resorted to if the agriculturist wished to dispose of his grain quickly, for rice became seasoned in a few months when thus placed in pits, while if stored in houses, the process took longer. The larger granaries constructed near the dwellings were usually utilized by a number of cultivators, while small granaries and baskets kept inside houses contained grain for individual consumption.

Dry Grains.—The principal dry grains were ragi, cholam, cambu, and varagu. They constituted the chief ingredients in the food of the poorer classes in several of the districts, and were grown everywhere in abundance. Their cultivation was comparatively easy and inexpensive for they occupied the ground for only a few months and the monsoon rains were sufficient to bring them to maturity.

37. *Kurnool District Manual*, p. 172.

Ragi was most widely cultivated, being one of the chief cereal crops in every district. In Ganjam[38] it was practically the only dry grain cultivated, and in Madura and Chinglepet it was one of the staple crops. It was also largely grown in Salem, Coimbatore, Vizagapatam, Tinnevelly and other districts. Ragi was generally sown in August or September, and reaped in December or January.[39] It was sometimes raised as a second crop after paddy was harvested, and often as a mixed crop with cotton, etc., the latter remaining on the ground after ragi was harvested. The field was ploughed slightly before the application of manure, then ploughed up again and the seed sown, usually broadcast, but sometimes by means of a drill, particularly in the Telugu districts. The crop was ready for cutting in about four months, when it was removed to the threshing floor and thence to the granaries.

Ragi was sometimes cultivated by means of artificial irrigation from wells. Here the land was ploughed four or five times, the seed broadcast or drilled in, and the ground again ploughed and levelled. The field was divided into small beds divided by ridges, and water was let in at regular intervals after the crop came up and continued till it was ripe. Transplanting was also occasionally practised in the case of wet cultivation. When irrigation was from ponds water was carried to the fields in earthern vessels and sprinkled over the crops. Where artificial irrigation was a feature the plants naturally throve exceptionally well and yielded very heavy crops.

Cholam or Jonna was the staple crop in the Telugu districts particularly in the tablelands of Bellary and Kurnool, in Nellore and in Guntoor It was also cultivated to a considerable extent in Madura, Chingleput, Coimbatore and North and South Arcot. Jonna was a five months crop and was grown at different seasons throughout the year in the various districts, but the major crop was sown in October and November and reaped in March. It was sometimes raised as a second crop on dry land after the castor plant or varagu, but elsewhere there was no change and *paira* (late) jonna followed *paira* jonna with a monotonous regularity. The plant did not require much ploughing and hence fields which had been well ploughed the previous year were selected and after a slight preparation the seed was sown. The largest and best developed ears

38. B. Heyne's Report to the Board of Revenue, 21st Oct. 1794.
39. Dr. Wight's Report on Agriculture, 20th May 1836.

were selected from the preceding year's crop, beaten with sticks, and placed in pots with margosa and other leaves and dried once a month till the period of sowing. Jonna was generally grown as a mixed crop with other grains, pulses, and sometimes cotton or indigo. The different seeds were either drilled into the soil in separate rows or mixed indiscriminately. The subsequent care was confined to occasional loosening of the soil round the roots, weeding and driving away birds, till the plant was ready for cutting. The seasonal rains were entirely sufficient for its cultivation, for it required but little water, and indeed an excess of moisture was injurious to the plant.

After being reaped and threshed, the straw was taken away to serve as cattle food during the summer months when nothing else was available, while the grain was removed to pits for storage. Pits were dug in houses, streets, compounds or waste land. Large granaries had their side walls covered with choppa (straw) for better protection against dampness, etc., with stone slabs set in chunam. Several ryots clubbed together to store their grain in the larger granaries. Accounts were kept by means of chits on which each individual's share was recorded, and these chits were placed in a hole in a cow-dung cake and thrown in. In the case of Comatis' granaries a more regular system of accounts was followed. Losses from damage were shared proportionately, but poor ryots were sometimes exempted. Considerable care was taken to preserve the grain in good condition and to prevent dampness setting in. Cholam for immediate consumption was stored in large baskets or earthen vessels.

The methods of cultivating the other dry grains were broadly the same with slight local variations. There were the usual processes of ploughing, manuring, sowing and weeding. Cambu was grown to a greater or lesser extent in practically all the districts, the only exceptions being Malabar and Canara. Varagu was cultivated largely in the Tamil districts and on a smaller scale in the Telugu tracts.

Costs of Cultivation.—It is difficult to ascertain the actual and relative costs of cultivation in the different districts. Several statements are found both in the records and in the accounts of travellers, such as Buchanan and Heyne; but their accuracy cannot be vouchsafed. The ryots who furnished these statements were always suspicious of people who inquired too closely into their life, and afraid lest it should lead to an enhancement of the

government demand. Hence they usually made out the profits to be much less than they actually were, and often gave a list of costs and charges which exceeded the value of the total produce.[40] Further, the accounts are for one or two districts at various times so that a comparison is not easy.

The following table has been drawn up from an analysis of district reports sent to Dr. Wight.

TABLE OF COSTS AND PROFITS PER ACRE FOR PADDY AND DRY GRAINS IN SOME OF THE DISTRICTS IN THE YEAR 1837.[41]

	Costs of Cultivation.	Assessment.	Value of produce	Profit.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Vizagapatam				
Paddy	9 14 0	14 0 0	30 0 0	6 2 0
Masulipatam				
Paddy Black	4 15 0	4 6 9	10 14 10	1 9 1
Paddy White	4 9 8	7 13 8	19 5 11	6 14 7
Dry grains	3 11 0	4 5 10	9 10 0	1 9 2
Tanjore				
Paddy	5 1 8	5 4 9	11 13 4	1 6 11
Dry grains	1 11 2	1 0 5	3 0 0	0 4 5
Salem				
Paddy	9 14 9	7 15 0	19 13 9	2 0 0
Dry grains	2 12 10	2 2 9	5 1 7	0 2 0
Coimbatore				
Dry grains	2 1 5	1 6 0	4 2 7	0 11 2
Madura.				
Paddy	5 4 8	3 15 6	10 6 7	1 2 5
Dry grains	3 4 4	1 5 11	5 11 7	1 1 4
Tinnevelly				
Paddy	7 7 0	14 3 0	28 6 0	6 12 0
Dry grains	3 10 5	2 1 7	6 7 6	0 11 6

The figures are checked by comparison with statements furnished by European farmers like Mr. Fisher, who owned a large estate in Salem. The table includes dry grains as well as paddy. The costs of cultivation consist of the hire for ploughs and bullocks,

40. See *Supra* III--Cotton.
41. Taken from Revenue Consultations, 5th Dec. 1837.

the value of seed grain, irrigation expenses, cost of manure, and the hire for labour, for ploughing, sowing, weeding and transplanting. The assessment includes the village charges, paid to the watchman etc.,—a small percentage of the produce. The variations in costs are due to differences in the methods and in the amount of attention and labour bestowed. For paddy which is transplanted, the expenses would naturally be higher than for sprouted or broadcast cultivation. Similarly, if manure was more largely applied or weeding practised more frequently, costs would be higher. To a slight extent, the differences may be attributed to the wages of labour being higher in one place than in another. It will be seen that the cultivation of white paddy in Masulipatam was by far the most profitable, the net return being about 50% of the total charges. The costs of cultivation are not very high, and hence the large yield must be due to the superiority of the soil. The produce was very abundant in Vizagapatam and Tinnevelly, but the profit per acre was slightly less than in Masulipatam owing to the heavy expenses and the revenue assessment. In Madura the profits were very low, owing to the inferior yield of the produce. As for dry grains, we find that their cultivation was far less profitable than that of rice. The net profit in one case (Salem) is stated to be only 2 annas per acre, though this can hardly be true. But making allowances for all understatements, profits were certainly very low, the average for the six districts given amounting to 11as. 11ps. per acre. The reason for their being cultivated at all was that the costs and charges were correspondingly low, and the poorest ryots who had little or no capital could take up the cultivation. Further, the crop was ready for cutting in three or four months, a great advantage for the ryots, who were too indigent to wait longer.

CHAPTER VI

CROP PRODUCTION (*Contd.*)

Commercial Crops.

Commercial crops at present occupy a considerable extent of the total cultivated area. Oil seeds alone account for about 4½ million acres, while the area under cotton and other fibres is about 2½ million acres. Other important commercial crops are pepper and spices, tobacco, sugar-cane, indigo, coffee, and tea. In the earlier half of the nineteenth century these crops were comparatively unimportant and indeed at the beginning of the century they were quite negligible except for pepper and, to a certain extent, sugarcane. Oil seeds came into prominence only at the very end of the period, and coffee and tea even later. During the period under review, the area under sugarcane was occasionally extended and the cultivation of tobacco improved to a certain extent. In the case of indigo and cotton the progress was more pronounced, the latter in particular rising to a position of importance among exports, whereas formerly it had figured prominently among imports. But even this increase bore no proportion to the extent of the available area, and there was still considerable scope for expansion.

It had long been recognized that there were large tracts of land in the Presidency excellently adapted to the growth of these crops, and the East India Company made several spasmodic attempts to improve the quality and quantity of most of them. But the lack of assured markets proved a great obstacle to progress. It was only after the opening of the Suez Canal which led to a great reduction in the cost of transport and provided easy access to foreign markets that commercial crops acquired a predominant position.

The following pages contain brief accounts of a few of the crops in which the Company was interested at one time or other, and regarding which therefore, information is available in the records. The Company was most interested in cotton and a vigorous policy of encouragement was followed throughout the period ; hence there is more material and the account of cotton is rather long.

Indigo.—Indigo was long grown in India both for the home and foreign markets. But it was in the seventeenth century that it rose

to importance as an article of great commercial value, and an extensive export trade was built up, first by the Dutch and later by other European trading nations. At the beginning of the eighteenth century the American colonies took to its cultivation and hence India's share of the indigo trade diminished drastically. But towards the end of the century, partly owing to the secession of the Colonies, India's position improved.[1] From that period, there was a steady increase in the production of indigo, and in 1856 the quantity exported from this presidency was about 7,000 chests.

Several parts of the Presidency were well suited to the cultivation of indigo of a superior kind. According to Mr. Macleane, Collector of Nellore during the earlier part of the century, Indigo culture extended along the coast from the Krishna to South Arcot and inland to Kurnool and Cuddapah. The chief indigo growing district was Cuddapah, which produced a fine variety greatly in demand in Europe, so much so that indigo was once known in the English market as "Kurpa," (Hindustani for Cuddapah). The next important seat of cultivation was Nellore whose dry fields yielded heavy crops of indigo. In Ganjam and Tanjore, it was largely grown in the beginning of the century, but by 1850 it was greatly neglected, probably due to want of encouragement and the increased attention bestowed on rice cultivation. Other districts where it was grown to any considerable extent were North and South Arcot, Bellary, Kurnool and Salem. In Chingleput, the cultivation was at one time taken up with great zest but without any appreciable success.[2] In South Arcot, a certain Col. Cullen who interested himself greatly in indigo, was able to produce even in an unfavourable season as much as 10,000 lbs. of indigo of an excellent quality. He considered "the uncultivated lands in the southern division of Arcot alone sufficient for the supply of all Europe, under a very trifling support from Government.[3]" According to him the produce of the Madras Presidency was at least as good as that of Bengal, if not better. We have no means of ascertaining the truth of the former statement. The Board seem to have been sceptical about it for they withheld the assistance desired by him, but by the middle of the century there was a very great extension of the cultivation of Indigo in that district.[4]

1. Bellary District Printed Selections, Vol. 19, p. 177.
   G. Watt, *Pamphlet on Indigo*, 1890, pp. 9-11.
2. Pharoah's *Gazetteer*, pp. 9, 239, 354.
3. Proceedings of the Board of Revenue, 13th March 1806.
4. Letter from E. Maltby, Collector of South Arcot, to the Board of Revenue, 16th Dec. 1852.

Cultivation of Indigo.—The only contemporary accounts of the cultivation processes are found in the Baramahal Records (Section IV), Heyne's *Tracts,* an article by Mr. R. Wight found in the Bellary District Records, and Pharoah's *Gazetteer.* The later district manuals and Mr. Watt's account of indigo cultivation have also been drawn on freely since a comparison with the earlier works indicates that there was no marked change in methods. The indigo plant was believed to thrive best on loamy soils, neither too wet nor too dry. In Cuddapah, Nellore and other districts where it was extensively grown, it was an annual, but in Kurnool, the plant was allowed to remain on the field for two and even three years. Rotation was not practised as a rule, though mixed cropping was not uncommon. Indeed it is stated that whatever the soil on which it is sown, "the crop, so far from exhausting, is believed to strengthen the soil,"[5] and in some cases, indigo seems to have been grown continuously even for 40 years with only an occasional rest, without any deleterious effects.[6] Sometimes it was sown mixed with millets or on paddy fields just before harvest, so that the indigo came up immediately after the earlier crop was reaped.[7]

After the land was ploughed, it was manured by sheepfolding or by the application of indigo seed or refuse from the steeping vats. Cowdung was also used to some extent. The seed was then sown broadcast or occasionally with a drill as in Cuddapah. The plant was ready for cutting in 3 to 5 months. Careful and repeated weeding was very essential during growth, and was performed either by hand or with a spade. In the case of wet cultivation, agricultural operations began a month or two earlier than for a dry crop, and the yield was decidedly heavier. In Kurnool, where it found the black cotton soil very congenial, the plant was a biennial and sometimes a triennial. There were as many as five cuttings and the indigo was considered to be of a very fine quality.

Manufacturing process.—After being cut the leaves were taken to the nearest place of manufacture. The method followed in the Madras Presidency was termed the "dry leaf" process, as distinct from the "wet" process of Bengal. It was asserted that "indigo manufactured from dried leaves as is practised in the Carnatic forms

5. G. Watt, *Pamphlet on Indigo,* p. 31.
6. Voelcker, *op. cit.,* p. 256.
7. Nellore D. M., p. 395.

a more durable dye than when it is prepared in a different manner," and this is borne out by Col. Cullen's statement that Madras indigo was superior to that of Bengal. The dried leaves were steeped in water about six times their bulk, the fecula drawn away, boiled and made into cakes.[8] Occasionally it was adulterated with blue mud. In the wet leaf method, the leaves were removed to the vat immediately after being cut, the subsequent processes being the same as in the dry leaf method.

There were several factories for manufacturing indigo in South India. Many of them were small and ill-equipped, owned by Indians, but there were also a large number of big-sized ones owned by European firms.[9] The chief centres of manufacture were Cuddalore, North and South Arcot and Nellore. Rajahmundry, Salem, Tinnevelly, Tripasore and Vellore also contained a few factories.[10]

Government Efforts:—Indigo was one of the important articles of the Company's export trade, especially after the secession of the American Colonies, and a certain amount of encouragement was given to indigo planters and ryots, though the "Company never directly undertook the cultivation of indigo."[11] The encouragement consisted of giving permission to individuals to make experiments, "remitting the usual duty on indigo brought into Madras for the purpose of exportation to England," and reducing the duty in England from 5 to 2½%.[12] Towards the close of the eighteenth century, the Company became considerably interested in extending the cultivation, and the newly appointed Company's Botanist was asked among other things to examine the possibilities of improving the quantity and quality of indigo. The Botanist was certainly very enthusiastic and painstaking, but no tangible results were seen, though his reports invariably stated that the experiments were eminently satisfactory.[13] The reason was that he was at the same time experimenting with numerous other crops, with limited means and equipment, and he could only ascertain their possi-

8. Heyne, *op. cit.*, p. 7.
9. General Reports of the Board of Revenue, Vol. 17, p. 77.
10. Bellary District Printed Selections, Vol. 19, p. 129.
11. *E. I. Company, Report on Indigo*, 1830, Introduction.
12. Commercial Despatch from England, 30th May 1792.
13. Reports from the Botanist, 21st October 1794 and 24th May 1797. Reports from the Superintendent of Corcondah farm to the Collector of Masulipatam, 15th October 1797

bilities. The Court of Directors, however, were favourably impressed and requested the government to induce the people to undertake the culture of indigo and other crops "under every reasonable degree of encouragement."[14]

Later, however, the Court of Directors feared that there would be "over production" and became lukewarm in their support. They confined themselves to permitting certain people to rent land for indigo cultivation, or to be sent from England to improve it, on condition that the Government "be not at all engaged in the speculation, either by advances of money or otherwise."[15] Colonel Cullen, who undertook indigo production in South Arcot where he saw every promise of excellent and abundant crops, was greatly disappointed by the lack of assistance from the Board of Revenue. Bound as it was by orders from Government, the Board was very cautious indeed.[16] The attitude of the Government is expressed in the following extract from a letter of the Madras Government to the Court of Directors dated 3rd March 1809. "The capacity of these provinces to produce indigo is such that there is always ground to apprehend that the manufacture will be extended far beyond the ordinary consumption and demand, and we shall therefore feel it incumbent upon us to act with extreme caution in making our purchases of indigo." Later they say again that indigo cultivation "has been pursued of late with such avidity, that there is reason to apprehend that the produce during a favourable season would far exceed the demand for the article."[17]

It may be said that to some extent the neglect of indigo cultivation in Madras was due to the influence of the Bengal Government, and here, as in other instances, the interests of the subordinate Presidency were over-ridden by those of Bengal. On a representation from the Bengal Government, the Court of Directors agreed that "it is not advisable to establish indigo factories upon our account in the territories under the authority of the Madras Government, for our apprehension that the market in Europe will be liable to be overstocked by the Bengal produce, operates as more than a counterpoise to the abstract principle which would otherwise govern our decision—viz., that it is our duty to promote

14. Letter from Court of Directors to Madras, 2nd March 1798.
15. Letter from Court of Directors to Madras, 7th April 1807.
16. Board's proceedings, 13th March 1806.
17. *E. I. Company, Report on Indigo*, pp. 94-95, 1830.

new branches of trade in any of our settlements to which the soil and climate appear favourable."[18]

Thus the Company began with good intentions, but soon interest waned, and far from encouraging the growth of indigo, they became apprehensive lest an undesirable extension of cultivation should take place. An expansion did however occur, owing to the rising demand for the article in Europe, and by the end of the half century large quantities were grown in Cuddapah, Salem and S. Arcot, and to some extent in N. Arcot.[19] In Nellore too, there was some increase in the area under indigo, but it was small compared to the total area, amounting in Fasli 1261 (1851-2) to 2,018[20] Goortoos, out of a total dry cultivation of 77,909 Goortoos.[21] In Cuddapah, however, indigo largely superseded the grains, and in Fasli 1260, 2,591 acres were taken by it. According to Col. Munro's statement in 1807, the exports of indigo from both Bellary and Cuddapah in 1806-7 amounted to Rs. 4,37,500 while in 1853 the value of indigo exported from Cuddapah alone was Rs. 13,75,132;[22] and if allowance be made for the fall of price, which was very considerable, the quantity exported must have been even greater. The crop being more valuable and certain than the grains, as well as readily marketable, it was of undoubted benefit to the agricultural classes. The ryots obtained high profits, often 3 times as much as those yielded by the dry grains.[23] The method of manufacture also improved, with the introduction of up-to-date plant and machinery by European firms. Thus in a number of districts there was an increase in cultivation, but for the Presidency as a whole, it was not very great, the total area being no more than 200,000 acres in 1852. It was only after the opening up of the European markets in the second half of the century that Madras was able to obtain a leading position in the cultivation and export of indigo.

In all the districts above noted, indigo cultivation was financed by the European Houses of agency which advanced sums of money

18. G. Watt, *Pamphlet on Indigo*, p. 14.

19. Proceedings of the Board of Revenue, 3rd May 1853.

20. A Goortoo is about 1.2 acres.

21. Letter from Mr. E. B. Elton, Collector of Nellore, to the Board of Revenue, 19th May 1853.

22. Letter from Mr. Murray, Collector of Cuddapah, to the Board of Revenue, 28th October 1853.

23. Letter from Mr. E. Maltby, Collector of S. Arcot, 16th December 1852. Letter from Mr. J. D. Bourdillon, Collector of N. Arcot, 28th August 1854.

to the ryots and took over a proportion of the produce. The system was certainly advantageous to the poorer ryots though the very poorest would be excluded for want of security. According to the Collector of Cuddapah this system was largely instrumental in relieving the poorer ryots "from the exorbitant interest demanded by the village Bakalls (money-lenders) and shroffs, and thus instead of being ruined by usurious interest, they with a little care and management may repay all their advances from their crops during the following year and obtain sufficient profit to satisfy the Circar demand and to maintain themselves and their families." They were also enabled to withstand any loss due to price fluctuations, and hence Cuddapah, as will be seen later, was not very severely hit by the depression in prices.

SECTION II—SUGAR-CANE.

At the close of the eighteenth century, sugar-cane was cultivated chiefly in Ganjam, Vizagapatam, Masulipatam, Salem, and to a limited extent in Chinglepet. An inquiry in 1797 showed that the largest quantity was raised in the two former districts, while the latter two produced considerably less.[24] In these districts as well as in others it was capable of great extension, and it was the unanimous verdict of all inquirers into the subject that several parts of the Presidency were well adapted for sugar-cane cultivation. In the opinion of Dr. Roxburgh whose investigations in the Northern Circars extended over several years, this country possessed every facility for cultivation and enjoyed several advantages over the West Indies whence the English demand for sugar was chiefly met. The plant yielded more than double the produce of the cane in the West Indies, labour was infinitely cheaper and the crop more certain.[25] In his Report on External Commerce for 1813-14, the Sea-Customs Collector deplored the importation of foreign sugar, for he believed that there was no country "better adapted for the growth of sugarcane than Malabar and Canara." We do not know how he obtained this information, but it is doubtful if Malabar and Canara possessed much facilities for its cultivation. The importation was the more regrettable because Bengal sugar which was frequently imported, whenever the Chinese supply did not arrive, was inferior in quality,—and also very costly. On the other

24. Minute of the Board of Revenue, 29th June 1797.
25. Commercial Despatch to England, 2nd May 1793.

hand the product of even such a minor sugar-producing district as Cuddapah was "nearly if not fully equal to that of China and incomparably finer than that of Bengal," while the price was below the Chinese and little more than half the price paid for the Bengal product.[26] The only requirement for extended cultivation was judicious encouragement.

In the Circars, Coimbatore, Chingleput, Cuddapah, Salem and Madura there was an immense area fit for sugar-cane cultivation. Indeed according to Dr. Roxburgh there were few districts where there were not extensive tracts of land which could be thus utilized.[27] The Collector of Ganjam stated in 1815, that "the quantity of sugar could be extended to almost any number of maunds annually"[28] and Roxburgh repeatedly asserted that the area available in the Northen Circars was almost unlimited.[29] Yet the increase in sugarcane culture was inconsiderable except towards the end of the period,—indeed there was a marked decline in the middle,[30]—and the only sugar exporting districts at the close of the half-century were Ganjam, Rajahmundry, and North and South Arcot. In 1852 only 38,400 acres were under sugarcane in the Madras Presidency. The immense areas available for cane cultivation remained as immense as ever, and large quantities of sugar continued to be imported throughout, from China, Batavia, Bengal, Bombay and elsewhere.

The reason was that though cane cultivation was profitable, it was also very expensive, and therefore beyond the means of the great majority of the ryots. It required more capital, more water and more labour than the staple wet crop, rice. The table given below, drawn up from an account given by Mr. Fisher, a planter in Salem to Dr. Wight in 1835, will illustrate this.[31]

26. Proceedings of the Board, 5th June 1815.

27. Dr. Roxburgh, Account of Sugar Culture and Manufacture in Rajah mundry, 20th June 1792.

28. Fort St. George Revenue Consultations, 31st July 1815.

29. Commercial Despatch to England, 2nd May 1793.

30. *First Report from the Select Committee on Sugar & Coffee planting*, 1848, p. 118.

31. Wight's Report on the Resources of the Presidency, 23rd November 1837.

EXPENSES OF CULTIVATING ONE ACRE OF SUGARCANE

(Statement furnished by Mr. G. Fisher, a Planter, 1835)

	Rs.	A.	P,
For seed cane 600 pieces ..	5	0	0
„ manuring ..	5	0	0
„ ploughing ..	5	0	0
„ hedging and weeding ..	5	0	0
„ watering ..	10	0	0
Government assessment ..	12	8	0
Compressing the cane and making jaggery or sugar ..	20	0	0
Total charges ..	62	8	0
Average produce jaggery or sugar 300 lbs value ..	84	0	0
Profit ..	21	8	0

The cost of ploughing, manuring etc., was considerably higher, the total charges coming to Rs. 62-8-0 which is much greater than the cost of rice cultivation. On the other hand the profits amounted to Rs. 21-8-0 or more than 30% on the outlay. Further it took ten to fourteen months to be ready for cutting and the poorer ryots who lived from hand to mouth could not afford to wait so long. Besides, the plant exhausted the soil greatly and hence could not be grown on the same field oftener than once in five or three years. Last but not least were the difficulties of transport and high cost of transit which, in the case of an article like sugar, enhanced the price considerably.

The best canes were grown in the Northern Circars, particularly in Ganjam and Vizagapatam, and in Coimbatore and to a lesser extent in Masulipatam.[32] The quality of Cuddapah cane was inferior, and the same may be said of Chingleput.[33] Sugarcane of fairly good quality was cultivated in Salem, chiefly in Kellamangalam, and also in Madura.

Method of Cultivation.—The plant requires high manuring and repeated ploughing. Buchanan describes an elaborate process of irrigating the land, allowing it to dry, ploughing, resting and alternately manuring and ploughing it, altogether about a dozen

32. Circuit Committee Report, 25th April 1788.
33. Minute of the Board of Revenue, 29th June 1797.

times.[34] Sheep-folding was common, and this was supplemented by stored manure, gingelly oil cake, earth containing nitre or rotten straw of green or black gram, according to local custom.[35] After the land had been thus prepared, the cuttings were planted either in beds, or in furrows formed for the purpose as in Madura and the Baramahal, or in rows in the level field as in the Northern Circars. The practice of scattering the seed canes broadcast, described by Voelker,[36] did not prevail in the earlier period. The fields were now irrigated, copiously and regularly if the weather was dry, and scantily if it was wet. Early in the season the fields were provided with a large number of channels and by these means water was conveyed easily if irrigation was required, while if the rains were too heavy, they served to drain away the surplus water; for an excess of it made the cane weak and tasteless. In Rajahmundry in particular, the farmer never failed "to have his field plentifully and judiciously intersected with drains" for they were considered to be "indispensably necessary" for the success of his operations.[37] Throughout the period of cultivation, the ground was frequently weeded and cleaned, the earth round the stems being often dug up and enriched with various kinds of manure.

When the plants were three or four feet high, they were tied together in groups of four or five which formed what was called the "stool" and were supported by a stake. Each cane was carefully wrapped in the leaves to preserve the richness of the juice and to prevent branching. This process of tying together and wrapping with leaves was continued, as also irrigation and weeding, till the plant was ready for cutting—about nine or ten months after sowing. Certain varieties took a longer time, about twelve months or occasionally fourteen. After the cane had been cropped, the field was either cultivated with leguminous plants or left fallow,[38] since sugarcane could not be grown on the same field consecutively. In some of the southern districts the plant was alternated with rice and sesamum, and some practised a regular rotation, cane followed by sesamum, that by rice and that again by sugarcane.

34. Buchanan, *op. cit.*, Vol. II, p. 43.
35. Ganjam *District Manual*, p. 13.
36. Voelcker, *op. cit.*, p. 243.
37. Roxburgh, Account of Sugar, 20th June 1792.
38. *Ibid.*

Government Efforts.—Towards the end of the eighteenth century the East India Company became interested in sugarcane culture in India owing to a rise in the price of American sugar which had hitherto been supplying the English market.[39] The interest, however, was confined largely to Bengal. In Madras, thanks to Dr. Roxburgh's efforts, a certain amount of attention was given to sugarcane cultivation in the nineties. In 1794 the Board of Revenue was authorised "to hold out every proper encouragement" to sugar manufacture in Madras and especially in the Northern Circars.[40] For quite a long time we hear of numerous communications from one authority to another directing that every encouragement should be given.[41] Some samples of Ganjam and Masulipatam sugar sent to England were highly commended by the Court of Directors and the Commercial Resident was asked to buy any amount that was offered.[42] In 1799 Mr. Campbell was allowed "to proceed to India for the purpose of establishing sugar works in such of the districts under our Madras Government as he may conceive most favourable for such an undertaking"; and the government was asked to assist him.[43] It would appear that in spite of these authorisations, proposals for extension of sugarcane culture were not always favourably received and little was done beyond occasionally giving advances for cultivation. Mr. Campbell made great efforts to improve cultivation in South Arcot and Dindigul but his enthusiasm was damped by want of support from the Collectors. In this as in other instances the ill-success of the Company's efforts to improve production may be partly attributed to differences of opinion between the various authorities as well as to departmental dilatoriness.[44] Advances to cultivators, if they were to be of any use should have been given early in the season. But by the time one official wrote to another, wrote again and the request finally reached the Board of Revenue, the season would be nearly over. By the time the Board considered it and passed orders the season would be entirely over and since the cane was a 12 months crop,

39. Proceedings of the Board of Revenue, 30th May 1799.
Letter from the Board of Trade to the Board of Revenue, 23rd August 1797.
40. *Report on Sugar Trade*, 1822, Second Appx., p. 45.
41. Letter from the Government to the Board of Trade, 6th March 1796.
42. General Reports, Vol. 4, p. 121.
43. Commercial Despatch from England, 17th March 1799.
44. Proceedings of the Board, 2nd March 1801.

there was not even the prospect of the sanction arriving in time for the next season.

Occasionally when a person in charge like Mr. Campbell took special interest, he might succeed in spite of routine and red tape, by making advances himself before the belated arrival of the sanction, paying the government assessment, buying half the produce, etc. In general, however, the encouragement actually given by the Company was half-hearted. Indeed when Col. Read after trying for sometime to introduce sugarcane, cotton and other crops in the districts under his charge gave up the attempt, the Court of Directors observe that they "do not feel much regret, since the cultivation of these articles to any extent may be carried on in our Bengal province".[45] The high cost of transport and the "unreasonable duty" of nearly 39% levied in England greatly enhanced the price of the sugar sent to England.[46] And on this plea of a high price, encouragement was withheld, the Court of Directors complacently remarking that artificial stimulus was unnecessary, and that if good sugar could be produced its cultivation was bound to thrive if left to itself.[47]

This policy of *laissez-faire* was followed till Sir Thomas Munro's regime when the assessment on sugar lands was raised; with unfavourable results. Speaking before the Select Committee on Sugar and Coffee Planting in 1848, Mr. George Tucker stated, "certainly in consequence of this assessment upon sugar, I think a very great check and discouragement was given to the cultivation of that article in the Madras Presidency."[48] A considerable extent of land under sugar was brought under other crops owing to the enhanced rate. Later, however, this assessment was lowered, with the result that there was an appreciable improvement in the forties in Ganjam, Vizagapatam, Rajahmundry, Cuddapah, North Arcot and Salem.[49]

The next phase of Government activity began in 1842 when for a few years some attempts were made to introduce the Mauritus sugarcane in the Presidency. Experiments were at first tried on

45. Revenue Despatch from England, 3rd Sept. 1800.
46. F. Royle, *The Productive Resources of India*, 1840, pp. 86-88.
47. Revenue Despatch from England, 22nd May 1818.
Commercial Despatch from England, 7th Sept. 1808.
48. *First Report from the Select Committee on Sugar and Coffee Planting*, 1848, p. 118.
49. Minute of the Board of Revenue, 3rd May 1853.

a very small scale owing to the inadequacy of cuttings, but results were found to be extremely satisfactory and high hopes were expressed. The Court of Directors asked the local authorities to proceed with the experiment.[50] Later, however, the attempts were less successful. "In the greater number of the districts the experiments would appear to have been carried on to a very limited extent, and in others little or no progress can be considered as having been made towards its introduction during the last two years."[51]

The unfavourable results were attributed chiefly to the difficulty of obtaining a sufficiency of cuttings, many having perished in the heat while being sent across great distances. The prejudices of the people and their natural reluctance to take up anything new and risky were as powerful obstacles as in the time of Dr. Roxburgh who observed, "I know the introduction of a new branch of agriculture among the natives to be attended with infinite trouble".[52] There were also transport difficulties,—sugar had to be carried by bullocks to the coast, thence to Madras by *dhonies* or specially chartered ships and thence re-shipped to England,[53]—to say nothing of high and discriminating duties which were £8 a ton higher than for West Indies Sugar. To this last cause alone, Capt. A. Cotton attributed the neglect of sugarcane cultivation in Madras.

But while concluding their letter to Government regarding the Mauritius cane the Board of Revenue stated, "it is however a matter of satisfaction to notice that although partial want of success has attended the exertions hitherto made in its behalf, the soil and climate of the districts generally throughout this Presidency are stated to be well suited to the production of the Mauritius plant" and added that the cultivation merited every encouragement.[54] Thus, the result of half a century of Government efforts was a highly favourable view of potentialities and a plea for encouragement.

Section III—Cotton.

The cotton plant is indigenous to India. The plant, which is long-rooted thrives particularly on "black land" whose sub-soil is

50. Proceedings of the Board, 5th May 1845.
51. Proceedings of the Board, 12th June 1845.
52. Roxburgh, Account of Sugar, 20th June 1792.
53. Mr. Scott, Evidence before the Committee on Sugar and Coffee Planting, 1848, pp. 164–5.

extremely tenacious of moisture. Cotton was cultivated to a certain extent on red and alluvial soils also, especially the American and other exotic varieties.

Several kinds of cotton were cultivated in South India. , Of the different varieties, three were indigenous, *oopum, nadum* and *shempurthee.* The *oopum* was an annual plant producing an abundant crop of coarse but durable staple. It was most extensively cultivated in the Presidency. The *nadum* was a triennial shrub whose yield was rather scanty, but the quality was excellent. The *shempurthee* which was occasionally grown in some of the southern districts was very similar to Brazilian cotton. Of the foreign cotton plants the most common were the Bourbon, American Sea Island and Nankin varieties. Among the different kinds of cotton grown in the Presidency, the finest came from Tinnevelly, Coimbatore, Cuddapah, Madura and Dindigul. The cotton of Tinnevelly was everywhere acknowledged to be exceptionally good, and indeed it was the best of the Indian varieties. In Coimbatore both *oopum* and *nadum* were produced, and of those the last was very fine and white though short stapled. The cotton of the Ceded Districts was fairly good, that of Cuddapah ranking among the best in the country. In Masulipatam, Ganjam, and Vizagapatam some fine cotton was produced, along with a quantity of inferior cotton. In the other districts it was usually of a coarse staple.

Extent of Cotton Cultivation.—Cotton was raised in most parts of the Presidency, but the chief cotton-growing districts at the beginning of the nineteenth century were Bellary, Cuddapah, Tinnevelly and Coimbatore. It was also cultivated to a certain extent in Vizagapatam, Masulipatam , Trichinopoly, Madura, Dindigul, Rajahmundry and Ganjam.[54] No accounts are available of the area under cultivation in the various districts. An inquiry was made into the state of cotton cultivation in the Presidency in 1812, but only one or two Collectors furnished figures of the acreage. Others supplied statements of the quantity produced, but as they do not mention the yield per acre, there is no means of estimating the area. Some Collectors did not give any figures at all, but merely stated that cotton was grown to a greater or less extent.

For the Presidency as a whole, cotton cultivation was not very extensive at that period, and the cotton grown was in many dis-

54. Proceedings of the Board of Revenue. 23rd July 1812.

tricts inadequate for local consumption.[55] Ganjam produced only a third of the cotton required for its manufacture. In fact, most of the cotton manufacturing centres of South India imported a considerable portion of their requirements from the Mahratta country, Nagpur and some Native States.[57] But in many of the districts, there were large tracts well adapted for cotton cultivation. Of the Ceded Districts, in which black land abounded, Col. Munro stated in 1807 that a reduction of 25% in the revenue demand would result in an increase of a million or a million and a quarter acres, within the space of 10 or 15 years; that cotton in fact could be grown to almost any extent that could possibly be required. In 1819 the Commercial Resident of the Ceded Districts expressed himself similarly.[59] On the occasion of the inquiry of 1812, the Collectors of Cuddapah, Ganjam, Masulipatam, Guntur, Trichinopoly, Madura, Dindigul and Coimbatore, all declared that there was ample scope for the extention of cultivation in their districts.[60] Even the Collector of Tanjore reported that the banks of the Cauvery were considered to be well suited to the production of the finer varieties of cotton, but he must have been misinformed for it is certainly not the case now.

By the end of the half-century, there was a considerable increase in the cultivation of cotton,[61] and the Presidency which had formerly imported large quantities, was able to export Rs. 58,22,790 worth of cotton. The acreage in Tinnevelly increased from about 45,000 in 1812, to 190,000. Similarly in Bellary, there was an addition of nearly 130,000 acres, and at the end of the period the extent of land under cotton was nearly 214,000 acres. Rajahmundry, Salem, Coimbatore, Masulipatam and Trichinopoly where cotton cultivation had been scanty in the early years of the nineteenth century had now large tracts under it. The total area under cotton in the chief cotton growing districts (except Coimbatore) was about 700,000 acres, and the area for the whole Presidency was nearly a million acres.

55. General Reports, Vols. 27 and 28, pp. 350-1.
56. Letter from the Board of Trade to Gov., 27th May 1802.
57. Proceedings of the Committee of Reform, 1799.
58. Report from Munro, 26th July 1807.
59. Memoir on Cotton Cultivation, 29th March 1819.
60. Proceedings of the Board of Revenue, 23rd July 1812.
61. Wheeler, *Hand-book on Cotton Cultivation in the Madras Presidency*, 1862.

Survey of Cotton Cultivation, 1853-62, pp. 218-259.

This extension of cultivation was brought about by an increase in demand, particularly in England and China, and by the encouragement given by the East India Company. The loss of the American Colonies at a time when Lancashires's cotton industry was being built up induced the British manufacturer to turn to India for the supply of raw material, and the Company was asked to see to the improvement of the quality and quantity of Indian cotton. The measures taken for this purpose will be dealt with later. They were successful to some extent and the exports to England which had been negligible at the beginning of the nineteenth century amounted in 1850-51 to Rs. 11,63,422. There was also a growing demand for cotton from China. In 1811 the Canton Supra Cargoes requested that all surplus cotton should be sent to China, since there was a demand for any amount that might be sent.[62] The exports to that country rose rapidly and in 1851-52 amounted to Rs. 13,45,296, being about a third of the total exports.

These factors account for such increase in cultivation as occurred. But production was still far short of the country's potential capacity. The Ceded Districts alone, according to Munro's statement above, contained at least a million and a quarter acres fit for cotton, and yet only 214,000 acres had been utilized by the middle of the century. Indeed the acreage for the whole Presidency did not reach Munro's estimate for the Ceded Districts, and when Mr. Wheeler conducted a survey in the middle of the nineteenth century it was found that cultivation in most of the other districts was capable of much further extension.[63]

Causes which retarded cotton cultivation.—There were various reasons for this limited increase in cultivation. Cotton was more exhaustive and expensive than most other crops and required greater labour and attention.[64] In black cotton soils it was even more expensive owing to a rank growth of a kind of grass called "Nuth" which had to be eradicated at a high cost every 12 to 20 or at least every 30 years.[65] It was also entirely dependent on the monsoons and hence extremely precarious. Further, only one crop could be raised in a year, while two and even three crops of dry grains, oil seeds etc., could be grown yearly

62. Public Consultations, 21st January 1812.
63. Wheeler, *op. cit.*, pp. 218-259.
64. General Reports, Vols. 27 and 28, p. 344.
Report from the Superintendent of Government Farms, 1876, p. 36.
65. Madras Journal of Literature and Science. Vol. X. 1839. p. 112.

and these at the same time yielded higher profits. In the frequent surveys of cotton cultivation in the first half of the century, all the collectors, with a few exceptions,[66] declared that cotton culture was not generally profitable.

Cotton, therefore, was not cultivated to any great extent, except by ryots who were comparatively rich and could stand the loss of a year's crop. In general, only a small patch of land was cultivated with cotton. Even in Cuddapah, where very large crops were grown, the farmer seldom allotted more than a third or fourth of his lands, and all his best lands were reserved for grains.

When asked why they continued growing it at all under such admittedly unfavourable circumstances, the agriculturists of Coimbatore gave the curious explanation that it was done in order to pay the land revenue, and that if they cultivated nothing but grain "they would have nothing wherewith to pay government rent as they and their families could and would consume the whole produce of the land, they having to content themselves at present with only two meals per day instead of three." They could not eat cotton and hence it would be reserved for the payment of the revenue. A superintendent of Government Experimental Farms to whom this statement was made believed that there was a good deal of truth in it.[67]

Cultivation Process.—The cultivating season differed in practically every district. As in the case of many of the agricultural products of the country, the successive operations of cultivation were carried on simultaneously in different parts. Sowing of cotton was performed in every one of the twelve months, the period in each district being one to two months. In Ganjam it was in December, in Vizagapatam, between May and June, in Nellore, during July and August, and so on in one or other of the districts throughout the year. Similarly, harvesting was carried on during all the months, and more so, since this last operation always extended over a considerable length of time.

Cotton was one of the crops which were not generally cultivated alone. One or more of the common dry grains were often raised along with it. The seed was broadcast in most of the southern and some of the northern districts. In Bellary

66. General Reports, Vols. 27 and 28, p. 347.

67. Annual Report from the Superintendent of Government Farms, 1876, p. 36.

and Cuddapah, however, a seed drill drawn by a pair of bullocks, designated a "gorru", was employed. The seed was drilled in 2 or 3 inches apart in rows 1½ to 2 feet wide. From now on till the crop was ready to be harvested, hoeing and harrowing were repeatedly resorted to in order to remove weeds and grass. Where hoeing and harrowing were not possible, weeding was performed by hand. About eight months after sowing the first crop would be ready to be gathered. After a month or two there was another picking, and later yet another, for in all the districts cotton was removed during more than one gathering. Of these the middle pickings were generally most productive.[68] In the case of Nadum cotton which was a biennial, the picking continued in the second and third years.

Costs of Cultivation and yield.—The chief items that entered into the cost of cultivation were, hire for ploughing, value of the seed, hire for weeding, occasionally for manuring, for gathering and fees for the waterer. The other charges were the village dues and the revenue assessment. Numerous accounts are available of the costs and charges of cultivation, but they are not all reliable. They would necessarily have to be obtained from the ryots who, as has been stated before, had a tendency to over-estimate charges and under-estimate profits. The following statement is a specimen of the estimate of expenses usually given. The second table has been drawn up from a comparison of the various district reports sent in 1835 to Dr. Wight.

Expenses of cultivating 1 cutty (12½ cawnies) of Black Land with Cotton in Masulipatam (1835).[69]

	Rs.	A.	P.
Charges of ploughing, including hire of bullocks, ploughs and labourers ..	13	4	0
Value of the seed for sowing ..	1	8	0
Charges for sowing ..	1	0	0
Harrowing, weeding and cleaning till the crop is ready for cutting ..	16	0	0
Hire for picking and preparing cotton ..	13	2	0
Total Expenses ..	44	14	0

68. Proceedings of the Board of Revenue, 23rd July, 1812.

69. Taken from the Report of the Collector of Masulipatam, 30th October, 1835.

	Rs.	A.	P.
Village fees paid in kind, equivalent to ..	9	9	8
Assessment at 50% of the gross produce, after deducting village fees ..	43	3	2
Total charges ..	97	10	10
The produce would be valued at ..	96	0	0
Net loss to the cultivator ..	1	10	10

Table showing the yield, costs of cultivation, revenue assessment and profits per acre for cotton cultivation in the various districts.[70]

	Yield in lbs.	Costs of cultivation.			Assessment.			Profits.		
		Rs.	A	P.	Rs.	A	P.	Rs.	A	P.
Ganjam ..	1150	10	0	0	2	8	0	10	0	0
Vizagapatam ..	1150	18	8	0	14	0	0	12	8	0
Masulipatam ..	200	2	11	6	2	11	7	0	8	11
Rajahmundry ..	500	4	8	0	3	0	0	8	8	0
Guntur ..	250	1	11	8	1	9	8	1	10	8
Tanjore ..	264	15	7	6	0	7	6	3	8	10
Trichinopoly ..	783	8	0	6	5	5	5	9	14	11
Salem ..	350	6	0	0	5	0	0	3	0	0
Coimbatore ..	318	5	0	4	1	8	8	2	6	0
Madura ..	390	6	10	8	1	14	7	7	0	11
Tinnevelly ..	278	5	4	0	2	1	7	2	1	8

We find from the first table that a ryot who cultivated 12½ cawnies of black land would incur a net loss of Rs. 1-10-10. Obviously this is impossible, and even allowing for the ryots over-rating the charges, this statement appears incredible. It must be accounted for by the fact that much of the labour, i.e. ploughing etc., was performed by the ryot and his family and hence the expenses on this account may be put down to their subsistence. In the other statement, allowance has been made for the ryots' exaggerations and some of anomalies have been corrected. It includes the total charges, assessment, the produce and profit per acre of various kinds of cotton in the districts. According to this account the charges vary from Rs. 18-8-0 in Vizagapatam to Rs. 1-11-8

70. Taken from Dr. Wight's Report on the Resources of the Presidency, 23rd Nov. 1837.

in Guntur. Much of the difference was due to the assessment, partly also it may be attributed to differences in soil and cultivating methods—ploughing, manuring and weeding being undertaken to a greater extent than in others.

The yield of cotton varied largely not only according to the variety of the seed and the soil, but also according to the labour and expense bestowed. The *oopum,* as has been said, produced a luxurious crop, while *nadum* yielded less. From the table given above, it will be seen that the yield was highest in Ganjam and Vizagapatam i.e., 46 maunds or 1150 lbs. This must have been at least partly due to the greater care and attention paid to cultivation, as is evidenced by the fact that the charges are considerably higher than in most of the other districts. In Tanjore the produce was only 264 lbs. though the expenses amounted to about 15½ rupees—no doubt owing to the soil being not so well adapted for cotton cultivation as in other districts. Compared to other countries, the yield of cotton in the Presidency was not very high. Dr. Wight in his report on the resources of the Presidency dated 23rd Nov. 1837, observed that the yield in Vizagapatam and Ganjam was "nearly equal to the best, and exceeding the ordinary American crops." But the produce in these districts is far higher than in the other districts. The average for all the districts was only about 465 lbs. per acre which was much lower than the yield in America.

Cleaning.—After gathering, the next process in the preparation of cotton was cleaning, and separation of seed from the fibre. This was undertaken sometimes by the agriculturist himself and sometimes by the dealer in cotton. Towards the end of the half-century it was the cotton broker who generally performed it. In Tinnevelly the cotton with the seed was delivered to the dealers who cleaned and marketed the produce. They classified the seed cotton and paid for it according to cleanliness.[71]

Cleaning was generally defective and sometimes wholly omitted,[72] and the frequent complaints against Indian cotton were attributable to the large quantity of dirt and seeds that were allowed to remain in the cotton. This was due partly to carelessness and partly to the primitive nature of the tools employed. At one

71. Wheeler, *op. cit.,* p. 126.

72. Letter from the Commercial Resident of the Ceded Districts to the Board of Trade, 29th March 1819.

time, cleaning was performed solely by the hand after the seed was removed by pressing with the feet. Subsequently a foot-roller was used to separate the cotton from the seed. The cotton was placed on a flat stone, and a woman sitting before it on a low stool with wooden soles attached to her feet, rolled an iron roller backwards and forwards with them on the cotton. The seeds were loosened and fell on one side while the cotton fell on the other side in a long web. Then the dirt was picked out by hand. An instrument more widely in use in the period under consideration was a *churka* which consisted of "two rollers set in a wooden frame, with a small interval between them. These are turned with an ordinary handle, the motion of the one being communicated to the other by a sort of endless screw. The cotton is passed between these rollers, the staple thus being separated from the seed."[73] The churka was more efficient and easy to work than the foot-roller, but on the one hand the wool was produced in a confused and matted condition, which was a source of endless trouble to carders, and on the other hand it was more expensive than the foot-roller. The East India Company attempted to introduce the American saw-gin which both separated and cleaned, the thresher and other foreign instruments, but outside the farms of the persons sent by the Government to popularise them, the new contrivances were little appreciated.

In connection with cleaning, a curious practice has been described by Mr. Finnie, an American planter, who calls it the "devil's dust system". In Tinnevelly the seed cotton was sold by the cultivator to the broker. The latter got much of the dirt and rotten cotton picked out " not to make the cotton better, but because the rubbish chokes the churka and prevents it from working." Then the cotton was separated from the seed and the adulteration commenced. The bad cotton seed which had previously been removed was beaten with a stone and then passed through the churka. The good and bad cotton and a number of rods were then taken into a very small room by two men. "Then they both set to work and whip the cotton with their rods in order to mix the bad and good so throughly together that a very tolerable article is turned out. If after all this "bedevilling", the broker can get a living price for his article, he delivers it to the chitty just as it is, with the addition of only a few seeds. Usually, however, he is shaved so close as to be driven to resort to other means

73. Wheeler, *op. cit.*, pp. 19-20.

to realise a profit. Accordingly he adds a handful or two of seed to every bundle, or lets it get in by accident, and in this state the cotton is finally delivered to the chitty."[74] Mr. Finnie, however, must have generalised from one or two instances, for Mr. Thomas, the Collector of Tinnevelly, asserted that cotton was not adulterated by design, that agents performed their duties scrupulously and that good cotton was often exported. Indeed the cotton of Tinnevelly was considered to be one of the best.

The Company and Cotton Cultivation.—Cotton was one of the few crops which the Company was interested in other than as a source of public revenue. Till the close of the eighteenth century scant attention was paid to the growth of cotton and very little of that article was exported from India. But with the rise of Lancashire's cotton industry, the Company had a direct interest in the encouragement of cotton cultivation in this country. From that period a series of inquiries were instituted into the condition of cotton culture in the different provinces of India, and into the possibility of improving the quality and quantity of the crop. Several experts from Europe and America were brought over by the Company, and numerous attempts were made to introduce exotic varieties. Experimental farms were established under Government supervision, to demonstrate and popularise American methods, advances for cultivation and rewards for excellence were offered, and seeds from Egypt, Bourbon, Brazil, Sea Island and North America were distributed among the ryots.[75]

In 1788 the Court of Directors called for 500,000 lbs. of good cotton, and at the same time ordered the first of the inquiries into cotton cultivation and trade in the Company's territories. Further, attempts were made to prevent adulteration, and screws were introduced to minimise freight charges.[76] In 1790, Dr. Anderson was sent to South India to distribute Bourbon, Mauritius and Malta seeds. He succeeded in introducing Bourbon cotton which became naturalised in Salem, Tinnevelly and Coimbatore.[77] Mr. Hughes, a private planter, helped considerably in achieving this

74. *Ibid.*, p. 27.
75. Despatch from England, 15th March 1839.
76. *East India Company Papers on Cotton, Silk and Indigo*, 1830, p. 5.
77. Wheeler, *op. cit.*, p. 28.
J. H. Heath, *Article on Cotton Cultivation in South India* in the Madras Journal of Literature and Science, Vol. XI, 1840, p. 183.

success, the cotton he sent being considered "a real equivalent for the Bourbourn wool." For a long time Mr. Hughes' "Tinnevelly cotton" enjoyed a great reputation in the English market and was quoted as the best Indian variety, being sold at higher prices than many of the American cottons and 3d. per lb. more than the best Surats.[78] A new machine for cleaning cotton was sent in 1794, and a bounty was offered for the cultivation of foreign cotton. In 1799 the Fort St. George Committee of Reform advocated measures for the improvement of cotton cultivation in the interest of the local manufacturer. The Coast Investment of piece goods was provided mostly from Nagpur cotton which was of a better quality than the country product. The Committee suggested that Commercial Residents should get Nagpur seed and try it on the soils best adapted to it. Should results warrant it, a remunerative price and other encouragement were to be offered, while if the Nagpur plant did not thrive, the local cultivation was to receive every assistance.[79]

At the request of the Court of Directors, a sample of Malabar cotton was sent to England in 1801. The Directors admitted that the article was of good quality, but the sample was insufficient for the purposes of experiment.[80] In 1810 there was a very large export of cotton from India owing to the American embargo. Two years later a questionnaire was circulated among the collectors of the several districts in the Presidency, asking for detailed information regarding the culture and trade of cotton.[81] Soon after, an American, Mr. Metcalfe, was sent to popularize American saw gins in Tinnevelly and the Ceded Districts, the cotton from thence being very dirty. The ryots, however, did not appreciate it, and the attempt was given up.[82] In 1818 there was a proposal to introduce improved varieties of agricultural produce. Mr. Heath, Commercial Resident of Salem and Coimbatore was asked to cultivate Bourbon cotton. After some preliminary difficulties, he met with marked success and in 1823-24 he sent 150,000 lbs. of good clean cotton. The ryots for once found it very profitable and if the policy of encouragement had been followed consistently, Bourbon cotton would have been exclusively cultivated in the country. But at this time the office of Commercial Resident was

78. F. Royle, *op. cit.*, p. 341.
79. *East India Company Papers on Cotton, Silk and Indigo*, pp. 18-19.
80. Letter from the Court of Directors to Bombay, 1st June 1803, para 10.
81. Proceedings of the Board of Revenue, 23rd July 1812.
82. Wheeler, *op. cit.*, p. 28.

abolished—consequent on the cessation of the Investment,—and the Company withheld assistance to the cultivation of Bourbon cotton in those districts. Since the indigenous manufacturers did not require such fine cotton, and there was not an assured demand for it from English merchants owing to the increasing use of Sea Island Cotton, the ryots abandoned its cultivation, and thus most of the land left by Mr. Heath under Bourbon cotton was soon occupied by grain and other crops which were more readily saleable.[83]

Another of the periodical inquiries regarding cotton was instituted in 1819, and Collectors were asked if a reduction of assessment would be of any use in increasing output.[84] Among other measures for improving the cultivation, it was proposed that gold medals, chains, "turbans and jacket chintzes", should be offered as rewards to those who brought the best specimens, and that the revenue should be received in cotton wherever possible. Mr. Randall, Commercial Resident of the Ceded Districts, urged the necessity for active Government support. He declared that "if the weavers and spinners of England were allowed to do as appeared most pleasing to themselves, the manufactures of England never would have risen to such perfection at present. In all the commercial towns and cities of England, very strong and severe laws exist to maintain staple articles, good spinning, and goods of a proper standard, agreeable to known regulations; and personal chastisement, imprisonment, and fine, are inflicted upon wilful offenders . . . . Premiums, patents, and every kind of encouragement are also held out, ... to meritorious persons planning and bringing to perfection new schemes of cultivation, manufactures and commerce".[85] On Mr. Randall's representation, the Government decided to offer Rs. 91/- per candy for a certain standard quality of cleaned cotton from the Ceded Districts, which was in great demand in China, though unfit for the European market. Mr. Metcalfe was sent to Bellary to superintend cultivation.

In the same year four experimental farms of 40 acres each, were started in Tinnevelly, Coimbatore, Masulipatam and Vizagapatam, under the superintendence of the local Commercial Residents. Collectors were asked to afford every assistance for the working

83. J. M. Heath, Madras Journal of Literature and Science. Vol. XI, 1840, pp. 178-180.

84. General Reports, Vol. 27 and 28, p. 343 *seq.*

85. Memoir on Cotton Cultivation, 28th March 1819.

of these farms. In their letter directing the establishment of these farms, the Board of Trade emphasized the point that their intention was not that the Company should ever become directly engaged in cotton culture, but that they merely wished to find out if any of the superior American varieties would grow in the Company's territories, and how far Western methods under expert guidance would be successful here. The experiments would also be the means of providing a good supply of seeds in case the plants found the soil and climate congenial.[86]

Of these experiments, the one in Vizagapatam was the most encouraging.[87] The culture of American cotton at Adoni in the Ceded Districts was also successful, but elsewhere the results were extremely unsatisfactory, though the seed was offered free or at a nominal price and premiums were promised. Often the seeds did not germinate or the season was too dry, and if the plant escaped both these evils insects destroyed the crop.[88] In 1830 the attempts were revived, and in order to provide for the rising demand in Europe for the longer stapled American cottons, the Company procured Georgia and New Orleans seed and at the same time tried to bring Whitney's saw gin into general use. Again circumstances were unfavourable, and the monsoons in particular, seem to have had a special grudge against American cotton. Collector after Collector reported that the season was either too wet or too dry, or the rains came at the wrong time, or the seeds were too old and had become spoilt during transit. Occasionally they managed to secure a crop, which was found to be extremely good in staple, but there was so very little of it, and on the whole the results were disappointing.[89] Meanwhile, in England, the import duty on Indian cotton was reduced from 6% *ad valorem* to 4 d. per cwt. In 1835 some choice New Orleans, Upland Georgian and Egyptian seeds were despatched to India, but what became of them is not clear.[90]

Towards the end of 1835 the Government decided that effective measures should be taken for the improvement in quality and quantity of the various crops for which the country was suited.

86. Letter from the Board of Trade to Govt., 17th May 1819.
87. F. Royle, *Review of the measures which have been adopted in India for the improved culture of cotton*, p. 37.
88. F. Royle, *Productive Resources*, p. 342.
89. *East India Company Papers on Cotton, Silk and Indigo*, pp. 238-249.
90. Letter from the Court of Directors, 15th March 1839.

The Board of Revenue believed that the unsatisfactory nature of the previous experiments was due to the lack of proper information, and Dr. Wight was appointed in 1836 to prepare a report on the state of cultivation and the possibilities of improvement.[91] According to Dr. Wight's report, the yield of cotton was highest in Vizagapatam and Ganjam, Trichinopoly coming next, while in the other districts it was very low. As to the exotic varieties, Egyptian, Upland Georgian and Sea Island cotton were found to thrive in this Presidency, but the last was particularly liable to destruction by insects.[92]

In 1840 ten American planters were sent to India to effect improvements in the methods of cultivation and cleaning, and of these, three were assigned to the Madras Presidency. The chief experiments were at Coimbatore under Dr. Wight, and Government set up a large gin house and machinery for cleaning and packing the cotton which was sent direct to England.[93] Dr. Wight was authorised to buy even 5,000 bales of cotton if the quality was of the required standard. It does not appear that much was accomplished beyond proving that American cotton could be successfully cultivated in certain parts. The first year's experiment was vitiated by an unusually wet season and the planters were discouraged. In 1842 however, the plants revived and yielded tolerable crops. But the American methods were confined to the government farms. The ryots resolutely refused to adopt them though they were offered as much seed as they liked and even promised advance payment before the market price of their cotton was ascertained.[94] The ryots were sensible of the superiority in some respects, of American methods and implements, but considered the expense and labour prohibitive, while the absence of a local demand or of direct orders from Indian merchants was a strong deterrent. The American saw gin was found to be more laborious to work, slower and almost as expensive as the *churka*. The Indian method besides, afforded employment during the off season. One of the planters, Mr. Simpson, went to S. Canara to introduce New Orleans cotton and reported that it was not feasible.[95] Of the ryots he said "they

91. Minutes of Consultation of the Board of Revenue, re: Crops, 17th November 1835.

92. Report of Dr. Wight on the Resources of the Presidency, 23rd November, 1837.

93. F. Royle, *Review of Measures for Improving Cotton*, p. 41.

94. Wheeler, *op. cit.*, p. 56.

95. *Ibid.*, p. 54.

never would regard the planters as cultivators like themselves, but rather looked upon the experiment as some public work undertaken by the sircar which they could not understand, and in which they had no concern."

Dr. Wight, the Superintendent of Government Farms, offered 15 to 20 rupees per candy for seed cotton when the local cotton was selling at Rs. 12 a candy, but there was no response.[96] From Coimbatore he wrote in 1849 that even a reduction of 25% in the assessment was of no avail. At that time Mr. Finnie, an American, was sent to popularize the American saw gin. Wheeler declares that as a patriotic American planter, his object was the non-introduction of the gin. If that was his object, he certainly succeeded.[97] Another gin from Manchester was tried, but this was also unsatisfactory. Mr. D. Lees, one of the planters, was able to raise some New Orleans cotton which fetched a very fair price in England, but stated that an assured market was a prerequisite for extended cultivation. For "they (ryots) always say that I must promise to buy it, since they cannot eat it, as they can their grains, neither can they sell it in the bazar."[98] The experimental farms were given up after ten years, the gin house and machinery being sold to Mr. D. Campbell in 1851.

As the result of the efforts of more than half a century, a great increase in the output of cotton was effected. While in 1805 the imports of raw cotton into the Presidency amounted to Rs. 20,00,000 and the exports to Rs. 1,00,000, in 1850-51, the imports were of the value of Rs. 19,709 and the exports, as we have seen, had risen to Rs. 58,22,790. Of the various foreign plants which the Company tried to introduce, only the Bourbon obtained any appreciable success, being at one time or other grown to a considerable extent in Tinnevelly, Salem and Coimbatore. As for the other varieties, they seldom survived the experimental stage. If they did, the habits and prejudices of the people, and the uncertainty of a ready sale constituted an effective bar to further progress. And in spite of all the exertions of the Government, the quality of cotton, the methods of cultivation and the ryots' implements remained practically the same throughout the period.

96. Royle, *Review of the Measures, etc.*, p. 43.
97. Wheeler, *op. cit.*, pp. 100-102.
98. Royle, *Review of the Measures, etc.*, p. 39.

CHAPTER VII

CATTLE

Many of the operations of cultivation dealt with in the previous chapters required the assistance of cattle. They were employed in ploughing, lifting water, threshing, transport of produce, etc. They supplied milk, curds, butter and ghee which formed necessary ingredients of the diet of a population which was largely vegetarian. Further, their hides were utilized for thongs, water-buckets and other articles. Cattle thus constituted the most valuable part of the ryot's stock.

The Different Breeds of Cattle

At the beginning of the eighteenth century, the finest cattle were found in Mysore, Nellore and Coimbatore. The Mysore breed were celebrated throughout the country for their hardiness and powers of endurance. They provided excellent draught bullocks, and it was by crossing these with the Nellore breed that the well-known gun carriage or kharkana bullocks were obtained. These bullocks have been known to draw carriages at the rate of eight to ten miles an hour. The animals were by no means tall, being 12 to 15 hands[1] in height, but very spirited,—too spirited in fact. They were so fierce that it was dangerous to approach them unless the herdsman was present.[2] In the case of this breed, even the cows had to be managed by a nose-string. The cows of Mysore were also excellent and second only to those of Nellore.

The existence of these fine cattle encouraged the Government to make probably the only systematic attempt in the period to improve the breed of cattle. A breeding farm had indeed been in existence in Mysore for a very long time, and the Amritmahal breed, as it was called, was the result of careful selection and crossing practised for ages. "Under the native rulers, it seems to have attained its greatest perfection"; but after the death of Tippu, the management of the farm was transferred to the new ruler of Mysore, when it was neglected. The result was a marked deterioration in the breed and consequently the Madras Government took

1. A hand is about 9 inches.
2. Buchanan: *op. cit.*, Vol. I, p. 301.

over the Hunsoor farm.[3] Its efforts were attended with considerable success, and for a long time the Amritmahal breed enjoyed great repute throughout India. After forty years' labour, however, the scheme was abandoned on account of expense, upon the recommendation of the Financial Committee (1858) and the animals were sold away. A year later the experiment was renewed, but the finest bulls and cows had disappeared and were never recovered.[4]

The tall and short-horned cattle of Nellore constituted another famous breed.[5] Cattle rearing was for long a main and even an all-absorbing occupation of the people of Nellore, and we hear that they devoted so much attention to it that cultivation was neglected.[6] Mr. Travers, the first Collector of the district, attributed the importance attached to cattle breeding to the insecurity of the cultivator's rights in pre-British days. In his Settlement Report for Fasli 1211 (1801-2) he says: "Having been repeatedly deprived of their cultivation when brought to maturity, experience pointed out to the inhabitants of these districts the want of security for the fruits of their labour. As a substitute affording them this advantage, their attention and labour have been given to the rearing of large herds of black cattle of a superior breed much in demand which they secured from the grasp of the renters by moving them from their villages to those neighbouring."[7] And "from this cause a large portion of their cultivated lands have been appropriated to pasture." Mr. Travers encouraged the ryots to return to agriculture which he declared was more profitable than cattle-breeding. This may have been the case in the early years of the nineteenth century, when agricultural prices ruled high.[8] We have no accounts of the expenses and profits of cattle rearing, but it is doubtful if cultivation was always better paying than the former. The people of Nellore, at any rate, found breeding more profitable and continued to rear cattle for the markets of Madras and elsewhere, as well as for agricultural purposes, "making this an object of greater attention than the cultivation of their lands."[9] Even at the close of

3. Watt: *Dictionary of Economic Products,* 1890, Vol. V, pp. 666-7.
4. *Report of the Agricultural Commission,* 1888, p. 230.
5. Pharoah's *Gazetteer,* p. 560; Nellore *District Manual,* p. 72.
6. General Reports, Vol. 14, p. 72.
7. Proceedings of the Board, 15th July 1802;
   Mr. Travers' Settlement Report for Fasli 1212.
8. See Chapter on prices.
9. General Reports, Vol. 4, p. 72.

the half century cultivation in several Taluks scarcely deserved the name, being "a mere speculation for the cattle."[10]

Nellore was the place for milch cows par excellence. We have no information about the yield of milk at the time, but at a later period it was stated that "some of them have been known to yield 18 quarts of good rich milk in the twenty four hours and they rear a calf at the same time."[11] It could not have been much less in the earlier period. The cows commanded a high price, a fine cow fetching Rs. 200 and even Rs. 300. The Nellore cattle were a noble and heavy-looking big breed, usually 15 to 18 hands in height. The bullocks were noted for their docility and capacity for endurance. They were able to draw loads of 1,500 to 2,000 lbs., which was much more than most other breeds could do. These bullocks were employed chiefly in ploughing and carriage, but not for the pack as they were too big. Good bullocks of the Nellore breed were sold at Rs. 150 to Rs. 350 a pair, and ordinary ones at Rs. 100 to Rs. 150.[12] The cattle were reared mostly in the northern part of Nellore, particularly near Ongole, and though they were found even in the Kistna district, it generally happened that if they were taken outside Nellore, the breed degenerated rapidly unless very well fed and cared for.[13] At the middle of the nineteenth century they were still one of the very finest cattle in the Presidency.

Besides the cattle of Nellore and Mysore, mention may be made of the breeds of Coimbatore, Salem, Guntoor and Poonganoor (in N. Arcot). The Kangyam cattle of the Coimbatore district are excellent, and perhaps second to none at present, but we do not hear much of them in the first half of the nineteenth century. Buchanan makes no specific reference to them, but merely states that Coimbatore cattle were of a good breed. We hear that fine cattle were reared at Avenashi and Kollegal and sent to all parts of the Presidency.[14] Even Pharoah's Gazeeteer makes no mention of Kangyam. The bullocks and cows, according to the Gazetteer, were 'exceedingly good' and the best were found in the Kollegal,

10. Letter from J. W. B. Dykes to the Board, 12th October 1865.
11. J. Short, *op. cit.*, 1874.
12. *Ibid.*
13. Pharoah's *Gazetteer*, p. 145.
14. Letter from the Collector of Coimbatore to the Board, 30th October 1835.

Satyamangalam and Andioor Taluks (p. 457). The Kangyam cattle must have risen to prominence at a later period. The price of Coimbatore cattle varied from Rs. 40 to 50 a pair for large animals to Rs. 20 to 40 for medium ones.[15] The cattle of Salem were small but extremely active and fiery and resembled those of Mysore. They proved very well-suited for light carriage, while the sturdier ones were employed in agriculture too. Working bullocks were sold for Rs. 35 to 70 a pair and carriage bullocks for Rs. 120. The cows were moderately good and fetched Rs. 20 to 35 each. Large numbers of these cattle were bred and exported to Madura and Tinnevelly and it was believed that even more could be raised if there was a sufficiency of water.[16]

The Guntoor breed resembled that of Ongole in several respects. The cattle had a considerable reputation and were taken for sale to the neighbouring districts. The Palnaud division of Guntoor was "a country remarkable for its valuable breeds of cows, and from the excellence of its grazing land, annually visited by great numbers of cattle of all descriptions from the adjacent districts, including even the territories of the Nizam".[17] At the close of the half-century, a pair of large bullocks cost Rs. 70 to 140.[18]

In most of the other districts the cattle were small and stunted and generally in a very poor condition due to the scarcity of fodder in the dry season. In Masulipatam there was a small breed which was sold for about Rs. 15. Cuddapah and Bellary imported cattle for more important purposes from Nellore. In Kurnool it was stated that there was no breeding whatsoever.[19] The cattle of Madura were neither many nor good,[20] but a few fine horned cattle were reared in the north and north west.[21] In Ramnad there were large and fine breeds at the time of Col. Fullarton, but they seem to have deteriorated, and at the end of the half-century they are described as ill-fed, weak and small. Similarly, Tanjore which was "over-stocked with sheep and cattle" towards the close of the eighteenth century, was left later with a wretched breed, "miser-

15. *Ibid.*
16. Pharoah's *Gazetteer*, p. 496.
17. General Reports, Vol. 32, p. 22.
18. Pharoah's *Gazetteer*, p. 66.
19. *An Account of Kurnool*, p. 94.
20. Letter from the Collector of Madura to the Board, 23rd Aug. 1835.
21. B. S. Ward, *op. cit.* p. 17;
Pharoah's *Gazetteer*, p. 410.

ably small and degenerate."[22] And this was the condition also in South Arcot and Trichinopoly. The cattle of Tinnevelly were few in number and mediocre in quality, a bullock fetching Rs. 10 to 35.[23] In Vizagapatam and Rajahmundry there was a small, inferior but hardy breed employed mostly as pack bullocks.[24]

The cattle of Malabar were very small. Buchanan declared that they were indeed the most diminutive creatures he had ever seen. Cattle breeding was unknown and the chief working cattle were imported from Mysore, Salem, Coimbatore and Gujerat.[25] In Cochin there was an absolute want of working cattle and much of the work was performed by buffaloes or by manual labour. The cattle of Canara were mostly of an inferior breed, and none of them were fit for carriage, being no larger than those of Malabar.[26]

The price of good cattle ranged from Rs. 500 to Rs. 70 or 50 a pair according to the breed, but the great majority of cattle used by the agriculturists were small, weak and stunted animals costing a few rupees. A single bullock employed by the poorer ryots usually cost about 4 or 5 rupees.[27] In North Arcot ordinary bullocks were sold for Rs. 25 to 30 while well-bullocks fetched Rs. 50 to 60.[28]

There are no accounts of the proportion of cattle to the area under cultivation. Occasionally we get a statement of the number of cattle in a district as in Place's Report on the Jaghire, or Thackeray's Report on Malabar, Canara and the Ceded Districts, but there are no means of comparison between the different districts at any particular period.

Fodder

The general complaint was that insufficient attention was given to the provision of fodder in most parts of the country. Cattle were badly fed, especially in the hot season when men and animals

22. S. Appaswamy Mudaliar, *Notes on Indigenous Breeds of Cattle and their improvement.*
23. Letter from the Collector of Tinnevelly to the Board, 17th Oct. 1835.
24. Pharoah's *Gazetteer.*
25. Letter from the Collector of Malabar, 9th Sept. 1835.
26. Buchanan, *op. cit.,* Vol. II, pp. 56, 74, 148.
27. Place's Report on the Jaghire, 6th June 1799;
Annual Report on Dindigul, 20th Feb. 1794.
28. Letter from D. Robinson, Collector of North Arcot to the Board, 17th August 1865.

were on "short commons".[29] The neglect of cattle has been attributed to the fact that the cow is considered sacred to the Hindus, and hence there was no attention paid to the fattening of cattle for food.[30] Though cattle may not be fattened for food, there could be no sentimental objection to feeding draught and pack cattle well. The real reason was the poverty of the Indian ryot. He himself lived on a little rice with a few herbs and greens or vegetables. And, as has been said, he expected his cattle also to live as best as they could, picking in the pasture of the village. Mr. John Short in a report states: "In most towns and villages the cattle are driven out at all seasons to roam about, but more frequently lick the dust and return home with the same empty stomach that they started with to receive perhaps a few handfuls of straw or rubbish just sufficient to sustain life."[31] But this was not universal. The authority just quoted presents an entirely different picture elsewhere in the same report, and indeed it is generally stated that the working cattle were always well fed as far as the ryots circumstances allowed.

In Nellore, working cattle were kept in the house during the dry season and fed on straw or jonna choppa and grass, and this was generally continued throughout the year. In the height of the hot season straw was given to the cows and ordinary cattle as well, but the supply was reduced as soon as grass sprang up after the first summer showers. During the rains, working cattle also received the husk and refuse leaf of horsegram, greengram, black-gram and Bengal-gram. At the period of ploughing jonna and cotton seeds and also korra straw were given to them. In fact as each crop was harvested the stalk, husk, etc., were given to the cattle.

Fodder crops grown as such, were less abundant than at present, but the cultivators in all the districts were aware of their value and occasionally raised them when feasible. Cholam straw was generally the main article of cattle diet, but paddy, samei and ragi straws were also given. In the Kangyam division of Coimbatore, where the best cattle were reared in the later period, cholam and occasionally cambu were regularly cultivated by means of well irrigation between February and March. There was no

29. Dubois, *Hindu, Manners, Customs and Ceremonies,* (1823) ; Translated by A. K. H. Beauchamp, 1897, p. 87.
30. Buchanan, *op. cit.,* Vol. I, p. 86.
31. J. Short, *op. cit.*

fodder in the Nilgris during the dry months while in the other months wild flax, korali and other straw were provided. In South Arcot, Tanjore and Trichinopoly, fodder was insufficient and poor in quality, but in Tinnevelly and especially in Madura, grass, straw, cholam stalks, cotton seed etc., were given to the cattle.[32] In Kurnool also, the "steam-engine" theory was understood. Cattle were fed with pottu, straw and horsegram between April and June, and later with cotton seed. The richer ryots provided artificial food all the year round, but the poorer ryots could afford it only during the cultivation season. Near Madras milch cows were fed entirely on grass while cattle doing hard labour received grain or pulse.

The cows of Malabar were let loose all day on the pasture (such as existed) and at night were fed on cut grass, with the addition of oil-cake if the owners were Brahmins. Rich farmers gave their cattle grass for 4 months and straw for the remaining 8 months. Others were able to supply straw for only about 6 months.[33] The cattle of Canara were fed on a bad hay with boiled rice husks morning and evening, supplemented by rice straw at night, between November and December. During the dry season working cattle in the Haiga received pottu as well as hay or straw, and buffaloes were supplied with cake of the coconut seed. Buchanan states that the people were unaware that seasamum cake could be utilised in the same manner.[34]

In certain parts, cattle were well cared for. Mr. John Short who gives two contradictory views in the same report, observes in one place that most ryots and breeders took very good care of bull calves particularly. They usually selected a bull-calf as a pet, purchased another to match it and led them about with fancy rope halters. While the farmer was occupied with his work in the fields, the calves grazed close by. When taken home they received all the wastings of rice, conjee water, rice left over, ragi pottage, etc.; all reserved for them and also some fresh grass. At times the wife led out the calves daily to feed on the grass which covered the bunds separating the rice fields. Further, good grass, cholam, ragi stalks or straw were given to them frequently. As they grew, some oil cake, rice bran and cotton seeds were given. Thus they were tended till five years old when they were trained to the yoke.

32. Letter from the Collector of Madura to Gov. 23rd Aug. 1835.
33. Buchanan, *op. cit.*, Vol. II, pp. 74-5.
34. *Ibid.*, p. 56.

Elsewhere, Mr. Short asserts that the Indian agriculturist is very careless in the treatment of cattle. "To the generality of natives, a calf is a calf no matter what sort of animal it may be". He was satisfied that eventually it would "scratch the soil with his crooked plough" and "why, he argues, should he trouble himself about improving his cattle which will cost him money when he has none to lay out, while by following the practice of his forefathers, things take their natural course."[35]

The condition of the cattle was unsatisfactory on the whole. The working cattle were well-fed and housed with the ryot, but for the rest there was little attention to housing, etc.[36] The high mortality among cattle so frequently referred to, proves that the cattle had little power of resistance to disease. If an epidemic attacked them whole villages were denuded of cattle.[37] Cattle died in large numbers in times of scarcity as well as during heavy storms. At the end of the dry season the cattle became very weak and in some districts were scarcely able to crawl, though they grew strong again in the rainy season.[38] Some even of the cattle of Nellore were so weak that they could not drag the Porto Novo plough[39] (110 lbs.). But the Collector must have seen some of the worst specimens, for generally Nellore cattle were strong.[40] The cattle in South Arcot, Tanjore, Trichinopoly, and Madura were most miserable creatures. A farmer would buy them just before the cultivation season began and resell them immediately his work was over at a lower price. The buyer in turn employed them for his cultivation and then sold them at a still lower value, and so on.[41] The reason was, that they were considered too weak to serve longer than one season, and in fact they were very lean and wretched looking animals which succumbed immediately when attacked by any disease.

In some places cattle were penned in very small dirty stalls—stalls so dirty that even the cattle were "distressed" and preferred to "stand a great part of the night rather than lie down". In other parts, however, particularly Kurnool and Canara, cattle were hous-

35. J. Short, *op. cit.*
36. *Report of the Agricultural Commission*, 1888, p. 183.
37. General Reports, Vols. 46-49, pp. 246-7.
38. Buchanan, *op. cit.*, Vol. III, pp. 56, 148, 241.
39. Proceedings of the Board, 1840, p. 6081.
40. Nellore District Manual.
41. S. Appaswami Mudaliar, *op. cit.*

ed with the ryot, while in Nellore pandals were erected for them, for protection from sun and rain.[42]

Pasturage

In most of the districts pasture was exceedingly scarce, and this was one of the main reasons for the poor condition of the indigenous cattle. Gen. R. Strachy declared that India is a land without pasture.[43] Pasture was certainly quite inadequate to the needs of the cattle. In fact, except in Nellore, Guntoor, Coimbatore, Mysore and Kurnool, there was no pasture worth mentioning.

In the wet taluks of the Nellore district where practically all the land was occupied, most of the dry lands were held by ryots as pasture. Here a pullary or pasture tax on each head of cattle yielded a considerable revenue to Government. Where any extent of waste lands was available there was no reservation of land as pasturage. When the pasture of the village became insufficient during the hot weather, all except the working cattle, and if need be, some, even of those, were sent away to waste or jungle tracts. For this purpose the ryots would club together and send their cattle in large herds. The pasture lands would be engaged previously, for the season, either at a fixed rent for the ground, or at so much per head of cattle, according as the herd was large or small. In January and February the cattle would be brought back to the villages and allowed to graze on the paddy fields immediately after the harvest. As the harvesting period advanced more pasture would be available, and then jonna and other crops would be reaped affording additional pasture.

Meanwhile the working cattle retained in the villages would be pastured on the waste and those dry fields set apart for pasture. These fields would be kept clear for about two months to allow the grass to grow before sending the cattle. Further, working cattle received choppa, straw, etc., as has been said before. When the hot weather set in again, the other cattle would be sent away to the jungle once more. The payment for grazing for a full grown bullock was Re. 1 per season and for the herdsman As. 8 or Rs. 1-8-0 altogether. Sometimes the cattle were sent to the hills, the Eastern

42. *An Account of Kurnool,* p. 115;
Nellore *Dist. Manual,* p. 416.

43. Gen. R. Strachey, *Lecture before the Royal Institute of Great Britain,* 1877.

Ghats, instead of to the jungle, and sometimes every ryot held part of his puttah lands as pasture. In taluks where there was a sufficiency of pasturage all the cattle were kept in the villages and let loose to graze on the grass and then on the stubble as each crop was harvested. A piece of land where 200 cattle could graze for 4 or 5 months fetched Rs. 35 to 50.[44] In all cases the working cattle received the pick of whatever was available and then the other cattle were allowed to feed on what remained.[45]

Pasture in Coimbatore was not very considerable, but more than generally supposed. In some taluks several fields were set apart as permanent pastures, natural or sown. Pasture lasted for several years after which they were ploughed and resown with grass or taken up for cultivation. And it was sometimes found that pasture was a better proposition than cultivation. In the hot season, however, pasturage became very scanty. It was believed generally by the inhabitants that formerly there were extensive and excellent pasture lands.[46] But according to Buchanan and Mr. Campbell, Collector in 1832, there does not seem to have been any great amount of pasture even in the earlier days.

Pasturage in Kurnool was abundant except for a month or two in the hot weather. For the greater part of the year cattle were sent away to large tracts of pasture land at As. 2 per head, per month. Pasture in Kurnool seems to have been advantageous, for it is said that some of the hill slopes yielded about Rs. 400 or 500 per acre annually. Cattle were sent there from the Nellore and Kistna districts. Here too, there was a pullary tax which was "productive of great inconveniences".[47] Palnaud has already been referred to as a country remarkable for the excellence of its grazing land which cattle from all the neighbouring districts visited.

For the Presidency as a whole, however, pasture was remarkably scanty, and many of the cattle practically starved during the hot weather. All that the ryot could do was to keep his cattle alive on leaves and a little grass and herbs. "In good years he just succeeds; in bad years, the weakly ones die of starvation. But then come the rains. Within the week, as though by magic, the burning sands are carpeted with rank luscious herbage, the cattle *will* eat and over-eat, and millions die of one form or other of cattle

44. Letter from the Collector of Nellore to the Board, 11th Oct. 1820.
45. Nellore *District Manual*, pp. 412-15.
46. Coimbatore *Dist. Manual*, pp. 198-200.
47. *An Account of Kurnool.*

disease, springing out of this starvation, followed by sudden repletion with rank, juicy immature herbage."[48] The ryots did their best for the cattle during their annual "Lent", but their best was not much.

The inadequate extent of pasture became further limited when the British Government assumed a monopoly over forests and pasture. The Fifth Report refers to the existence of "free unbounded common pasturage" and it has been stated that "from time immemorial the produce of the jungle had been enjoyed by the inhabitants of the neighbouring villages without cost, and without restriction,"[49] until forests were reserved by the Company. But the system was not a British innovation. A pullary or pasture tax had long been in existence in some of the chief breeding districts, and local rulers occasionally placed certain restrictions on the utilization of forest products, but it was confined only to certain tracts and periods. The British extended it to the whole Presidency and rendered it more rigid than before. The Madras Forest Committee stated that it was remarkable, "even if it be impossible to prove any connection between the two facts, that the cattle in places where the ryots have always paid for their grazing as in Nellore, Guntur, and in the Dharapuram Taluk of Coimbatore, are immensely superior to any other cattle in the Presidency" and added that these were the only places where systematic breeding had been attempted.[50] The Committee seem to think that the levying of a tax was the cause of the fine breed, but it is more probable that the existence of good cattle and pasture for which there was great demand, rendered the levy of a tax advantageous to Government. As a result of the monopoly the difficulties of obtaining pasture increased greatly.

From the evidence available, it does not appear that there was any marked improvement (except in the case of Amritmahal cattle) in the breed of cattle during the period under review. Good breeds of cattle at the end of the period were still confined to Mysore, Nellore, Ongole and Coimbatore. In Tanjore there was a positive deterioration probably owing to the increased attention paid to paddy cultivation and the consequent neglect of cattle breeding. The cattle in most of the other districts are generally referred to as small and wretched.

48. A. O. Hume, *Agricultural Reform in India*, p. 27.
49. *Report of the Madras Forest Committee*, p. 3.
50. *Ibid.*, p. 4.

CHAPTER VIII

IRRIGATION

Water is good, water indeed is fatness.....
May the strong rain of those who scatter sweetness come helpful unto me with breath and vigour.....
Here, O ye waters, is your heart. Here is your calf, ye holy ones,
Flow here, just here, O mighty streams whither I now am leading you.

Atharva Veda, III, 13.

The importance of irrigation in a tropical country like India can hardly be over-rated. Subject as India is to monsoon rains, often precarious, water is as precious as gold itself. Indeed it is considered to be "liquid gold" in the East.[1] As Sir Charles Trevelyan put it, "irrigation is everything in India. Water is more valuable than land, it increases its productiveness at least six fold and generally a great deal more, and it renders great extents of land productive which otherwise would produce nothing or next to nothing."[2] It is an oft-repeated saying that given a sufficiency of water (and manure), the ryot would grow a crop even upon the stones.[3] Water is the "universal solvent," the sovereign remedy for all the economic ills of the country, declared Lt. Col. A. Cotton in his treatise on Public Works in India.[4]

The value of an assured water supply has been recognized from the earliest times, as may be seen from the above-quoted prayer of the Vedic farmer for the success of his irrigation projects. Throughout the ages the provision of irrigation facilities was regarded as a prime obligation of the state, and kings and princes

1. Godavari *District Manual*, 1878, p. 164.
2. Samaddar, *Lectures on the Economic Condition of Ancient India*, p. 15.
3. Voelcker, *op. cit.*, p. 95.
4. Cotton, *Public Works in India*, p. 238.

NOTE:—The District Manuals and the Madras Administration Manual have been referred to frequently in this chapter because many of the observations are applicable to the period under consideration.

vied with one another in constructing these "good works"; particularly rulers without heirs, for they constituted one of the *sapta-santanas.* Even during the anarchic period immediately preceding the establishment of British rule this duty was not "wholly omitted."[5]

In the Madras Presidency where the monsoon rains are generally inadequate, artificial irrigation is an imperative necessity. The westernmost districts of Malabar and Canara, and parts of the Northern Circars were the only tracts which presented no serious problems, obtaining as they did a fairly regular and copious supply of water. But for the rest of the Presidency, the nature of the cultivation depended largely on the extent of irrigation facilities.[6] Tanjore, considered to be one of the richest spots on earth, owed its prosperity entirely to the remarkable network of irrigation channels that covered the country. According to one authority, "for the most part, the soil is naturally poor and it is irrigation alone which makes the province such a scene of fertility."[7] This view is corroborated by Captain A. T. Cotton in his report on the Irrigation of Rajahmundry dated 12th August 1844.

The Sources of Irrigation

The various sources of irrigation in the Presidency are rivers, reservoirs, tanks and wells. The great perennial rivers that flow across the peninsula from the Western Ghats are of the highest utility, especially in their deltas. For the greater part of the year, their low freshes provide a regular supply of water, while during the monsoons an immense quantity is available. The flood waters of the rivers were hardly utilized till towards the close of the nineteenth century, but previously there were numerous canals of the perennial type. An *anicut* or dam was constructed across the width of a river and the water led off by channels to the adjacent country. Such were the irrigation systems dependent on the Cauvery, the Godavari, Tamraparni, Noel, Tungabudra, Amaravati, Vigay, Pennar etc. These works varied greatly in magnitude and value. Some of them, supplied by the larger rivers, irrigated a thousand acres and more; others barely five acres.[8] There were single channels leading from the Cauvery more than 30 miles long,

5. *Report of the Madras Public Works Commission,* 1852, p. 3.
6. *Madras Administration Manual,* 1886, p. 19.
7. Pharoah's *Gazetteer,* 1852, p. 346.
8. *Madras Administration Manual,* 1885, p. 389.

irrigating a hundred villages and more, and yielding a revenue of 1½ lakhs.[9]

In some districts, the facilities of river irrigation were greater than in others. Tanjore was the best favoured. The deltaic lands which were so fertile, were irrigated almost entirely from the river.[10] In Madura and Dindigul, the chief sources of water supply were the numerous channels from rivers and streams.[11] The resources of Rajahmundry were for a long time undeveloped, in spite of the splendid potentialities of the Godavari, but with the construction of the Anicut in 1847, cultivation increased by leaps and bounds. Trichinopoly depended greatly on the Cauvery Anicut and the New Iyen Vaykal, while Coimbatore was supplied largely by river channels.[12] South Arcot was also favourably situated with regard to river irrigation, and to a certain extent, Tinnevelly. On the whole, rivers supplemented the monsoon rains to a very considerable degree.

Where irrigation from rivers was not feasible, tanks and reservoirs constituted the mainstay of the ryot. Tanks abounded in all parts of the country. The larger tanks were not excavated but formed by constructing bunds wherever natural facilities existed, as across valleys, round depressions, etc. A necessary feature of tanks was the sluice or vent which acted as a safety valve during the monsoon. In Bellary, Cuddapah, Nellore, Coimbatore and the Circars, much of the wet cultivation was carried on by means of tank irrigation. Some of the tanks were rain-fed and hence supplied water for a limited length of time in the year and some were supplied by channels.[13] Some again, were mere puddles, irrigating one or even half an acre precariously, while others were very extensive, with banks thousands of yards in length. The Veeranum Tank in South Arcot which still irrigates thousands of acres, supplied 149 villages in 1850 and provided a revenue of Rs. 1,14,500.[14] The Wodiarpalayam taluk of Trichinopoly contained the largest tank in India, about sixteen miles in length, but by the middle of the

9. *Report of the Public Works Commission*, 1852, p. 6.
10. Tanjore *District Manual*, p. 341.
11. Madura *District Manual*, Part V, p. 53.
Hodgeson, Report on Dindigul, 1808, p. 17.
12. Coimbatore *District Manual*, p. 202.
13. *An Account of the Province of Ramnad*, 1836, J.R.A.S., Vol. III, p. 181.
14. *Report of the Public Works Commission*, p. 6.

nineteenth century, it had ceased to work and remained only as a magnificient ruin.[15]

In Madura there were two large tanks, the Rasingamangalam tank which was 9 miles long and 1 to 2 miles broad, and the Periakulam tank, 7 miles in length.[16] The Caveripak tank mentioned by Buchanan yielded a revenue of Rs. 50,000 and the Chembrumbakum tank in Chingleput irrigated 58 villages. Other large tanks were those at Mamundoor in North Arcot, Cumbum in Cuddapah, Cunningherry in Nellore and Bapatla in Guntur. Such tanks however, were not numerous, the majority of tanks in South India being less than half a mile in length and yielding hardly Rs. 5,000 each as revenue, while many yielded Rs. 1,000 and even less.[17]

The larger tanks were generally provided with a waste weir or Calingulah to protect them in case they became too full. The Calingulahs were 30 feet long or more, according to the capacity of the tank, and were constructed several feet lower than the rest of the bund, and paved with stones sloping downwards so as to allow the surplus water to escape. But at the same time, a sufficiency of water was ensured by building a temporary embankment of straw, mud and sticks,[18] which was removed immediately there was any danger to the tank. During rains these Calingulahs were watched incessantly, for when large tanks gave way whole villages were swept away.

The last, but by no means the least important, means of irrigation were wells, on which the cultivation of more than one-fourth of the total irrigated area depended. Wells were in existence from time immemorial, and were almost invariably constructed by the agriculturists themselves. The rocky sub-soil of the greater part of the Presidency rendered well-construction difficult and expensive,—the average cost being seldom less than Rs. 100 per acre,[19]—and yet the ryots had built innumerable wells all over the country. In a few districts indeed, such as Tanjore and Cuddapah, well-sinking was comparatively easy, wells being "merely holes dug in the sandy soil between the banks of the large rivers,"[20] called Doruvus.

15. Pharoah's *Gazetteer*, p. 338.
16. J.R.A.S., Vol. III, p. 182.
17. *Report of the Public Works Commission*, p. 7.
18. Buchanan, *op. cit.*, Vol. I, p. 3.
19. *Indian Irrigation Commission Report*, Vol. I, Part I, p. 51.
20. Proceedings of the Board of Revenue, 23rd April, 1840, and 15th Nov. 1824.

Even in Cuddapah, in certain parts large wells cost Rs. 100 to 800.[21] In Tinnevelly the expenses of digging a well varied from Rs. 2 to 200, according to the nature of the soil and the kind of well. But in most of the other districts the cost was much higher. In Guntoor it was Rs. 50 to 400,[22] and in Coimbatore, the expenses ranged from Rs. 150 to 300.[23] In Trichinopoly, the cost was very high, and it averaged between Rs. 500 and 600.[24]

But in spite of the heavy charges and the uncertainty attending it, well-construction was undoubtedly worth while, and there were thousands of wells even in districts which afforded few facilities.[25] As against tanks which often dried up, the advantage of wells was the certainty of supply. Hence tobacco, chillies, onions and other garden crops which required a constant supply of water were raised largely by means of well irrigation. In Coimbatore, wells were considered to be the very "heart and life of the district," and the "mainstay" of the ryot as well as of the revenue.[26] In some parts however, there were comparatively few wells. Vizagapatam had no wells properly speaking, but only a few pits whence the ryots obtained water for tobacco and vegetables.[27]

The methods of raising water from wells were extremely simple and they were the same throughout the period.[28] Cattle power was largely employed, the most common method being the water-wheel. A pair of oxen moving up and down an inclined plane raised and lowered a skin bucket suspended over a roller-pulley. By this method the cost of irrigating a dry grain crop ten to twelve times amounted to Rs. 20 to 24 per acre. Another common contrivance was the *yettam* or *picotah*, which is still seen in many gardens and fields. Water was raised in a bucket by a man walking up and down a balance beam, moving on a pivot, to the end of

21. Letter from J. R. Cockerell, Collector of Cuddapah to the Board, rd Oct. 1865.
22. Sullivan's Report to Govt., 28th Dec. 1840.
23. Robertson, *Report of a Tour in Coimbatore*, 1878, pp. 13-14.
24. Benson, *Report of a Tour in Trichinopoly*, 1879, p. 63.
25. Lt. Newbold, *Some Account, Historical, Geographical and Statistical, f the Ceded Districts*, Madras Journal of Literature and Science, Vol. X, 339, p. 121.
Pharoah's *Gazetteer*, p. 86.
26. E. B. Thomas, Settlement Report for Fasli, 1226.
27. Proceedings of the Board of Revenue, 9th April 1840.
28. Buchanan, *op. cit.*, Newbold, *op. cit.*, M.J.L.Sc., Vol. X; p. 121.

which the bucket was attached.[29] In some parts a *capily* was used by which two teams consisting of a man and a pair of bullocks could supply half an acre with water for rice cultivation. In Malabar, a machine called a *chakram* was employed for draining fields, and in other parts, a basket suspended by four ropes.[30] All these instruments for raising water were very ingenious, simple and effective, but they involved an enormous wastage of labour and of time.

Early Irrigation Works

The irrigation system of the country owed much to the early Hindu kings who gave an important lead to the construction of great irrigation works. At the commencement of the Company's regime, there existed a vast number of channels, tanks and reservoirs,—many of them in working order—which bore eloquent testimony to the attention that was paid to this fundamental requisite of agriculture. "Almost every catchment basin, however small, still bears traces of having been bunded across, and in many instances this was done in order to secure a crop of paddy on a few acres of stony ungenerous soil, to which all the fostering care of the British administration has failed to induce cultivation to return."[31] Besides these, there were a few major works by which the waters of such large rivers as the Cauvery and the Tungabhudra were utilized. Though they were not perfect from a modern standpoint, they gave excellent service, and such as they were, excited the admiration of all who saw them.[32] The wonder was that at that period such extensive works could be conceived and carried into execution at all, and the conclusion was that their skill must have been "intuitive."[33] Some of these constructions were very ancient indeed, and still in working order at the close of the eighteenth century, in spite of continued neglect, especially during the period of Mohomedan rule.

The most notable of the old irrigation works was the Grand Anicut across the Cauvery, "the greatest engineering work carried out in India before British rule began."[34] According to tradition, it

29. Newbold, *op. cit.*, M.J.L.Sc., Vol. X, p. 121.
30. Buchanan, *op. cit.*, Vol. I, p. 255, Vol. II, p. 92.
31. Chingleput *District Manual*, p. 209.
32. *Fifth Report*, Vol. III, p. 133. Nellore *District Manual*, p. 658.
33. Chingleput *District Manual*, p. 210.
34. *Indian Irrigation Commission Report*, Part I, Vol. I, p. 9.

was constructed by the Chola kings of the second or third centuries A.D. It was probably not so early, but at any rate it could not have been later than the fifth century.[35] It consisted of a dam of rough stonework across the entire width of the Cauvery, a 1000 feet and more in length, 40 to 60 feet broad and 15 to 18 feet high,—certainly a remarkable example of skill, considering the limited and imperfect equipment at their disposal. It served its purpose for centuries, and rendered Tanjore comparatively independent of the vagaries of the monsoon. Sir Arthur Cotton's Cauvery-Coleroon anicuts were based on this work of the Cholas, which may justly be termed the "key to the irrigation of Tanjore."[36]

Another important construction dating back to the time of the early rulers was the Kambukal canal from the river Palar in the Chingleput district. It was 50 to 60 miles long, extending from an anicut 20 or 30 miles west of Conjeevaram to the sea, and feeding innumerable tanks throughout the district.[37] The Tungabudra channel which formed the basis of Cotton's Kistna Canal, has been attributed to Krishna Deva Raya (sixteenth century). Absolute neglect for three centuries reduced most of it to ruins, but these ruins served to indicate that it was originally a work of great magnitude and utility. And according to Lt. Newbold, even in 1839, what remained of the construction provided for the irrigation of "large and fertile tracts" adjoining the river.[38] As in the case of the Cauvery irrigation, the main work was supplemented by an extensive network of channels.

An equally valuable or even more valuable contribution of the old rulers was the construction of tanks which abounded in all parts of the country. Almost all the tanks existing in the British period were built during the previous centuries. In the district of Kurnool, there were nearly 400 tanks and all of them had their origin in the Hindu period.[39] Inscriptions belonging to the eighth and ninth centuries A.D. contain references to two tanks in Chingleput which even in the middle of the nineteenth century irrigated 2000 to 4000 acres annually.[40] The Caveripak tank of North Arcot described by Buchanan was built in the tenth century and the Madura

35. *Imperial Gazetteer*, Vol. III, p. 327.
36. Tanjore *District Manual*, Vol. I, p. 327.
37. Chingleput *District Manual*, p. 210.
38. *Account of the Ceded Districts*, M.J.L.Sc., Vol. X, 1839, p. 121.
39. Kurnool *District Manual*, p. 72.
40. *Report of the Indian Irrigation Commission*, Part I, Vol. 1, p. 8.

tank, one of the largest in the province, has been ascribed to the middle of the sixteenth century.[41] To this period also belonged the Nellore tank considered "a work of art which marks the ancient spirit and splendour of this part of the country."[42]

State efforts were ably seconded by philanthropic individuals and private exertions contributed largely towards the growth of irrigation works. Many of them were built "more as good works than as commercial propositions."[43] But they were none-the-less serviceable and it was on these early constructions that the success of the projects of the nineteenth century largely depended. According to the Indian Irrigation Commissioners, "more than half of the existing irrigation" was provided by them and there were "vast tracts of country which in the absence of such works could not be protected against the effects of drought."[44]

During the eighteenth century, irrigation works were not "wholly omitted," as has been stated before. But that is the most that could be said for the eighteenth century. Very few works of any magnitude were undertaken by the Mohomedan rulers, while those that existed were badly neglected.[45] Almost the only assistance of the government in securing irrigation facilities was the continuance in some parts, of the custom of encouraging private efforts. When an altruistically minded person built a reservoir, he and his heirs were allowed to enjoy rent-free a tenth of its Ayacut, i.e., the land which the reservoir watered; and also a certain proportion of dry land. In return, he had to keep it in repair.[46] As to renewal and reconditioning of existing works, it was hardly to be thought of even during prosperous times, and entirely out of the question during the period of war and misrule that preceded the advent of the British.

The result was that at the close of the eighteenth century, the condition of tanks, reservoirs and watercourses was generally most deplorable. The unanimous verdict of all who examined the irrigation works at the time was that repairs were imperatively

41. M. Lohana, *Outlines of the Economic History of India*, pp. 80-82.
42. Official Diary of the Superintendent of Tank Repairs and Watercourses, 1805.
43. Kurnool *District Manual*, p. 72.
44. *Indian Irrigation Commission Report*, Part I, p. 44.
45. Nellore *District Manual*, p. 494.
46. Buchanan, *op. cit.*, Vol. I, p. 194.

needed by the great majority.[47] In the Northern Circars, most of the tanks and channels were in ruins. Repairs, where they were attempted, were so superficial and hasty that the structures collapsed at the first heavy rains.[48] According to Buchanan, there were 40 or 50 tanks in good order in the Kollegal taluk of Coimbatore in 1720, and of these only 17 were of any service at the period of his tour. In the Cherical division of Malabar, tanks were entirely abandoned since Hyder Ali's invasion. Apart from one or two belonging to powerful Nairs, not one could be stated to be in a "tolerable state of preservation."[49] The Nellore tank had not, according to local accounts, received repairs of any kind for about a century.[50] "Few even of the largest and most important works were provided with Calingulahs or vents for surplus water, nor with sluices."[51] Naturally much damage resulted and even the blessings of abundant rainfall turned out to be curses. Most of the tanks were breached during the monsoon, often in forty or fifty places and sometimes even in a hundred places.[52] At other times, scarcity was attributable more to the neglect of irrigation works by the Nawabs than to the want of rain, and the evils of famine were always accentuated by their apathy.[53]

Irrigation Policy of the State

For a considerable time after its accession to power, the East India Company continued the policy of its immediate predecessors. The construction and repair of irrigation works received scant attention from the government. Mr. White at the beginning of the period asserted that not a single scheme had been projected "since the establishment of the Company's administration on the Coast."[54] "The Company's Jaghire, which abounds in works of this kind formed at a vast expense under the country governments, has had no substantial repair for the last 30 or 40 years." The

47. Nellore Settlement Report for Fasli 1211, p. 99.
Circuit Committee Report, 1784.
Kurnool *District Manual*, p. 73.
48. Report of the Circuit Committee, Proceedings, 12th September 1784.
49. Hodgeson, Report on the Cherical Division, 9th March 1801.
50. Official Diary, Superintendent of Tank Repairs, etc., 1805, p. 6.
51. Nellore *District Manual*, p. 494.
52. Official Diary of the Superintendent of Tank Repairs, etc., 1805, p. 6.
53. Srinivasaraghava Iyengar, *op. cit.*, p. 7.
54. *Fifth Report*, Vol. III, p. 133.

Governor of Fort St. George thus declared in 1799:—"It is the wish of the Government to leave the construction and care of tanks and watercourses entirely to the proprietors, who will however, to encourage improvement be assisted with loans from the Treasury."[55] This policy was followed consistently and for long. If tanks were occasionally repaired, it was at the expense of the renter who had to place an annual deposit with the Company.[56] Once in a way, a work of great benefit to the people, and too expensive for any single individual, was undertaken by the Government; but the first consideration was to see that the assessment was apportioned "so as to indemnify the Company as far as may be practicable, for the charge to be thereby incurred."[57] At one time Munro suggested that "the repair of tanks not rendered private property should be made by Government,"[58] but the proposal was evidently not accepted.

After a time however, the problem of irrigation received more attention from the new rulers. The regular collection of revenue required that irrigation works should be maintained in proper order. Collectors naturally took charge of these duties along with the collection of revenue, and were assisted by the Civil Engineering Department.[59] The various collectors had annually to report to the Board of Revenue as to what works required repair, with an estimate of the charges. Small undertakings were looked after by the local authorities, while the more important ones were assigned to the Superintendent of Tank Repairs and Watercourses.[60] In 1809 the duty of superintendence was divided between two civil engineers and in 1819, their number was raised to three.[61] They toured the various districts, examined the reservoirs and channels and effected major repairs where necessary. Further, Takkavi loans were granted to ryots to carry out small improvements on their lands. The Government in 1799 agreed to sanction loans "repayable with interest at 12% on security of their estates and under prescribed regultions."[62] Later, the Revenue Board's Regulations empowered collectors to grant

55. *Fifth Report*, Vol. III, p. 184.
56. General Reports of the Board of Revenue, Vol. I, p. 7.
57. *Fifth Report*, Vol. III, p. 184.
58. Revenue Despatch to England, 28th Oct. 1808.
59. *P. W. Commission Report*, p. 7.
60. Proceedings of the Board of Revenue, 16th Sep. 1813.
61. *P. W. Commission Report*, p. 3.
62. *Fifth Report*, Vol. III, p. 184.

loans "on adequate security" at 10% "the whole amount to be repaid within a moderate period."[63] Some of these Takkavi advances seem to have been very profitable indeed. For certain loans in the Chicacole Circar, amounting to about Rs. 4,000 the value of the increased produce was Rs. 10,263 and the Government share of the profit about Rs. 5,600.[64] Yet advances for irrigation purposes were not granted on any large scale, for the emphasis was on the adequacy of the security and the certainty of repayment.

On the whole the expenditure on irrigation works was totally inadequate. It has been stated that "large sums" were spent on account of irrigation,[65] but these "large sums" really amounted to a few thousand rupees per annum for districts yielding some lakhs of revenue each. According to the computation of the Public Works Commissioners of 1852, the charge incurred for repairs was less than ½% on the probable original cost of the works, under 2% of their total annual yield and little more than 4% on the revenue derived from them.[66] Even from such expenditure, the best results were not always obtained. For a long time the supervision of repairs was entrusted to people who had no knowledge of engineering, and the works naturally suffered. There was also a great deal of waste and injudicious expenditure. Even when experts were recruited, they were so few and their responsibilities so vast that they were simply lost in their duties. It was not till 1838 that the Maramut Department, as it was called, was reorganized, and the whole Presidency divided into eight Maramut divisions with a civil engineer at the head of each. They worked with great zeal, and the improvements they effected invariably proved most beneficial, both to the government and the cultivator, but little could be done in a decade. Hence the condition of irrigation works at the close of the period was still very far from satisfactory.

Kudi-Maramut

Government activities being thus limited, the maintenance and upkeep of irrigation works depended largely on private efforts. In fact there had long existed a customary obligation on the

63. Proceedings of the Board of Revenue, 16th Sep. 1813.
64. General Reports of the Board of Revenue, Vol. 8, p. 155.
65. *P.W. Commission Report*, p. 3.
66. *Ibid.*, p. 109.

part of cultivators to work or provide labour for the repair of works needed for cultivation. Of course it was natural for them to do so, and people voluntarily turned out for any small repairs on which their cultivation depended, and which could easily be done in their spare time; while the fact that they could expect no remission of the land revenue if crops were lost owing to their neglect acted as a further spur. On othe other hand, it would be difficult for Government to undertake repairs of innumerable small works scattered all over the country.[67] And no doubt because ryots had been attending to repairs for ages, it came to be looked upon as obligatory.

Before the British occupation, this system, known as Kudimaramut, was fully recognized, and indeed absolutely necessary. For if the Company during the first few decades of its power did little, their predecessors the Nawabs did less for the restoration of tanks and channels. Of course the security of the revenue demanded that irrigation works should be attended to, and this attention took the form of enforcing the corvée, and if the official summons did not prove effective, the Amildar's "slippers, rattans, and jairbunds"[68] were employed to bring a refractory ryot to a proper realization of his responsibilities. No doubt special officers were sometimes appointed for the purpose of exacting labour—as may be surmised from the existence, in the British period, of certain free-holds termed வாய்க்கால் ஆள் ஓட்டி மான்யம் (literally channel-men-driving-inam).[69] But compulsion could not have played a large part, for self-interest would ensure the preservation of irrigation works.

Even after the advent of the British, Kudi-maramut prevailed for some time, the Tahsildars being expected to enforce it. The village peon, *toti*, *taliari* and others had to watch the tanks and watercourses and as soon as any damage was discovered, the Tahsildars called out the ryots of the village or villages concerned.[70] The maintenance of irrigation works by means of individual effort continued for a long time, for it was not till after the recommendation of the Commission of 1880 that the repair and renewal of irrigation works was regarded as a prime obligation of the

67. *Irrigation Commission Report*, Part I, p. 45.

68. Evidence of Mr. Banbury, Collector of Trichinopoly before the Kudimaramut Committee, 2nd March 1869.

69. Evidence of Mr. Hathaway before the Committee, 8th March 1869.

70. Hukumnamah for the settlement of South Arcot, 1805.

state.[71] The labour, however, was not exacted strictly and whatever the power of the Tahsildars, it was apparently not exercised everywhere. The system even in pre-British times, was based on voluntary action,—communal if not individual—and was managed by the village authorities who constituted the most natural agency. But with the decay of village corporate life and the weakening of the power of village officers, Kudi-maramut fell into desuetude. Further, the Company assumed an increasing responsibility for irrigation during the later stages of their administration, and the ryots' activities in that direction diminished correspondingly.

By the middle of the nineteenth century, there were few traces of Kudi-maramut proper. It is only occasionally that we find a reference to the custom of repairing irrigation works by voluntary labour.[72] The report of the Public Works Commission of 1852 contains no account of the system at all. They state that in nearly all the districts, labour was "more or less" forced. "Little actual coercion is used, but it is known that it will be used if required, and indeed the work-people themselves, from long custom, consider themselves under a sort of obligation to work for the Government on the established terms."[73] But they did not call this Kudi-maramut, and could have had no idea of it when they complained that the wages were inadequate; for the essence of the Kudi-maramut system was that labour was unpaid and more or less voluntary. In 1869 interest seems to have revived on the subject and an inquiry was made by a specially appointed Committee. The evidence brought before the Committee is conflicting and confusing and proves that there was no such thing as a *system* of Kudi-maramut. Mr. Fraser, Collector of Godavari, declared that the meaning of the term "Kudi-maramut" was unknown in his district,[74] while Mr. Agnew, who had served in Godavari, Tanjore Trichinopoly, Madura, Vizagapatam, North Arcot, and Cuddappah stated that in every district in which he had been, the people had "recognized an obligation to contribute unpaid labour, such obligation extending to such repairs as it has not been customary for Government to undertake."[75] So by this time the customary obligation seems to have devolved on Government. But there was

71. *Irrigation Commission Report*, Part 1, p. 113.
72. South Canara Settlement Report for Fasli 1256, 12th Oct. 1847.
73. *P.W. Commission Report*, p. 27.
74. Letter dated 27th Feb. 1869.
75. Evidence before Kudimaramut Committee, 1869.

great difference in practice between different districts and between different parts of the same district, as Mr. Agnew observed. In nearly all the districts distributing channels were usually kept in repair by the people themselves. It was generally voluntary and the arrangements were independent of the revenue authorities.[76] In Cuddapah, one of the Reddies of the village was annually elected to be in charge of irrigation. When repairs were required he summoned the ryots, "generally at the rate of one man per acre and superintends the clearing of the channels, executing the work out of hand in a few days."[77] A fine of a few annas was levied on those who did not obey. The Collector adds that if channel clearances had been entrusted to the Tahsildar, nothing would have been done,—at any rate the work would certainly not have been done as efficiently as it was. Where Government undertook the task, the labourers were sometimes paid in cash, oftener in kind and sometimes not paid at all.[78] In the case of tanks, little was done by way of private efforts. Tanks continued to be of service long after deterioration set in, without necessitating urgent repairs, and hence they were neglected, till the decay was complete and one heavy shower would bring the whole structure down, rendering its restoration too great a task for individuals. It was only in the district of Tanjore, where both the people and the authorities seem to have been more irrigation-minded than elsewhere, that the system of Kudi-maramut survived.[79] In zamindari areas also, Kudi-maramut continued in full vigour. Here irrigation works were always carefully attended to both by the tenants and the zamindars, and the "parched and arid" fields of the ryotwari areas were frequently contrasted with the well-cultivated zamindari lands.[80] On the whole however, Kudi-maramut as a system was obsolete.

Irrigation Works in the Later Period

The condition of irrigation works meanwhile was extremely unsatisfactory. It was bound to be so considering the scant atten-

76. Letter from Mr. Moberly, Civil Engineer, 2nd Division, 24th Feb. 1869.

77. Evidence before the Kudimaramut Committee, 1869.

78. Evidence brought before the Kudimaramut Committee.

79. Replies of Capt. J. O. Hasted, Executive Engineer, Kistna Dist., to Circular I.

80. *P.W. Commission Report*, p. 112.
Memorandum of Mr. Boswell, Acting Collector of Kistna District.

tion bestowed on repairs. While Kudi-maramut was decaying on the one hand, the active irrigation policy of the Government was in its initial stages. Neglected both by the people and the Government, irrigation works deteriorated rapidly resulting in a great diminution of cultivation and of revenue. The total extent of irrigated lands under cultivation at the end of the period was about half the total cultivable area, and it was believed that almost all of it had formerly been under irrigation.[81]

In 1852 the Public Works Commissioners asked the officers in charge of irrigation in the different districts for accounts of the condition of the works about 1835, and how far it had improved since that time. The reports are uniformly unfavourable. Speaking of Rajahmundry, Masulipatam and Guntoor, Colonel Cotton says, "In this division there is scarcely a single work that is in a respectable state; and almost the whole of them are without proper sluices, Calingulahs etc." Drainage, which was very important in those districts, was as bad as the supply of water. During the rains, scores of villages were completely submerged in water and cultivation was delayed for weeks.[82] But about twenty years before, when the greater part of the division was under zamindars. the state of tanks and channels was much better. It is a significant fact that throughout this period, irrigation works were in much better order in zamindari tracts than in ryotwari. The zamindars at any rate seem to have been more alive to their interests than the Company's government. Lt. F. H. Rundall endorsing Col. Cotton's view adds, "the case could not have been otherwise, with an annual expenditure of no more than about Rs. 2,500 on works yielding a land revenue of five lakhs."[83]

Even in the sixth division, (Tanjore and Trichinopoly) where irrigation problems received more consideration than in other divisions, the state of tanks and channels was by no means satisfactory. The account of Captain Smith from the Fifth Division is no more encouraging. Only Capt. Horsley who was in charge of Madura and Tinnevelley reported that works were in tolerable order, but as the Commissioners put it, "if he had more time to attend to improvements, his idea of what good order means would much enlarge." The Civil Engineer of the Fourth Division also stated that tanks etc, were "in very fair order," but the

81. P.W. *Commission Report*, p. 110.
82. *Ibid.*, p. 112.
83. *Ibid.*

actual description that follows indicates that like Mr. Horsley's, his notion of good order did not reach a high standard. The Reports proved that throughout the Presidency, the condition of irrigation works was "below par." The want or the imperfect state of Calingulahs, sluices, vents, bunds, etc., was a universal feature, and the distress caused by flood or famine was thus intensified. Tanks, in particular, were universally neglected. "To whatever part of the country we turn, we find the vast majority of tanks, even in a good season watering far less than they once did, and far less than they could now, if kept in proper repair."[84] It is true that the various Civil Engineers, especially during the last decade were untiring in their efforts, but the deterioration of a century could not be checked in so short a time.

With regard to new constructions, there were very few during the earlier part of the nineteenth century, although a number of schemes were suggested. In fact most of the major projects of the nineteenth century seem to have been first proposed during the early years of British Administration. The Kistna canal which was begun in 1853 was planned by Major Beatson as early as 1792.[85] and the Periyar project which came to fruition in 1884 was first suggested by the Raja of Ramnad in 1798.[86] Similarly, a scheme for an anicut over the Godavari was brought forward in 1798, and one for the Cauvery-Coleroon works in 1804.[87] But though plans were forthcoming in abundance, little was accomplished. Occasionally a proposal was followed up by an investigation and a report, and there would be an end of the matter,—generally on the plea that the state of the finances would not admit of such expenditure as would be required. As Lt.-Col. Cotton declared, the great thing was to see that nothing was done.[88]

84. *Ibid.*, p. 110.

85. *Report on the Direct and Indirect Effects of the Godavari and Kistna Works*, p. 88.

86. *Cambridge History of India*, Vol. V, p. 51.

87. Tanjore *Dist. Manual*, Vol. I, pp. 327-8.

88. "Before anything is *done*, a matter must be brought before the Collector, who has charge of the welfare, and in a great manner the lives, of a million people, and of a revenue of 30 or 40 lakhs a year; but he shall not be permitted to spend £100. He hands it on, therefore, to the Board of Revenue, but they have no power to sanction an expenditure of £100. It travels from the Board of Revenue to the Local Council, but the hands of that Council are tied if the project involves an expenditure beyond £1,000; it must be passed on, therefore, to the Supreme Council, —a tribunal ignorant of the wants, and dead to the interests of those exten-

Later, however, Government became more enterprising. In 1836 the first great irrigation work was undertaken—the Cauvery-Coleroon anicuts. The irrigation of the Tanjore district was entirely dependent on the Cauvery, as has already been said. The Grand Anicut and a large number of channels which had been in existence for ages, were functioning tolerably even in 1830.[89] But a new danger had arisen which threatened to deprive Tanjore of all her former prosperity. For many years the bed of the Cauvery was found to be rising, while that of the Coleroon was deepening and thus water was being diverted to an increasing extent from the Cauvery to the Coleroon in spite of great labour in removing the sand periodically. Even in 1804 Col. Caldwell pointed out the danger and indicated a remedy;[90] but his advice was not acted upon. In 1836 conditions became alarming and the work was taken up by Capt. Cotton. A masonry weir was constructed across the Cauvery where it branched into the Coleroon—known as the Upper Anicut—to prevent the efflux of water from the main stream; and at the same time, in order that the Coleroon might retain a reasonable amount of water, the Lower Anicut was built across it, a little further down.[91] Besides, two new channels were laid out, the North Rajan Vaykal and the South Rajan Vaykal, for North Arcot and Tanjore respectively. These works were the first great engineering achievements of the British, not merely in the Madras Presidency but in India. The anicuts proved very effective in securing water supply for Tanjore. Indeed they were so effective that after some time it was found that the Cauvery was absorbing an undue share of the water to the detriment of cultivation in South Arcot. Hence in 1845 another dam was raised across the river to remedy the defect.

Results of New Irrigation Works

These works were of immense benefit to the district. In fact Tanjore thenceforward served as a permanent advertisement of

sive kingdoms which are called minor Presidencies, and which is glad enough to avoid the inconvenience and responsibilities of expenditure, by referring the project to the Authorities at home, and on its arrival at home it has to undergo the ordeal of two more Boards (*Public Works in India*, pp. 293-4).

89. *Irrigation Commission Report*, Part I, Vol. I, p. 9.

90. *Tanjore District Manual*, Vol. I, p. 329.

91. *Report on the Direct and Indirect Effects of the Godavari and Kistna Anicuts*, p. 117.

the utility of irrigation works. It was always held up as an example of what might be achieved by a proper attention to irrigation and its prosperous condition contrasted with other districts which were denied the blessings of adequte irrigation.[92] It was computed that since 1836, the date of the construction, there was an annual addition to the revenue of 10 lakhs of rupees, not to mention the saving due to prevention of losses of revenue from drought and flood.[93] The returns from the works were more than 118% on the outlay of about 15 lakhs. The people also benefitted by the increased productiveness and value of their lands, and above all by vastly improved security of the crops, and comparative immunity from floods and famines. Fluctuations in prices were reduced to a minimum.—formerly the variation was from 100 to 57, while now it was from 100 to 95¼.[94] Further, ryots were enabled to begin cultivation earlier. In the opinion of Mr. Kindersley, Collector of Tanjore, "there is not an individual in the province who does not consider it (the Anicut) the greatest blessing that has ever been conferred upon it."[95]

The most important scheme after the construction of the Cauvery works was the Godavari anicut. The subject was first mooted in 1798, as stated before, but nothing was done for nearly half a century. Then Cotton drew up several reports in which he maintained that Rajahmundry had greater natural advantages than Tanjore, and indeed that with regard to soil, climate and facilities for irrigation it could "scarcely be surpassed by any part of the world," but that owing to the want of irrigation works and of roads, it was markedly inferior to the latter district according to every criterion of prosperity.[96] He pointed out that in the case of Rajahmundry, the benefits from irrigation works would be even more substantial than those that were derived from the Cauvery- Coleroon anicuts, because in Tanjore a fairly satisfactory system of irrigation had been in existence even before the anicuts were built,

92. Report of Capt. Cotton, 12th Aug. 1844.
Report on the Direct and Indirect Effects of the Godavari and Kistna Anicuts, pp. 122-32.
93. Proceedings of the Board of Revenue, 21st May 1855.
94. Report of Capt. Cotton on the Irrigation Department, 13th December 1837.
95. Report of A. T. Cotton on the Irrigation of Rajahmundry, 12th August 1844.
96. Proceedings of the Board of Revenue, 21st May 1855.

while in the other district there was nothing at all except for one or two channels. The scope for improvement, therefore, was greater in Rajahmundry.

The Godavari works which included the Anicut, several channels and a canal for navigation, were constructed in 1847. Even before they were completed, there was a considerable increase of revenue due to the revival of economic life by the circulation of money, employment of labour, etc.[97] Within half a dozen years of their completion, cultivation and revenue had more than doubled,[98] and by 1858 the revenue had increased by 7 lakhs while the produce of land was quadrupled. Owing to the navigation canal, the cost of internal traffic by water was reduced to a tenth of what it had been, while passengers could travel at the rate of 1 pie per head per mile.[99] Besides this, there was an immense indirect benefit, from the stimulus afforded to cultivation, industry and trade, and the condition of the people improved vastly. Thousands were given employment and the district was able to weather the agricultural depression better than others. In fact the change has been described as one from death to life.[100] Within the district itself, the poverty and general backwardness of the taluks not affected by the works presented a striking contrast to the prosperity of the others and afforded further proof of the value of the anicut. The villages that were most highly assessed—in consequence of the irrigation facilities—were the "richest and most thriving" and every village wished to own a watercourse.[101]

Besides the Cauvery and Godavari anicuts, there were a few smaller works. In 1837 a channel was opened from the Poolair in Masulipatam, which proved to be "of great service," and a dam was raised across the Nagalair.[102] The Thungabudra channel was constructed in 1842 at a cost of Rs. 34,000. In Rajahmundry there were the Samulcotta channel and four other Calwas. Other works which cost above Rs. 1,000 each were an anicut over the Vellaur, the

97. *P.W. Commission Report,* p. 124.

98. *Report on the Direct and Indirect Effects of the Godavari and Kistna Anicuts,* p. 5.

99. Memorandum of Col. Cotton, 4th March 1858.

100. Letter from T. Prendergast, Collector of Rajahmundry to the Board, 19th Jan. 1853.

101. Letter from G. N. Taylor, Sub-Collector of Rajahmundry, to Cotton, 4th May 1853.

102. Pharoah's *Gazetteer,* pp. 48 and 63.

Porel Tank South Channel in Chingleput, the Raghavien's channel in South Arcot and the Maranthy New channel in Tinnevelly. As to the Kistna river, nothing was done for a long time after Major Beatson's scheme, except for two plans in 1839 and 1845 which never saw the light of day—till an inquiry was made by Col. Cotton and the work was started in 1853. The total initial cost of new irrigation undertakings between 1835 and 1845 was less than 5½ lakhs and they yielded an aggregate increased revenue of nearly 53 lakhs and an annual profit of 70%.[103]

103. *P. W. Commission Report*, Appendix Z.

CHAPTER IX

RURAL CREDIT

The widespread prevalence of indebtedness is to-day a marked feature of Indian agriculture. But it was not so prominent before the eighteenth century. True, in every country there must always be a certain class of cultivators on the border line between independent farmers and labourers, who are just able to get on in favourable circumstances, and whose cultivation would be brought to a standstill by the slightest mishap, unless given some assistance. There would also be a large section who would be obliged to borrow in case of severe and unusual distress. And in a country where poverty was general and the rainfall uncertain, the proportion of farmers having recourse to money-lenders was bound to be large. From very early times we find sowcars advancing money to agriculturists during famine and flood, or at the beginning of the agricultural season, to be repaid in cash or kind after the crop was harvested.[1] And throughout the Hindu and Mohomedan periods there are numerous references to indebtedness and usury.[2]

Thus debt there undoubtedly was in the earlier days, but it was not of an alarming type. The general impression is that under former governments, the creditor had no legal means of redress against defaulting debtors. In the first place it was difficult to get a hearing for the case, and even when a favourable decree was passed it was not always enforced.[3] And at best there was not much that the creditor could take possession of. For previous to the British regime, land could not, as a rule, be attached for non-payment of debt, though isolated instances did occur when local authorities tacitly allowed money-lenders to seize debtors' pro-

1. *Yajnavalkya*, II, 43.
Mymensingh Gitika, p. 44, See B. Bhargava, *Indigenous Banking in Ancient and Mediaeval India.*
2. Dinabandhu Mitra, *Nildarpan*, V. 1, *Ibid.*
Marco Polo, *Travels*, Translated by Sir Henry Yule, 1903, Vol. I; p. 343.
3. Letter from Capt. G. Wingate, Revenue Survey Commissioner, to the Court of Sadr Dewanee Adalat, Bombay, 24th Sep. 1852.

perty.[4] This has been ascribed by some to the non-existence of proprietary rights. The land was supposed to be the property of the state and such rights as the ryot possessed were "personal to himself and his family, or in some cases, clan; and if any outsider obtained possession, the state would have stepped in and resumed the property."[5] We know, however, that land was not so exclusively the property of the state as Mr. Hume believed; and as to the invalidity of transfers, the numerous deeds of sale, bequest, etc., available in the inscriptions and records furnish conclusive evidence to the contrary.

The fact was that rulers recognized that their revenue depended on the ryots and saw that their rights were secure. The joint family system further prevented alienations, for no individual could sequester property when there were others who had equal claims. Besides, when there was more land than was required by the people, as was the case in the earlier days, it was not coveted as valuable property. Money-lenders, therefore, had no strong incentive to advance large sums, and no reason at all to persuade ryots to borrow more than they required, as happened frequently at a later period. Such small sums as they lent were on the security of jewels, houses, standing crops, etc.[6]

In the circumstances creditors and debtors got on fairly satisfactorily. Many writers wax eloquent over the idyllic relations that existed in former times between creditors and debtors. Some accounts present a different picture, and occasionally the same person makes contradictory statements, but the general view is that their relations were amicable rather than otherwise. It was true that the rates of interest current were very high, but the money-lender seldom got all that was stipulated in the bond, to say nothing of the principal, the realization of which was entirely problematic, and attributable to some extraordinary stroke of luck. When, as was often the case, the debt was of several generations' standing, no one expected that the principal would be repaid. The creditor could only hope to receive what was considered fair and just, and as the debtor had no wish to cheat, he was always prepared to make such periodic payments as he could

4. Hunter, *England's Work in India*, p. 72.
5. A. O. Hume, *op. cit.*, p. 38.
6. Letter from Capt. Wingate to the Court of Sadr Dewanee Aadalat, 24th Sept. 1852.

afford. "It was almost a point of honour with them to defraud the state, to make false statements to superiors etc., just as it used to be for boys to rob their master's garden and mislead him whenever possible, but it would have been as base in their eyes to cheat or bilk their friend, the family banker, as it would have been for the school boy to steal from one of his own companions."[7] When some perverse debtor obstinately refused to pay anything and heavy arrears had accumulated, the creditor had recourse to *sat darna* by sitting on his doorstep till his debt was paid, or appealed to some influential person who would see that justice was done; otherwise a panchayat was held which decided the case to everybody's satisfaction and there was an end of the matter. But such instances were rare and in general debtors and creditors are believed to have lived in happy harmony sharing prosperity and adversity,[8] bound together by "many acts of mutual kindness."

But these ideal conditions did not last. A great impetus was given to the activities of money-lenders in the time of Hyder Ali[9] when the revenue demand was suddenly increased by 15 to 25% over what it had been during the Hindu rule. The incidence of this assessment fell particularly on the poorer ryots and arrears accumulated fast. When pressed by the Amildars (Revenue Officers) to liquidate their balances, the ryots were forced to obtain Teeps or bills of exchange on Seringapatam from sowcars, who agreed to accommodate them—for a consideration. It is stated that one half of the revenue collected was thus remitted "to the great advantage of the sowcars and the loss of the sircar and ryots."[10] This practice gained ground rapidly, till Tippu checked it to some extent by prohibiting remittances through sowcars.

During the Company's rule, agricultural indebtedness again became general and in a few decades attained an unprecedented magnitude. Collectors of districts repeatedly stated that the ryots were deeply involved in debt, and the burden became more pressing year by year. Early in the nineteenth century, the Collector of Malabar reported that the evil had assumed serious proportions and instanced the Palghat Division where more than 90% of the

7. A. O. Hume, *op. cit.*, p. 39.
8. Wingate, Letter, 24th Sep. 1852.
9. Baramahal Records, Sec. VI, p. 18.
10. Read, Report on the Ceded Districts North of the Cauvery, 15th November, 1792.

inhabitants were indebted to the pattars, the local Brahmin money-lenders.[11] In the districts through which Buchanan passed he found that Moplah money-lenders and others were already becoming adepts in the art of manipulating bonds to their advantage.[12] Père Dubois testifies to the general existence of debt both among the agricultural and the industrial classes in the first quarter of the country.[13] "The ryots are more in the hands of merchants than you are perhaps prepared to hear....The number who are able to pay their rents without any pecuniary assistance is hardly 1/3 of the whole. The practice of borrowing has rather increased than diminished under our sway," wrote Mr. Dalzell, Collector of Cuddapah to the Board of Revenue in 1830,[14] and the statement was reiterated a few years later.[15] A French traveller of the period was surprised to find that in a country which was supposed to be an Eldorado, the vast majority of the population had heavy liabilities rather than assets and entered life, lived and died in a state of indebtedness.[16] In 1836 when there was an inquiry into the resources of the Presidency, it was found that the general poverty obliged the great body of the ryots to borrow large sums on the security of land, crops, etc., at high rates of interest.[17] By the middle of the nineteenth century many sections of the rural population were entirely immersed in debt,[18] whole villages and sometimes districts being involved. Indigenous capital employed in usury was believed to be more than three times as much as that invested in trade.

Debt was incurred for the purchase of seed and stock and quite frequently for the subsistence of the ryot and his family till the crop was harvested. Another great cause of debt was the payment of land revenue. Borrowing under these heads increased in

11. Warden, Report on Malabar 20th March 1801.
12. Buchanan, *op. cit.*, Vol. II pp. 172-3.
13. Dubois, *op. cit.*, Vol. I, p. 82; Vol. II, p. 672
14. General Reports, Vols. 46-49, p. 161.
15. Settlement Report, Fasli 1238 (1828-29).
16. Victor Jacquemont, *Etat Politique et Social de l'Inde du Sud en*, 1832. pp. 139-140.
17. Wight, Report on the Resources of the Presidency, 20th May 1836.
18. Letter from J. Goldingham, Collector of Guntur to C. R. Cotton, 13th Dec. 1839.
Letter from Blair, Collector of Canara to C. R. Cotton, 8th June 1839.
Sullivan's Report to Govt., 28th Dec. 1840.

volume during years of flood and famine and diminished in years of abundant harvests. Debt for really productive purposes as the digging of wells and the improvement of land was less common, particularly the latter. Last but not least was the expenditure on marriages and other ceremonies. Sir R. Temple refuting the assertion that debt was occasioned by the pressure of the land tax, maintains that it was mostly due to the ryots' improvident nature and to their spending enormous sums on marriages and funerals.[19] It seems, however, that marriages and funerals have been given an undue prominence. The expenditure on this account was undoubtedly heavy considering his means, but it was the ryot's only extravagance, and "unless he was singularly blessed (or unblest?)," [20] it did not recur often.

These were general causes operative even before the nineteenth century. The remarkable increase in indebtedness during the Company's rule has been ascribed to the introduction of proprietary rights by the British.[21] It has been said that by allowing the transfer of land, a premium was laid on money-lending. But we have seen already that right of property existed even before the British. The Company's rule however, rendered proprietary rights more secure than formerly by the abolition of arbitrary and undefined exactions and the establishment of peace. Thus the sowcar found it to his advantage to lend larger sums than before, and the more so since with the increase of population, land was gradually becoming more valuable. Ryots were persuaded to take more money than they needed so that the land may be attached the sooner. Further, the new method of administering justice which was costly, cumbersome and tedious was altogether more favourable to the creditor than to the debtor. The poor and ignorant ryot was no match for the rich money-lender who was up to all the tricks of the trade. The fact that the old nominally high interest rates were now realizable, the rigid enforcement of contracts, the flair for litigation which the ryots seem to have developed latterly,[22] and the increasing pressure of the land assessment also contributed to the growth of debt. In the case of the last, the complaint was not only against the high rate of assessment but also against its

19. *India in* 1880, p. 221.
20. A. O. Hume, *op. cit.*, p. 37.
21. *Ibid: Report of the Deccan Riots Commission.* 1876.
22. Munro, Letter to the Board of Revenue, 15th August 1807.

inequity and the method of collection.[23] The introduction of money rents must further have pressed heavily on the poorer class of ryots. The difficulties of communication constituted a great obstacle to the export of produce to the most favourable market, and in the circumstances grain became a drug in the local markets at the period of harvest when kist payments had to be made. The ryots, therefore, were obliged to borrow money at ruinous prices. In the Woondy Taluk of Rajahmundry, agriculturists had to part with paddy for Rs. 6|- or 7|- per Pooty when the prices were Rs. 10|- and 11|- respectively at Cocanada and Bunder, not far away.[24] It has been asserted that the sowcar was the direct result of the commutation system.[25] When, as was the case in some parts, the revenue had to be remitted even before the grain was cut, the ryots' plight was even worse, and the "Mustacabol," as it was called, must undoubtedly have been the "greatest bane" of agriculture.[26]

With the increase in the volume of debt, the rate of interest also rose considerably. In former times the rate varied from 8 to 12% per annum. At times lenders charged 2 and 3% for 2 or 3 months, but in such cases the debt was discharged within a few months. If it was not, the ryot certainly did not have to pay at that rate for the whole year. Instances of exorbitant interests do occur, but they were not the rule, and according to the common law of the country, (*Damdupat*), the interest could never exceed the principal.[27] During Hyder's reign, Teeps were issued at the rate of 8% for one month, 18% for six months and 30% for the year. Early in the Company's rule the legal rate of interest was fixed at 12%. By a regulation of 1802, the Courts were debarred from decreeing a higher rate. If the bond specified a lower rate it certainly held good, and if the interest was more than the principal, the excess would be cancelled.[28] But the money-lenders had a hundred means of circumventing the regulation. Whenever the

23. Thackeray, Letter to the Board of Revenue, 20th April 1821. General Reports, Vols. 46 to 49, p. 161.

24. *Report on the Direct and Indirect Effects of the Godavari and Kistna Anicuts*, p. 36.

25. *Madras Council Proceedings*, 1908, p. 307.

26. Heyne, *op. cit.*, p. 86.

27. Munro's Evidence before the Select Committee of 1813, Report pp. 285-286.

28. Regulation XXXIV of 1802, Para 1.

interest equalled or exceeded the principal, the old bond was cancelled and a fresh one was drawn up in which the whole amount would be put down as principal. Very often a premium of 1 to 6% was charged, and deducted before the payment of the loan.[29] The actual rate of interest paid by the debtor was thus considerably higher than the legal rate, and varied according to the circumstances of the borrower and the nature of the security offered. Usually it was between 18 and 24%. On the security of jewels it was 8 to 24%, and on mere personal credit as much as 35 to 60% and occasionally even a 100%.[30] In other cases, however, where the security was unexceptionable the rate of interest was even less than the legal rate and ranged from 6 to 9%.[31]

When there were prospects of such enormous profits, the money-lenders became increasingly avaricious and the relations between debtor and creditor underwent a change. "Mutual confidence and goodwill" gave way to "mutual distrust and dislike."[32] The old sowcar who was a friend of the family and almost a relative became a rapacious usurer whose sole object was to get the ryots into his clutches and keep them there. Many were the means employed by the sowcars to achieve this. If a ryot borrowed 2 maunds of grain valued at 2 or 3 rupees, it was converted into a money debt by "tricky proceedings." As the interest accumulated, fresh bonds were executed in which interest and principal were consolidated till the debt amounted to Rs. 50 or more. The ryot was now completely in the creditor's power and was compelled to give up all the produce of his lands beyond what was necessary for mere subsistence. Thus he dragged on a miserable existence, and if he ever showed signs of being refractory, a suit was filed against him and he would be completly ruined. The mere threat of legal proceedings was often sufficient to render the ryots abject slaves of the money-lenders. A man borrowed 4 maunds of cholam valued at Rs. 6/-. By means of renewing bonds two or three times, the debt rose to Rs. 72|- in 16 months and when the debtor was unable to pay he was dragged to court and the decree was

29. *Report of the Deccan Riots Commission,* Appendix, p. 2.
30. Robertson, *Report of a Tour in Coimbatore,* 1878.
Dubois, *op. cit.,* Vol. II, p. 663.
Report of the Deccan Riots Commission, Appendix, p. 6.
31. Letter from Clementson to C. R. Cotton, 31st Dec. 1838.
32. Wingate, Letter, 24th Sep. 1852.

passed against him.[33] Such instances could easily be multiplied. The practices of usurious money-lenders in Malabar described by Mr. Warden are very similar. A ryot would borrow 50 fanams (3½—4 Rs.) at the close of the year when the price of paddy would be high and get 75 parahs for it. A bond would be drawn up stipulating in paddy at the price then current. The price being low at that time, the debt would amount to 174 parahs. As the ryot would have to pay the land tax at the same time he would be able to discharge only 2/3 of the debt. A new bond would then be drawn up for the repayment of the remaining 58 parahs in money at the end of the season,—with the same rate of interest. This would amount to 47 fanams.[34] The chief methods employed therefore, were conversion of the contract from money to grain and vice versa, as it suited them, and the frequent renewal of bonds. Very often a debt of Rs. 50/- would lead to the sale of property worth Rs. 500/-, and even after that there would be a balance due to the sowcar who would continue to harass the ryot till his claim was settled.[35] The worst feature of the system was that if a ryot fell into the hands of a money-lender there was no prospect of redemption. "Once a debtor, always a debtor."

As for the debtor, he was just as much inclined to unfair practices as the creditor, only he had fewer opportunities. Ryots frequently borrowed with the hope of eluding payment. In regard to this a curious account is given by the Abbé Dubois. When a debt had to be repaid the debtor would say that he had no money at the time and would ask for grace. Further time would be granted once and even twice, and when the money was still not forthcoming the lender would make an unauthorized arrest. The borrower could not eat or drink without the permission of the creditor, who also starved with him. Otherwise, debtor and creditor stood in the sun each with a stone on his head, or walked about till one of them was exhausted or fainted; or both performed penance on one foot. Finally the debtor, unable to put up with it any longer, would settle at least a part of the claims against him and promise to pay the rest later. "Creditor and debtor then part on the best of terms."[36] Dubois must have observed this during the earlier days of his sojourn in South India when money-

33. *Report of the Deccan Riots Commission,* Appendix, p. 17.
34. Warden, Report on Malabar, 20th March 1801.
35. Robertson, *Report on Coimbatore,* 1878.
36. Dubois, *op. cit.,* Vol. II, pp. 672-3.

lenders had not probably realized the possibilities and the advantages of the judicial system introduced by the British. Often the creditor and debtor did not part, but remained on the worst of terms till death. The struggle was naturally demoralising to both. By the middle of the century, "the grinding oppression of the ryot by the village bania or money-lender" become proverbial.[37] There was considerable bitterness of feeling among the agricultural classes which occasionally led to riots when usurers' houses were burnt down.[38]

There is however, another side to the picture. Conditions were not always so distressing, and the money-lenders were not all as black as they were painted. The fact was that though they were as a class rapacious and unscrupulous, they constituted a most useful and necessary element of the community. It was to the sowcar that the sircar and ryot were indebted "for equalizing annual receipts from a fluctuating source."[39] As things were, the money-lender was absolutely indispensable, and it was for this reason that the authorities were chary of interfering with his activities, and decided to make the best of the position. Discussing the expediency of introducing measures to regulate money-lending, the government stated that long established customs could not be uprooted in a short time by legislative enactments, and that the prohibition of usury would only aggravate the evil by forcing the ryot to pay a higher rate of interest for secret assistance. And after all, since men were "in general the best judges of their own interest," laissez-faire was the ideal policy.[40] Several Collectors regarded the money-lender with a friendly eye. He was considered to be the ryot's friend in need, and a "positive benefactor," and the impression was that too strict an action would be injurious and defeat its own purpose. Some of the Collectors' enthusiasm in defending the sowcar may be attributed to the fact that a considerable amount of the revenue was paid through them, and that but for their assistance, there would be large balances every year. Indeed one collector admitted as much. "Some Revenue Officers, anxious to show a settlement without much remission or outstanding balances, will look upon him (sowcar) as a useful and valuable member of the village community, not considering how far the

37. Wingate, Letter, 24th Sept. 1852.
38. Hunter, *op. cit.*, p. 73.
39. Srinivasa Raghaviengar, *op. cit.*, p. 257.
40. Letter from Government to the Board, 10th Aug. 1827.

ryot may have involved himself....to obtain the means of paying his Revenue instalments."[41] Hence we find that no strong measures were taken to check the growth of indebtedness or usury, beyond the passing of the Regulation of 1802 which limited the nominal rate of interest to 12%.

Thus during the period under review, we find a great increase in the extent of rural indebtedness, and the growth of strained relations between debtors and creditors. The worst, however, was not yet in sight. It was only in the subsequent period that the evil assumed serious magnitude.

Takkavi

The system of advances by the government to poor ryots for the purchase of seed grain and other requirements is as old as the Epics.[42] But it was under the later Mohomedan rulers that a regular procedure was evolved, and the granting of loans to cultivators became a recognized obligation of the Government. Even the word "Takkavi" which was used to designate such loans is of Hindustani origin—(khavi-giving strength or assisting). The British on their advent found the system already existing and continued the practice of their predecessors. In many cases such assistance was absolutely necessary in the interests of revenue, since otherwise a large number of agriculturists would be obliged to give up their lands. Originally, grants made by government at the beginning of the cultivating season to enable ryots to carry on agricultural operations were called Takkavi, but later all advances for "purposes connected with agriculture," including the digging of wells and the improvement of land were included in the category. At one time it was even applied inaccurately to loans by government for non-agricultural purposes, such as the manufacture of salt and the purchase of tobacco.[43]

41. *Report of the Deccan Riots Commission*, p. 6.

42. कच्चिन्न बीजं मक्तं च कर्षकस्यावसीदति ।
पादिकं च शतं वृद्धया ददास्यृणमनुग्रहम् ॥
Mahabharata, Sabhaparva, V. 78.
"The agriculturists in thy kingdom want not either seed or food? Grantest thou with kindness loans (of seed grain) unto the tillers, taking only a fourth in excess of every measure by the hundred?"

43. *Madras Takkavi Manual*, p. 1.

During the early days of the Company's rule, there was no regular system of grants. At first the government and the Board of Revenue issued executive orders on their own authority for the disbursement of Takkavi loans in specific instances. Regulation XXVII of 1802 provided for the realization of Takkavi advances in the same manner as revenue arrears, but included no directions for the guidance of officers in making advances. In 1803 Takkavi was legalized, and collectors were authorized to issue loans after obtaining the sanction of the Board of Revenue, but here again there was no indication of procedure.[44] The method followed was for Tahsildars to send estimates of Takkavi required in their Taluks to the Collector who forwarded them to the Board; and when the latter sanctioned them, the Collector despatched orders for the disbursement of Takkavi. The amount of loans granted varied greatly according to the requirements of the various taluks, and also to the Amildars' (local revenue officers)' notions of what was necessary—which were very elastic. The advances were made to ryots only on the security of the *potail* or *karnum* or other respectable resident of the village.

This system was fraught with grave abuses. Col. Munro in a letter to his assistants in the Ceded Districts enumerated the various shortcomings of the existing method and suggested certain remedies.[45] In many cases the amount of the Takkavi that the ryot actually received was considerably less than the sum specified in the accounts, for the Amildars were in the habit of appropriating a part of the loan, while the *potail*, *karnum*, etc., who stood as security had to be paid for the service rendered, either in cash or in kind. And frequently the ryot was deprived of the whole amount by the headman as soon as he left the Amildar's office. Indeed it was a common expedient by which *potails* and others obtained money for marriages and funerals. Sometimes the ryot was supposed to have lent the money to the headman, but when the Takkavi was due, it was the former who was compelled to repay it. Further, many Amildars granted Takkavi to a ryot and received it back from him the next moment as arrears of revenue. By these means the Revenue accounts were bolstered up, and the officers justified their action by declaring that it was advantageous both to the ryot and the sirkar,—the

44. Regulations I and II of 1803.
45. Letter to Assistants, 16th June 1801.

former in that it relieved him of the necessity of selling his cattle, and enabling him to begin cultivation, and the latter in being secured from loss of revenue. The practice, however, was obviously pernicious and Munro while prohibiting it, directed that all receipts should first be credited to Takkavi, and the balance, if any, to revenue. This would simplify accounts and was also equitable, since but for Takkavi the ryot's cultivation would undoubtedly have been greatly curtailed, and the revenue correspondingly diminished.

To prevent other abuses it was stipulated that all disbursements of Takkavi should be made before the Tahsildars and other witnesses. The ryot was to sign a receipt or touch the pen before his name was entered in the register. A respectable *malzamin* or money security had to accompany the ryot, and also sign his name. Officials were not to be too strict in their requirements from the surety as to his obligations, lest he should *pro tanto* stiffen his terms to the ryot. Further, each Amildar was to send a full account of the advances to the Sub-Collector for purposes of checking, so that the latter could, by enquiry, make certain that the loans were really granted to the individuals as stated. The amount of Takkavi was limited to 4% of the gross revenue of the Taluk, and was to vary from Rs. 5|- to 50|- for different ryots according to their needs and ability to repay. The sums usually disbursed were Rs. 5|- to 20|-, since "seed, subsistence and the want of one bullock" were the most common reasons for soliciting aid.

The Board of Revenue endorsed all these recommendations of Munro, but they were not generally put into practice. We repeatedly find the Board drawing the attention of Collectors to the continuance of various evils and advocating the adoption of Munro's methods.[46] Estimates of Takkavi were often sent very late and hence the sanction of the Board could not reach the Collector in time to render advances useful.[47] But in the uncertain conditions of agriculture, it was undoubtedly difficult to estimate several months in advance what the cultivators would require. Collectors were therefore authorized to make advances in anticipation of the Board's sanction. However, no serious attempt was made to render the system effective and free from corruption, and

46. Circular Orders of the Board of Revenue, 16th March 1818, 6th Sep. 1832, 1st July 1833.

47. Circular Order of the Board of Revenue, 13th July 1826.

"the practical result was that, while the demand for Takkavi increased year after year, the material improvements effected by, and the relief afforded to, the people at large were out of all proportions to the money so lavishly spent by government on their account."[48] In 1838 the Court of Directors expressed the strange opinion that Takkavi advances were injurious rather than beneficial in that they had a tendency to make the ryot improvident in the hope of obtaining loans, and that it would be better for the ryot to confine himself to a small holding than to be induced by an artificial stimulus to take up more land than he could afford to cultivate. They ordered that grants of Takkavi should be restricted "within the most moderate limits."[49] Later they reiterated the order, but directed that the reduction should be gradual so that the agricultural classes may not be put to undue distress.[50] Thus advances were curtailed year by year till 1856, when they were discontinued altogether, except in rare cases when an extraordinary calamity rendered assistance imperative.[51]

The system of Takkavi loans with all its defects was undoubtedly of benefit to the poor ryots. If the Government had been making a present of the money, there would be a possibility of the ryots becoming improvident. But since it was a loan, and further, a loan from the ruling authority which had better means of enforcing repayment than any ordinary money-lender, it was unreasonable to think so. At any rate the discontinuance of Takkavi did not make the ryot more provident. On the contrary, his debts increased in volume as we have seen. As to the money "lavishly spent," the expenditure was certainly not too liberal. Between Faslis 1232 and 1244 (1822-3 to 1834-5) a few years before it was decided to restrict the further issue of Takkavi, the amounts disbursed on this account averaged 8½ lakhs of rupees annually, while the total number of ryots was nearly 17 lakhs[52] of whom about half were in the most indigent circumstances.

48. *Madras Takkavi Manual*, p. 3.
49. Despatch from England, 19th Sept. 1838.
50. *Ibid*, 29th Jan. 1845.
51. *Madras Takkavi Manual*, p. 3.
52. The number of ryots has been taken from the Census of 1850-1, when they had no doubt increased since the period referred to. But on the other hand, the 1850-51 Survey was incomplete in some districts and the two may be supposed to balance. Even if we make allowance for an increase of another lakh of ryots the expenditure is still far from adequate.

PART III
INDUSTRIES

CHAPTER X

STATE OF INDUSTRIES

SECTION I—GENERAL

From time immemorial till the close of the eighteenth century, India had been renowned for the skill of her craftsmen and the excellence of her manufactures. The seventeenth and the greater part of the eighteenth centuries marked the zenith of that industrial efficiency which had elicited the wonder and admiration of the world. The period 1800—50, however, saw changes of a fundamental character in the nature of the country's productions. India, from being an exporter of manufactured articles, became an importer of them, and began to grow and export raw materials in increasing quantities. In fact, the "roles" of India and Europe, particularly Great Britain, were "reversed," and India began to depend more and more on the West for the very articles in the production of which she was believed to be unrivalled.

At the beginning of the nineteenth century, the country still retained its pre-eminence in arts and crafts. In 1803 a foreign traveller wrote: "The Hindu attainments in Arts . . . . have uniformly supplied the materials of trade in the Western world, which enriched every nation engaged in it. There a passion for Indian manufactures has actuated the higher ranks of society in every age and has conferred a degree of importance upon those nations which have imported them, which they would not otherwise have obtained."[1] Even in the second decade of the nineteenth century we find that the arts and crafts of the country were in a high state of efficiency, according to the testimony of no less a person than Sir Thomas Munro. In his evidence before the Select Committee of 1813, he stated that "in India almost every article which the natives require is made cheaper and better than in Europe. Among these are all cotton and silk manufactures,

NOTE.—The account of industries in this section is necessarily very sketchy owing to the paucity of contemporary accounts. It is possible that an exhaustive study of the records in the Madras Record Office, will furnish more material, but in the present state of the indexes which has already been referred to, such a study will involve some years of tedious labour.

1. Tennant, *Indian Recreations*, 1803, p. 6.

leather, paper, domestic utensils of brass and iron and implements of agriculture." Even the inferior woollen cumblies could successfully resist foreign competition owing to their cheapness, while the costlier woollen manufactures had the advantage of an excellent quality.[2]

The extent of South Indian manufactures was considerable at the beginning of the period. James Grant in his Survey of the Northern Circars bears witness to the flourishing condition of industry and commerce on the Coromandel Coast in general and in the Northern Circars in particular. According to Col. Fullarton, even after the wars with Hydar and Tippu, which left the southern districts desolate, there were several places where manufactures were thriving.[3] Buchanan in his *Journey* of 1801 describes extensive manufactures in the districts through which he travelled, and these were, except for parts of Mysore, by no means the greatest manufacturing centres.

First among manufactures came cotton textiles which were produced in large quantities throughout the country. Another major industry at the time was iron-making and smelting which was carried on in several regions. These two will be dealt with in some detail in the sections which follow. Leather making, dyeing, glass-making, diamond and copper-mining, and saltpetre manufacture were among the other industries. With regard to these we have very little information. Buchanan's *Journey*, Heyne's *Tracts* and a Minute of Sir Thomas Munro in 1824 indicate the existence of a superior kind of locally manufactured leather, and Heyne gives a detailed account of the process of manufacture.[4] Commenting on the practice of the Military Board in getting all the military stores from England, at an unnecessarily high price, Munro observed, "there is no such superiority in the quality of the European article to compensate for the great excess of price. It is only three years since the commissariat began to tan leather and the progress made in that short period has been so great as to hold out the strongest encouragement to perseverence in the present course".[5] He declared that the difference, if any, between local and European leather was very trifling. By the end of the half century, however, tanning seems to have decayed. At

2. Arbuthnot, *op. cit.*, p. 491.
3. Fullarton's Letter to the Court of Directors, 7th Jan. 1785.
4. Heyne, *op. cit.*, p. 90.
5. Arbuthnot, *op. cit.*, p. 424.

any rate there is no mention of it except for a solitary instance in the Guntoor District in Pharoh's *Gazetteer.*[6] We also find several references to dyeing, glass-making, saltpetre manufacture, etc. in the General Reports of the Board of Revenue and in Heyne's *Tracts,* but by 1850, none of these, except perhaps dyeing, was of any importance.

Organisation

Industries were both rural and urban. The village carpenter blacksmith, mason and others supplied the simple needs of the agriculturists to a large extent and were remunerated by grants of land, fees and perquisites. But industries such as dyeing, tanning, etc., which catered to a wider market were for the most part localised in certain towns and villages or groups of villages. The wages of the workers in these industries were naturally paid by the job.

Many of the industries were organized in craft and caste guilds which regulated training and conditions of work. "The admission to apprenticeship was regulated by birth, capacity, honesty and knowledge of accounts; and contributions to guilds were made in kind or cash or by a certain percentage of the profits either annually or monthly. The Guilds exercised a lot of influence, regulated hours of work, punished bad work, decided social and trade disputes and in fact exercised real control over the workers".[7] The economic position of craftsmen depended largely on the strength of these guilds.

A feature of Indian manufactures which struck every foreign observer was the paucity and the simplicity, amounting often to crudeness, of the tools and equipment used. According to Dubois, the carpenters' only instruments were, "one or two axes a few saws and planes, all of them so rudely fashioned that a European workman would be able to do nothing with them". The equipment of a goldsmith consisted of a tiny anvil, a crucible 2 or 3 small hammers and as many files.[8] In fact all the artisans were in the habit of carrying their tools and other appliances as they moved from place to place. But this imperfection of implements was more than compensated by an innate skill in "the

6. Pharaoh's *Gazetteer,* p. 65.
7. Narayana Rao, *Report on the Survey of Cottage Industries in the Madras Presidency,* 1929, p. 20.
8. Dubois, *op. cit.,* p. 35.

production of delicate fabrics, in the blending of colours, in the working of metals and precious stones." As to dyeing, Heyne remarks that "though the methods of the Indian dyers are exceedingly tedious and complicated, and though they are utterly unable to explain the rationale of their process, yet the beauty of their colours must be admired and must inspire us with the opinion that a knowledge of their methods might improve the processes of the European dyers".[9] Dubois wondered "to what a standard of excellence would these men have attained if they had been from earliest times subjected to good masters."[10] It seemed a marvel that anybody could produce even tolerable goods, much less pieces of artistic work with such inadequate implements at his disposal.

The Decay of Industry.

However, much of this excellence was, by the middle of the nineteenth century, a thing of the past. The major industry of the country succumbed under the influence of Manchester's competition. The effects of the blow to the weaving industry were most acutely felt, because it was diffused throughout the country and offered employment to a very large number of people. Other industries suffered equally, and some even more, such as iron making. Iron-mining and smelting had been one of the most important industries in 1800 and the iron of South India was, according to the best authorities, all that could be desired, both as regards quality and quantity, and facility of extraction. Yet this industry had a worse fate than weaving. While the latter decayed but managed to struggle on, the former was completely ruined. Of the various iron mines in the Presidency at the beginning of the period, there is little mention in the later reports, District and Administration Manuals. Other industries were not in a much better state. Even in 1836, Dr. Wight observed that "India as compared with Britain, a pre-eminently manufacturing country, may almost be considered a non-manufacturing one, but fitted from the vastness of her natural resources, when these are adequately drawn forth, to be of the greatest benefit to Britain by supplying her with raw material".[11] This was of course not quite true. We may suppose that the wish was father to the thought. He himself admits that up to 1814 local manufactures held their

9. Heyne, *op. cit.*, p. 204.
10. Dubois, *op. cit.*, p. 35.
11. Report from Dr. Wight, 20th May 1836.

own. But by the middle of the century, India was indeed no longer a manufacturing country. In Pharoah's *Gazetteer*, the only industries worth mention except for weaving and iron-mining were, pottery in South Arcot, leather making in Guntoor, and the manufacture of articles from ivory, sandalwood and horn in Vizagapatam.[12]

The decay of the local manufactures was partly due to the rapid technical advance made in the West, during the latter part of the eighteenth and the beginning of the nineteenth centuries while Indian industry lagged behind. Improved communications (such as they were before 1850) accelerated the movement by making cheap foreign goods accessible to the people in the interior. The attitude of the East India Company also, was not without influence As early as 1785, Col. Fullarton wrote to the Directors: "when we recollect the original object of the English merchants in India —the benefits of a commercial intercourse with that once industrious coast,—we find that it had long ago been overwhelmed beneath a mass of territorial concerns, assumptions of sovereignty and wanton extension of Dominions which we know not how to govern." He adds that the Company's employees preferred quick fortunes through contracts of pay-master-ships, residencies and chieftain-ships to the "tedious drudgery of mercantile proceedings." The Company indeed gradually neglected the commercial side of its activities, particularly in its original aspect of exchanging the "products" of England for the "manufactured articles" of India. There was less and less of encouragement, not to speak of positive discouragement to the industries of the Presidency. The rising importance of commercial crops further contributed to the neglect of industries which had ceased to be remunerative. At the close of the half century Indian manufactures were at a very low ebb.

The decay of the two great industries, iron and textile will now be dealt with.

Section II.—Iron Industry.

The iron deposits of South India are fairly extensive. In Salem, the Northern Circars, Ceded Districts, and Mysore, iron is found largely in the ore, while in Coimbatore and Malabar the black sand brought down by streams is rich in the metal. At the opening of

12. Pharoah's *Gazetteer*, pp. 285, 165 and 22.

the last century, iron-making and smelting was carried on to a considerable extent, the entire demand for agricultural implements, carpenters' and smiths' tools, iron boilers for sugar making, domestic utensils, etc., being met by the local production.

The industry was widely distributed in the country at the commencement of British rule. Buchanan saw numerous mines and forges at every stage of his journey, except in Canara. Colangodu and Poicun in Malabar contained several furnaces, while in the single village of Vellater there were 34 forges. At Satyamangalam, Chinnamali, Mulnur and other parts of Coimbatore, iron was smelted from black sand on a large scale. Kanjamala and Sendamangalam in the Salem district were important centres of iron manufacture. In the village of Ramanakapetta in the Northern Circars there were at one time as many as 40 furnaces, and in other parts of the Circars, iron-smelting was a part-time occupation of several people, who were employed in agriculture and other avocations in the wet season.[13]

The quality of South Indian ore, was, by all accounts of the very best.[14] The Salem and other ores were among the richest in the world, containing 72% of iron, whereas English ores contained 33%, and even the best Swedish ones, 70%. The very slags and scoriae remaining after Indian ores had been smelted were richer than the average English ores.[15] According to Dr. Heyne, the iron produced in the Northern Circars was "considered as the finest in every respect for tools, razors, etc.," and Mr. Stodart, "an eminent instrument maker" of England asserted that "the steel of India is decidedly the best I have yet met with."[16] Mr. Heath stated before the Select Committee on East India Produce in 1840 that he could "produce articles to the Committee made from this (Salem) steel, the quality of which is allowed by persons who have worked it at Sheffield to be unequalled, and decidedly superior to the best they

13. Heyne, *Reports on the Manufacture of Iron in the Northern Circars*, 15th Feb. and 11th Aug., 1795.

14. *Ibid.;* Arbuthnot, *Memoirs of Sir Thomas Munro*, p. 561;
Holland, *Preliminary Report on the Iron Ores and Industries of the Salem District*, p. 138;
Capt. H. Campbell, *Report on the manufacture of bar iron in Southern India*, 3rd Aug. 1842.

15. E. Balfour, *Report on Iron and Coal in the Madras Presidency*, 1855, p. 12.

16. Heyne, *op. cit.*, pp. 218, 364.

can now get made from the highest priced Swedish iron.[17]" The iron of Malabar was considered by Mr. Heath to be equally good. Indian steel or "Wootz" as it was called, was renowned for its superior qualities,[18] being excellently adapted for making knives, wire and gun-barrels, as well as for engineering purposes.

Manufacturing Processes

The art of mining and smelting iron was an ancient one, and must, at one time, have been highly developed, judging from the earliest steel monuments, and from the fact that the famous Damascus blades were fashioned out of Indian steel. At a time when the principles of iron manufacture were but imperfectly understood in the West, iron and steel of the best kind were prepared in India by methods which had been practised for centuries. In spite of all its defects, the local mode of manufacturing iron was greatly admired by those who examined it. "The antiquity of the Indian process is no less astonishing than its ingenuity," declared Mr. Heath, who had been engaged in iron manufacture for years.[19] Dr. Heyne was greatly struck by the "simplicity of every part of the process and the goodness of the iron obtained."[20] Mr. Balfour who was appointed in 1854 to report on iron and coal in the Presidency observed that the metallurgical processes had "long since been carried to perfection."[21] It may be said at once that much of this excellence was relative, not absolute; and the subsequent decline of the industry affords sufficient proof of it. The admiration was aroused not so much by the intrinsic merit of the technique as its extreme simplicity when compared to the elaborate processes which European manufacturers had been used to on the one hand, and the superior quality of the product on the other. This superior quality was attributable to the richness and purity of the ore, the use of charcoal as fuel, and partly to the practical experience handed down through the ages.

The actual methods of manufacture, however, were certainly not perfect. The people were notoriously averse to innovations and

17. *Report of the Sel. Committee on E. I. Produce,* 1840, p. 325.
18. Evidence of Mr. Cockburn before the *Select Committee of* 1813, Report, p. 473.
19. J. M. Heath, On *Indian Iron and Steel,* Madras Journal of Literature & Science, Vol. XI, 1840, p. 189.
20. Heyne, *op. cit.,* p. 219.
21. E. Balfour, *op. cit.,* p. 12.

any departure from the practices of their forefathers was taboo. The apparatus was extremely inadequate, and the processes left much to be desired. In mining, which was really "grubbing", for they seldom dug more than two or three feet deep, there was an enormous wastage of ore. All the larger pieces of ore were thrown away, " for the trouble of breaking any of these into lumps of the size of the fist is greater than cutting down more from the hill." The furnaces for smelting iron were very crudely constructed, and being often in the open air, operations had to be suspended in rainy weather. As for the forges, according to Buchanan, the iron forges above the Ghats were " miserable " and those below the Ghats even more so. During the smelting operations fuel was wasted to a great extent and the charcoal was also injured by the practice of pouring water on the furnace to put out the fire. A general complaint was that fusion was incomplete and hence repeated forgings were necessary before articles could be manufactured. Further, the process of smelting was long and tedious, and the yield of iron was very low (being seldom more than 31% and often as low as 12 to 18%) in spite of the richness of the ore.

The method of mining was simplicity itself. The ore and ground being generally soft, a pick-axe was the only instrument used. "The miner forms a cut with a perpendicular surface, and throws all the rubbish down the declivity. He then continues cutting down from the hill with his perpendicular surface, two or three feet in height. He works with a pick-axe and cuts promiscuously through earth, stones and ore. Having brought down a sufficient quantity, he rubs the fragments; and having picked out the smaller pieces of ore, he throws down the hill all the earth, ochres, barren stone, and larger masses of ore."[22] When a bed was exhausted, the pit was filled up and the worker began to dig in another direction. Dr. Royle considered it very wonderful that a person should work with no other tools than a hatchet and his hands in the production of a superior article, but actually it was very inconvenient and laborious, the miner having to make excavations about every six yards.[23]

In some parts, the miners were also smelters, but in others, the ore was purchased from the diggers by the latter. At the end of the half century iron-sand washed down by the streams was often

22. Buchanan, *op. cit.*, Vol. II, p. 456.
23. Heyne, *op. cit.*, p. 219.

collected by women and bartered for grain.[24] The ore was prepared for smelting by stamping and beating it and separating the quartz either by washing in water or by winnowing, after which it was taken to the furnace. As has been mentioned earlier, the furnace was usually in the open, but sometimes it was constructed inside a thatched shed. It consisted partly of a permanent structure and partly of a temporary one, built up and demolished during each smelting process.[25]

The methods of smelting differed slightly in the various districts in the matter of the shape of the furnace, the bellows used, and as to the time taken in the process. But the principles of iron manufacture were practically the same all over South India and indeed from the Himalayas to Cape Comorin.[26] When the furnace was ready, some charcoal was thrown into the bottom and lighted. A basketful of ore was then emptied on it, either broken into small pieces or just as it had been quarried, and small quantities of charcoal and ore were alternately added at regular intervals, till a short time before removing the iron. Meanwhile, the bellows were kept plying incessantly. The "scoriae" was now and then allowed to run out through the opening at the bottom. After several hours, the operations were suspended and the temporary wall broken. The metal, after being removed from the furnace, was allowed to cool a little and then cut into two or three pieces.

The product thus obtained was often of a "very inferior quality, porous, and its pores filled with scoriae, and in fact little more than 'half-smelted' if such an expression can be used."[27] In fact it was so imperfectly smelted that it could hardly be classed under cast-iron; but if it was heated again and hammered it acquired "the properties of steel" and could be manufactured into instruments, etc. One good feature of the process was the purity of the charcoal used, which, along with the excellence of the ore, was responsible for the fine quality of the steel. Malleable iron for manufacturing implements was obtained by heating the iron brought from the smelting furnace several times and hammering it into convenient pieces.

24. E. Balfour, *op. cit.*, p. 25.
25. Heyne, *op. cit.*, p. 220.
J. M. Heath, on *Indian Iron and Steel*, M.J.L.Sc., Vol. XI, 1840.
26. Capt. Campbell, Report on the Manufacture of bar iron in South India, 3rd Aug. 1842.
27. *Report on Iron Manufacture*, 15th Feb. 1795.

For the production of steel, these iron pieces, weighing ½lb. to 2 lbs. were placed in crucibles, or cuppels, generally with a handful of dried "tangedu" (Cassia Auriculata) and other leaves added. The crucibles were placed in a semi-circle over a large furnace, and the bellows were applied for several hours, after which they were removed and allowed to cool.[28] They were then sold, either in the conical form which they had acquired in the crucibles, or hammered into square bars. The price of the product was about 15 gold fanams per maund (10 sh. 8d. per 25 lbs.).

This extremely simple process was for long a mystery to Europeans.[29] Indeed in several parts of the country the method of manufacturing steel was kept a secret and handed down from father to son.[30] It was not till Dr. Heyne and others actually observed the operations that the prevailing misconceptions were removed, such as the belief that steel was produced direct from the ore, etc. The processes of manufacture do not appear to have changed during the period. The later accounts given by Capt. Campbell, Mr. Balfour, Mr. Heath and others, do not differ materially from those of Buchanan and Heyne.

Iron-smelting seems to have been an unhealthy occupation. It was not injurious in itself but as the work had to be carried on near forests, smelters were often attacked by fever. Mr. Heath found the labourers in his works to be very efficient men,[31] but as a rule, the men employed in the industry were weak and sickly-looking. The miners, smelters, charcoal burners, etc., employed at one bloomery all together seldom exceeded 8 or 9 men. In some parts, there were only three men for working a furnace, and even these were under constant apprehension that they might be forced away to carry "burdens for strangers from one village to another, a thing which often happens in the very season when it is in their power to employ their time to most advantage to themselves." Two large furnaces at Chica-balicaray employed 22 men, including the miners and carriers of the ore. When one of them fell sick, as no doubt happened often, the whole operation was held up; and this as well as frequent holidays and rains, resulted in production being much below that warranted by potential capacity. Hence, iron-work-

28. H. Wilkinson, On Iron, J.R.A.S., Vol. V, p. 387.
29. J. M. Heath, On Indian Iron and Steel, J.R.A.S., Vol. V, 1838.
30. E. Balfour, *op. cit.*, pp. 120, 217.
31. *Report from the Select Committee on E. I. Produce*, 1840, p. 330.

ers were, in spite of the existence of a large demand for their products, far from prosperous, and forced to cultivate the land for their livelihood in the wet season. "The finest and mildest season they employ in cutting wood in the hills and in burning charcoal, and after these operations are over, in recovering their health at home".[32]

The Porto Novo Iron Works

The iron industry received little encouragement from the Government, with the notable exception of the Porto Novo Iron Works. Whenever any individual who was interested in the matter investigated the possibilities of iron manufacture in various localities, his report was transcribed in the Government Proceedings, and his zeal was commended; but that was all. In 1824, Sir Thomas Munro observed that "the richness of the ores of Salem and other districts have been known above thirty years, without anything having been done to extend their produce," and that unless the rulers gave active support the industry would remain indefinitely in its then backward condition.[33] He recommended that Mr. Heath, who had long been carrying on experiments in the preparation of iron in South India, and who had spent considerable sums of money on them, should be given facilities, monetary and other. Accordingly, Mr. Heath received an advance from the Madras Government and started operations in 1825.[34] After a few years Mr. Heath represented that certain concessions were necessary for the success of his undertaking and in 1831, he was given the exclusive privilege of erecting and conducting iron-works according to European methods in the Presidency.[35] He constructed large buildings and furnaces and imported much machinery from England, and the first experiments seemed to be eminently satisfactory.

Soon, however, Mr. Heath found that more capital was required and he applied to Government for further assistance. A Committee was then appointed by Government to examine and report on the conditions and future prospects of the iron works. A number of experiments were conducted twice over, under the personal supervision of the Committee. It

32. Heyne, *op. cit.*, p. 218.
33. Arbuthnot, *op. cit.*, p. 561.
34. Ranade, *Essays in Indian Economics*, p. 166.
35. Letter to England (Public), 17th Sep. 1833.

examined the entire process and found the results most encouraging. While Swedish bar-iron was sold in England at £34 to £40 per ton, Salem iron, which was quite as good, cost £6-10-0 at Porto Novo, and it was estimated that it could be shipped to England for £12 to £13. The Committee reported that there was every prospect of success and recommended the formation of a company with adequate capital.[36] Government was favourably impressed, and in a letter to the Court of Directors they pointed out the necessity for assisting the project, not only on its intrinsic merits, but also because new sources of wealth were particularly deserving of encouragement at that period of diminishing revenue and falling prices.[37] Accordingly in 1833 Mr. Heath was granted exclusive mining rights in Salem, Coimbatore, South Arcot, Malabar and Kanara, and permission to cut fuel in Tanjore, Trichinopoly and South Arcot, with exemption from various duties for 21 years.[38] A company called the Porto Novo Iron Company was started, and its capital was provided partly by an advance of Rs. 160,000 by Government. For this advance, and for its previous loans to Mr. Heath, amounting to Rs. 411,000, he executed bonds, offering his entire stock and property as security, and the capital and stock of the new company as collateral security. Meanwhile the duty on Indian iron in England was reduced from £16 10sh. a ton to £1 and later to 2sh. 6d. a ton. In Madras, all the materials required for the workshops at Porto Novo were allowed to pass duty free for a term of years.

The enterprise began with high hopes expressed on all sides, but unexpected difficulties upset all the calculations. Misfortune seems to have dogged the undertaking from the beginning. There was great delay in the completion of the works, owing to imperfect fitting of machinery in England, necessitating refitting here. When these difficulties had been overcome, operations were begun, and some unfinished iron was sent to England to be worked into cast-iron and steel. Mr. Heath himself went to England, where he set up steel works and made experiments "the result of which entirely satisfied ourselves that there was that in the iron which only required it to have fair play, to be all that we

36. Report to Government, 15th Feb. 1833.
37. Letter to England (Public), 17th Sep. 1833.
38. Letter to England, 13th May 1834.

expected."[39] Meanwhile, the Madras Government apprehensive of the fate of its advances, appointed a Committee in 1837 to examine the iron works and the accounts of the Iron Company. The report revealed that the accounts were entirely in order, but that work was suspended or below full capacity owing to the exhaustion of capital.

The Company now procured more capital and work was resumed. Considerable iron was manufactured and supplied both to individuals and to the Madras Government which undertook to purchase all its requirements from the Company provided prices were satisfactory. A great deal of finished and unfinished iron was also exported to England, where it found a favourable market. But still the enterprise did not yield even a fraction of the expected returns. In 1840, the workshops which once employed 3,000 to 4,000 men had only 2,000 for want of capital, and in 1843, 10 years after the commencement of the undertaking, it was reported that measures were "in contemplation" in England, through which they expected to bring the project into successful operation.[40] Affairs continued in this state till the middle of the century, with diminishing resources and undiminished expectations. In 1851, a new Company—the Indian Iron and Steel Company—was formed, which took over the lease-hold rights of the first company, and the management of the Porto Novo factory. But it did not prosper any better than Mr. Heath's Company, and Government despairing of ever realising its loans, stopped the works in 1860-61.

Thus the Company which on a "moderate calculation" had been expected to make a profit of £30,000 per annum after three years,[41] never declared a dividend or made any payment to Government. As far as the ore was concerned, its quality and quantity left nothing to be desired: there were no two opinions about it. But there were various other factors which were overlooked at first. Major R. Mahon summed up the shortcomings of the undertaking as inexperience, defective machinery and want of capital.[42] This was no doubt the case at the commence-

39. *Report from the Select Committee on E. I. Produce*, 1840, p. 328.

40. Letters from the Directors of the Porto Novo Company to Govt., 18th Sep. 1840, 13th March 1843.

41. Report of the Committee appointed to examine Mr. Heath's works, 15th Feb. 1833.

42. Watt, *Commercial Products of India*, p. 690.

ment of operations, but nearly twenty years, to say nothing of Mr. Heath's earlier experience, should have been sufficient to remove the first cause. The machinery, again, had indeed been defective at first, but it had, according to the reports of the Directors themselves, been replaced by better apparatus; and as for capital, large sums had repeatedly been sunk in it and yet the undertaking remained in a chronic state of anaemia. The Directors of the Company gave an explanation similar to Major Mahon's and added that it was also due to "difficulties in arranging for the supplies (*i.e.*, transportation) of ore and more particularly fuel, combined with much interruption in our lease-hold rights."[43] Of these the first cause was really the most important. Charcoal, which was the only fuel used, could not be procured easily and cheaply, while the lack of communications rendered it both expensive and difficult to transport ore and iron. As far as the internal market was concerned, the iron implements such as the plough were of no use, being too heavy for the small local cattle. (Pharoah's *Gazetteer*, p. 36). When to these were added various miscalculations, a number of misfortunes, and the other influences referred to above, it is not surprising that the undertaking yielded no profits. And thus "the Sheffield Ironmonger's prophesy that India would ultimately become one of the largest sources from whence Sheffield would draw her supply of raw materials, remained unfulfilled".[44]

Decline of the Iron Industry.

The fate of the Porto Novo Company only reflected the general decline of the iron industry, which began early in the century. After Buchanan and Heyne, there is scant reference to iron-mining and smelting for a long time, and where it is mentioned, it is only to say that formerly the manufacture was widespread, but that it had decayed greatly at the time. In 1842, Captain Campbell, Assistant Surveyor-General sent a number of reports on the manufacture of iron and steel in South India, and offered to set up iron-works on Government account, but the offer was declined on the ground that it would interfere with the privileges granted to the Proto Novo Company.[45] The next inquiry into the

43. Letter from Messrs. Heath, Norton, etc., to Government, 20th Sep. 1837.

44. Ranade, *Essays on Indian Economics*, p. 167.

45. *Public Consultations*, 31st May and 16th Aug. 1842.

state of iron manufactures was in 1855 when Mr. Edward Balfour made a thorough survey of iron and coal in the Madras Presidency. His report revealed that conditions were most unsatisfactory, though iron mining and smelting were still carried on in several parts of the Province. In Chingleput there were traces of extensive manufacture at one time, but now the art was "neglected and forgotten." In Coimbatore there were few vestiges of the industrial activity of Buchanan's time, the manufacture being limited to the production of a few agricultural implements. In Ganjam the method of manufacture was "lost," and in Rajahmundry there was not a furnace in blast in the whole district, where Dr. Heyne saw excellent steel instruments being produced in large quantities. In most of the districts there was a considerable import of iron and steel on private account. Besides this, Government imported a great deal of British iron and steel, as well as instruments at a high cost and sent them at great expense to outstation arsenals and elsewhere, although there was "no doubt that, in all the districts where our arsenals are situated, their steel-irons and steel would furnish implements and tools greatly superior to anything brought from England".[46]

In some districts, however, the decay of manufacture was not so pronounced and a considerable amount of iron and steel was produced for local consumption. In North Arcot, there were 100 villages where iron-mines were worked, and the number of furnaces was 200. But the method of manufacture was crude and imperfect and the outturn extremely poor, so that the workers made only Re. 1-8-0 a month. Mr. Balfour says, "poor as this business is, and miserable and destitute as the people are who follow it, it has not escaped the moturpha," a tax which amounted on an average to Re. 1-4 per furnace, and sometimes as much as Rs. 3-8.[47] The iron industry of Malabar was by no means as prosperous as when Buchanan visited it, but there were still several furnaces working, and what was more, they were well conducted, and the operations as a whole were on better lines than in other parts of the country. In Salem, despite the existence of the Indian Iron and Steel Company, the local furnaces turned out a large quantity of steel and all kinds of implements.

Thus at the middle of the nineteenth century the iron industry was decadent but not extinct. In 1855 it was computed that iron

46. Balfour, *op. cit.*, p. 8.
47. Bourdillion's Report in Balfour's Report, p. 19.

and steel worth half a million pounds sterling were manufactured in the iron-producing districts of the Presidency, which proves that British manufactures had not quite ousted the local products. "For all the smaller implements used in manufacturing and agricultural pursuits, the native furnaces are producing a steel iron infinitely superior to anything obtainable in England, and which will stand a comparison with the best Swedish and Russian works".[48] Even in the neighbourhood of the Porto Novo Works, many people preferred to buy iron and steel manufactured by the indigenous method, because it was more serviceable. Mr. Balfour stated that it would be possible for Indian iron and steel to displace Swedish and Russian products in the English and other markets if certain improvements were effected,—such as economy in smelting, elimination of fuel wastage, better bellows, larger furnaces, and cheaper and speedier transport.

However, none of these improvements took place, except partially and tardily in the case of communications, and Indian iron, far from monopolising foreign markets, disappeared from the home market. The iron industry merely shared the general fate of Indian industries in the nineteenth century, though the blow was more severe than in the case of some others. Among the causes for the decay was the high price of fuel, which was always a material drawback and which, after the Government assumption of monopoly over the forests, became prohibitive. Owing to the absence of coal, charcoal was the only fuel that could be employed. Further, the Indian industry retained its primitive methods, while rapid strides in technique were taking place elsewhere. The difficulties and the high cost of transport have already been referred to. Not the least important of the causes was lack of state encouragement. In spite of Mr. Balfour's findings, Government continued to make all its purchases of iron and steel from England at great cost in preference to superior local products. Imports of British iron goods were further stimulated by being admitted duty free, while indigenous producers were subject to various oppressive taxes such as the Moturpha and the Transit duties. The result was that private imports of metal into the Presidency (almost entirely iron and steel goods from Britain) rose from Rs. 49,411 in 1811-12 to Rs. 7,22,098 in 1830-31 and Rs. 17,09,818 in 1850-51.[49] By 1860-61 the imports had

48. Balfour, *op. cit.*, p. 6.
49. Annual Reports on External Commerce.

risen to Rs. 30,29,989 and the increase was maintained in subsequent years. Thus within a few decades, Indian iron was ousted from the field, and the industry dwindled into insignificant proportions. The art of manufacturing iron was practically lost, and in the accounts of the industries of the Presidency towards the end of the century, iron-making was not regarded as worthy of mention.

CHAPTER XI

STATE OF INDUSTRIES—(*Contd.*)

SECTION III.—TEXTILE INDUSTRY

The unrivalled excellence of Indian textile manufactures was a bye-word in the seventeenth and eighteenth centuries. Their superiority lay in the fineness of the texture, the delicacy and harmony of the decorations and the "freshness and permanency" of dyes. Many writers have grown eloquent over the marvellous beauty of the fabrics that were aptly called *subnam* (evening dew), *abravan* (running water) *ventus textilus* (textile wind), etc. So delicate was the texture that English woollen manufacturers in the days before England adopted protectionism, complained that the Indian fabric was but the shadow of a commodity.[50] As for the colours, they were rich without being gaudy, and remarkably permanent. A noteworthy feature of the dyed chintzes of Masulipatam and Madura was that the colours became even brighter and more beautiful after washing.

The manufacture and export of cotton goods began in very early times and continued through the ages. The seventeenth and the greater part of the eighteenth centuries marked the heyday of the Indian textile industry. Cotton piecegoods were the staples of the export trade of the various European Companies in India. In England, calicoes and chintzes were the craze among all sections of the people, and the British wollen manufacturers were so seriously affected that they started an agitation which led to the adoption of a protectionist policy by Britain. In 1700 and 1721 a number of laws were passed prohibiting the import of Indian goods and even the wearing of calicoes. From this time, we find a series of Acts and Regulations in England to protect the home industry. Then came the introduction of machinery in England, when the British manufacturer was able to throw large quantities of cotton goods on the world markets at extremely low prices. These factors, combined with various other influences, brought about the collapse of the textile industry.

Condition of the Industry at the Beginning of the Period.

At the opening of the nineteenth century, the textile industry was still able to hold its own. Owing to the wars and turmoils

50. P. J. Thomas, *Mercantilism and the East India Trade*, p. 34.

of the second half of the eighteenth century, there was occasional suspension of industrial activity; but thanks to the protection offered by the Company, the weaving villages along the coast were able to continue their work without much interruption. We have no figures of the total production but some accounts of the export trade are available. From these we find that about 1790, the Company's annual investment of piecegoods had amounted to between 14 and 16 lakhs of pagodas (49 to 56 lakhs of rupees) but in 1796, it was reduced to 12 lakhs owing to monetary stringency. The wars and other demands had depleted the treasury and the Government was obliged to borrow money at 12% even for the provision of this Investment.[51] But after the close of the wars, there was a steady expansion.[52] As for private exports, between 1801 and 1805 they averaged 6,08,165 pieces per annum, valued at Rs. 29,99,721.[53] Total exports thus averaged about 75 lakhs of rupees per annum. We have no data for estimating the internal consumption, but it must have been considerable. Mr. Dodwell makes a rough guess at it and puts down the proportion of the exports to total production at 1 : 10.[54] Assuming this to be correct, total production must have been about 7½ crores of rupees. Even if we reduce the proportion of internal consumption by half, the total could not have been less than 3 or 4 crores. Thus it is clear that cotton manufactures were very extensive at the beginning of the nineteenth century.

The industry was widely diffused. In all the districts weaving was carried on to a greater or lesser extent. The coarser stuffs, especially those used by the poorer classes, were generally of local manufacture. But the production of the better sorts of cloth and of a few specialized kinds was localised in and around particular towns. Further, along the coast where the European companies had established factories, there were large groups of weaving villages. Chicacole in Ganjam was famed for its fine muslins, while Masulipatam produced beautiful chintzes and the 'inimitable' Palempores which were so much in demand in Europe and Persia. Venkatapalem in Guntoor was a centre for the manufacture of the well known "Madras

51. Commercial Despatch to England, 22nd March, 1797 and 20th Feb. 1798.

52. *Ibid.*, 9th August 1799.

53. Report on External Commerce, 1804-5.

54. H. Dodwell, *The Madras Weavers under the Company.* Paper read before the Indian Historical Records Commission, 1922.

Handkerchiefs." The Northern Circars as a whole, provided the most valuable part of the Investment, comprising longcloths, calicoes, and various other kinds of cloth, both plain and coloured. In Nellore a large variety of cloths including muslins, handkerchiefs, tent-cloths, etc., were manufactured, particularly in the Taluks of Gudur, Rapur, Kavali and Nellore. Bellary was the next considerable weaving district in the north, with Adoni as its centre, where about 200 different varieties of piecegoods were turned out.[55]

Turning to the south, " some way back from Madras lay the principal centres for the manufacture of fine goods, beetalas and muslins. To the south and south-west of Cuddalore lay the centres of Udaiyarpalayam, Chinnamanaikkanpalayam, and Shiali, where were made the calicoes that were dyed blue, principally in the neighbourhood of Porto Novo ".[56] In and about Cuddalore itself was an extensive manufacture of brown cloths, ginghams, chintzes, comboys, palempores, etc.,[57] while Madura produced the red and black sarees which enjoyed a wide celebrity. Ramnad and Tinnevelly, further south, formed another calico-producing centre. Buchanan noted the manufacture of fine cloth at Coimbatore and Bangalore, and of coarse cloth in large quantities in several of the places he visited.[58] Thus almost every district was famed for the production of one or more varieties of cloth.

Equipment.

The implements and equipment employed were simple and meagre to an extreme. " The instruments they use for cleansing, loosening and spinning the cotton, are remarkable for their ingenuity and simplicity " observed Mr. Elijah Hoole.[59] Spinning was performed by a light spindle made to revolve in a small frame by means of a wheel and a band, the wheel being driven by the right hand while the cotton was held with the left. The tiny ' takli ' consisting of a thin metal rod with a weight at one end was also largely used for spinning. The same simplicity and

55. Letter from Munro to the Board of Revenue, Board's Proceedings, 21st June 1804.
56. Dodwell, *The Madras Weavers,* I.H.R.C., Vol. IV.
57. Report on External Commerce, 1811-12.
58. Buchanan, *op. cit.,* Vol. I, pp. 145, 154, 290 and 472.
59. Elijah Hoole, *A Mission to the South of India,* 1829, p. 156.

crudeness of tools characterised weaving. Tennant states that "in the manufacture of fine muslin, in which they excel all the world, the wheel, the reel, and the loom, are of a simple and artless structure. Yet the work produced cannot be equalled by European machinery, aided by every effort of ingenuity and skill."[60] In fact the entire apparatus for both spinning and weaving was often carried by the artisan himself as he travelled from place to place. For printing calicoes, the tools comprised a few bamboos for holding the cloth, some potsherds to mix the colours in, a hollow stone for pounding them and a few brushes. Commenting on the common belief in Europe that Manchester, Lyons and Birmingham must have set up their factories on the Indian model, Dubois declares that in fact, the "beautiful fabrics" of India were "manufactured in wretched thatched huts built of mud, twenty to thirty feet long by seven or eight feet broad. In such a work room, the weaver stretches his frame, squats on the ground, and quietly plies his shuttle surrounded by his family, and his cow and his fowls".[61] During the period under review, the apparatus remained the same while fundamental changes in manufacturing processes occurred in the West. The result was that the mills of Paisley and Manchester were soon able to surpass the Indian articles in all but the very finest varieties.

Organisation and Credit.

The weaving industry in common with other industries was organized into castes and guilds, which were sometimes identical and sometimes not. There were certain professional weaving castes such as the Devangas, Saliaes, Kaikolar and Patnulkar to whom weaving was generally the sole means of livelihood. It is stated that "usually, each sub-caste wove a particular type of cloth, and could seldom be induced to make any other". It was difficult to effect a change even in the dimensions of the cloth.[62] Besides these, several other castes, such as barbers, Chucklers, Dhers, etc., took it up as a part-time occupation.[63] Even the higher castes occasionally took to weaving, for it was one of the few avocations the pursuit of which was not regarded as derogatory to anybody's dignity. Mohomedans also, formed a considerable

60. Tennant, *op. cit.*, p. 301.
61. Dubois, *op. cit.*, pp. 36, 81-2.
62. Dodwell, *Madras Weavers*, I.H.R.C., Vol. IV.
63. Letter from Munro, Board's Proceedings, 21st June 1804.

element in the weaving population. Organization into guilds was usual and in certain parts the guilds seem to have been fairly numerous, powerful and productive of substantial advantages, especially in marketing the products. "Combinations are among no classes of people so common as the weavers" observed Mr. Place in his report on the Jaghire in 1799. Risings and 'strikes' were frequent among the company's weavers, and owing to the exigencies of the Investment, they often "succeeded too well".[64] The usual way of ventilating a grievance was to summon an assembly of the craft and suspend operations or send a petition to the authorities. In general, however, as the industry was very widely diffused, these guilds could not have exercised much influence on the quality of the product and conditions of work.

The industry presented every variety and gradation from the completely independent producer who provided his own capital and marketed his products himself, to the weaver who was so dependent on advances from the dealer that he was practically a serf. Where the weaver worked on his own account, the fabrics were generally of the coarser variety which would meet with a ready sale in the neighbourhood. Since the weaver had little capital, he was obliged to sell his cloth before he could buy his yarn for further production. Even here, sometimes the producer paid cash for the yarn and sometimes bought it on credit. For the finer fabrics on the other hand, and for goods which found a distant market or were in large demand, the weavers worked only to order. Merchants had to advance money, either directly or through middlemen.

The sums advanced to the weavers were half and sometimes the whole of the price of the goods, when there was a heavy demand for them from a great distance. The advance was initially for three months, without interest, but if the period was exceeded, an interest of ¾% a month was charged. Where demand was slack, bankers lent the weavers money at 2% a month from the date of the loan. Occasionally, the wealthier weavers made advances to their poorer bretheren and thus enabled them to steer clear of rapacious merchants. Once the weaver got into the clutches of a dealer, he became a slave and remained one till his death. The artisan who received advan-

64. Letter from the Commercial Resident at Ingeram to the Board of Trade, 28th December 1803.

ces could not dispose of any cloth until he had finished and delivered the goods contracted for by the agent. Often the weavers could not work for anybody but the dealer to whom he was indebted, and that at starvation wages. If anybody else wished to engage him, the first dealer's debts had to be liquidated, but the weaver's position would still be unchanged. He would only have changed masters. Dealers employed several weavers, advancing yarn, which was worked up in their homes and then delivered back to the dealer.[65] Sometimes master weavers also admitted labourers, generally on piece wages and occasionally on time wages.

The provision of goods for export was largely in the hands of middlemen. In Madras these agents received a commission of 2½% to 5% according to the extent of risk and responsibility borne by them.[66] In the interior, middlemen who merely collected and delivered the goods received 2% or a certain sum per piece, when the goods were sold.[67] The agents of the Dutch and other European Companies advanced money to Indian merchants who in turn distributed it to numerous 'cobdars' or dealers. These bought up the cloth from the various villages.[68] The East India Company also employed the contract system in most cases, though occasionally, advances were made direct to the weavers if the latter resided in the vicinity of the Company's factories. The method of supplying the Investment was as follows. The Court of Directors sent directions to the local government in regard to the requirements for the ensuing year, with specifications of quantity, quality, dimensions, etc. These were transmitted to the Board of Trade who made appropriate allocations between the different factories and passed on the specifications to the Commercial Residents in charge. The latter made advances of money to local contractors who distributed it to the weavers either directly or through agents. Contractors received a commission of 5% which was certainly not too high, since it covered charges of conveyance and the risk of bad debts. Advances were retained till three-fourths of the goods contracted for were delivered. Then the advance

65. Elijah Hoole, *op. cit.*, p. 156.

66. Milburn, *Oriental Commerce*, 1813, Table of Rates of Commission in Mardas.

67. Buchanan, *op. cit.*, Vol. I, p. 152.

68. Letter from the Commercial Resident at Ingeram to the Board of Trade, 28th Dec. 1803.

was worked up. The Company's requirements were divided into 4 qualities with standard prices for each category. On delivery at the factory, goods were examined by brokers, and any deficiency in quality or dimensions led to rejection.[69]

General Condition.

From various contemporary accounts it would appear that the weavers had it in their power to be well-off but that owing to their improvidence, laziness and dissolute life, their condition was often one of extreme poverty. The weavers were skilful in their work, their products were always in great demand, and where combinations existed, they could even dictate terms to the purchasers of their articles. "In whatever length of idleness they may choose to indulge," says Mr. Place, "as there is always a demand for their labour, a little extraordinary exertion brings them where they are."[70] Further, the industry was one which could be carried on inside the house, and thus women, even of high caste and in *gosha* families could engage in it. And their contribution was no mean one. It is stated that, at present, in the Ceded Districts and in some parts in the South, "the weaver indulges in polygamy merely to augment his earnings by the labour of his wives."[71] It is not known how far this practice prevailed in the last century, but women participated to a large extent in all the preliminary processes. Even children and old people could take part in the industry as the work was not strenuous.

In addition to the above advantages, the weavers enjoyed several privileges, especially during the early years of the Company's regime, such as freedom from vexatious taxes and special protection of their property.[72] Such were their advantages that Mr. Place complained that weavers "carry on their occupation to the depression of almost all others. All articles come cheap to them and their's come dear to others."[73]

With all that, the weavers were not very prosperous. It is frequently stated that weavers led a riotous and improvident

69. Mungo Deck, (Member, Board of Trade), Evidence before the Select Committee of 1813, Report, pp. 917-18.

70. Place, *Report on the Jaghire*, 6th June 1799.

71. Narayana Rao, *Report on Cottage Industries in the Madras Presidency*, 1930, p. 31.

72. *Judicial Regulations*, 1802, Vol. I, Regulation XXVIII, Para 3.

73. *Place, Report on the Jaghire*, 6th June 1799.

life. They wasted much of their earnings in gambling and cock-fighting and on jugglers "who are the delight of a weaving village."[74] The Board of Trade reported in 1802 that the weaver never worked for more than a subsistence, unless stimulated by a high advance. All surplus was spent "on dissipation and idleness till necessity again calls forth exertion."[75] Dr. Heyne on the other hand declares that they earned money by great skill and industry, but he too admits that they spent it "like fools in every kind of play."[76] This, however, is not an entirely fair representation of the weavers' character. Their work was so tedious and laborious that some kind of stimulus and recreation was probably necessary and they must have resorted to the cheapest means of obtaining them. Further, not all weavers were addicted to gambling and cock-fighting. Many of them were extremely industrious and frugal, and in some parts such as the Jaghire and N. Circars, they were "the monied men." In the Ceded Districts the better class of weavers could earn as much as Rs. 60 per month from each loom, while the lowest income was Rs. 8 per month.[77] The main drawbacks of the weaving community were the uncertain conditions of the industry especially in the matter of demand and the extent to which weavers were dependent on dealers. Government demands such as the Loom Tax and family needs often compelled them to sell their goods immediately they were produced, at very unremunerative prices.[78] In such circumstances, weavers were naturally forced to borrow and many of them were up to their neck in debt.[79]

Those who worked independently, however, were better off, and when there was a large demand for their goods, conditions improved. Thus many of the weavers of Adoni, whose sarees, dhoties, etc., were in great demand all over the Presidency, were "persons of substance."[80] Similarly the manufacturers at Masulipatam, Arni, Salem, Madura and other important centres were in a fairly prosperous condition.

74. Letter from Mr. Scott, Collector of Ganjam, to the Board of Revenue, Board's Proceedings, 24th December 1798.
75. Letter from the Board of Trade to Government, 27th May, 1802.
76. Heyne, *op. cit.*, p. 21.
77. Letter from Col. Munro, B. P., 21st June 1804.
78. General Reports, Vol. 21, p. 296.
79. Dodwell, *Madras Weavers*, I.H.R.C., Vol. IV.
Letter from Mr. Scott, Board's Proceedings, 24th December, 1798.
Letter from Mr. Landon to the Board of Revenue, 31st March 1793.
80. General Reports, Vol. 20, p. 212.

The Company and the Industry

In the earlier stages of its career, the East India Company, consistent with its character of a trading organization, gave every encouragement to the cotton manufactures which were the staple exports of the country. Weavers were relieved as far as possible from vexatious imposts levied by local rulers, and skilled artisans were sent from England to effect improvements in machinery and technique. Every effort was made towards directing the weavers' labour "to the manufacture of such cloths as are fit for the Company's investment."[81] At one time, even the encouragement given to cotton cultivation had its main incentive in the need for procuring cheap raw materials for the Company's weaving establishments.[82]

When the Company assumed administrative authority, the encouragement was for a time continued, and indeed greatly extended. The Moturpha, a rather comprehensive impost of which the main item was a tax on looms was at first abolished in the Company's territories. Revenue exigencies necessitated its reimposition later, but generally weavers who worked for the Company were exempted from it. Trees or cultivation in weavers' compounds were occasionally declared rent free.[83] Commercial Residents were appointed in nearly all the districts to direct the industry and introduce new manufactures where feasible.[84] The Resident at Calicut is reported to have established weaving factories at Calicut and Palghat by bringing skilled weavers from Travancore and Cochin.[85] By a Regulation of 1802, the Company prohibited renters and proprietors from distraining "the Company's money or material found with the weavers or other people employed in making up their Investment, or the loom, raw material or yarn."[86] To further encourage the weavers, windfall profits were divided with them, while during famine, they occasionally received free grain allowances.

In a report of 1814, the authorities claimed to have done much to ameliorate the condition of the weavers. "Under the native Governments, the weavers and other workmen were sub-

81. General Reports, Vol. I, p. 9.
82. South Arcot District Records, Vol. 272, p. 245.
83. Baramahal Records, Section VII, Letters 7 and 8.
84. Sea Customs Proceedings of the Board of Revenue, 1806, p. 30.
85. Buchanan, *op. cit.*, Vol. II, pp. 139-140.
86. Judicial Regulations, 1802, Vol. I, Regulation XXVIII.

ject to innumerable vexations, rising out of the imposition of occasional and undefined taxes, from which they are now free, such as arbitrary assignments upon the marriage of a zamindar's daughter, compulsory receipts of grain at an advanced price in barter for their cloths, extorted loans of money, taxes suddenly laid upon thread. They are also now emancipated from a state of unlimited liability to give their labour and the pre-emption of their manufactures to the governing power or its provincial representatives whenever they chose to require them, and that at prices below the just rates."[87]

In spite of all these advantages, the Company's service does not always seem to have been popular. The reports from the various Collectors and Commercial Residents contain frequent mention of dissatisfaction and 'ferment' among weavers.[88] Peculation was rife among *gumasthas* and head-weavers, who were in the habit of deducting a part of the advances, either as a commission or as a bribe for not under-valuing the finished product. Brokers, where they were employed to appraise the cloths, had an interest in reporting unfavourably, since the weavers were forced to give rejected goods to the agent at less than the market value. When the authorities came to know of these abuses, remedial measures were taken, but in general "the checks against collusion between the gumasthas and brokers" were inoperative. The result was that weavers sometimes received about 1 to 2 Rupees less for a cloth, than its cost price to them.[89] Towards the close of the century, Munro declared that it was advantageous that Tippu's administration was tyrannical, for a government a little less oppressive would induce most of the weavers to leave the Company's territory.[90] As it was, we hear that weavers in large numbers were leaving their houses in certain parts, and the Company had recourse to force in order to stop the exodus. The weavers were asked to obey the Company's summons "without delay or hesitation on pain of being very severely punished."

Early in the nineteenth century, the Committee of Reform reported that the weaver derived no gain by working for the

87. Dodwell, *Madras Weavers*, I.H.R.C., Vol. IV.

88. Letters from Munro to Read, 23rd November 1792, 11th October 1793.

Letter from the Commercial Resident at Ingeram to the Board of Trade, 28th December 1803.

89. Letter from Munro, 23rd November 1792.

90. Baramahal Records, Section VII, Letter XXV.

ɔmpany, but had to supplement the meagre earnings thus obined by producing coarse fabrics for sale in the market to mainin his family.[91] Commercial Residents frequently observed that ivate manufacture was more profitable than the Company's and at those who worked for the latter did so more from compulsion an from choice.[92] The fact was that private traders were not o strict about quality or dimensions, and hence there was no fear rejection of cloth. Further, while the price of raw materials ıctuated, the Company's standard price was the same. The ofits of the Company's weavers were thus both low and unrtain.

In order to cope with competition from private traders the ɔmpany adopted stringent measures restricting the manufacture of ɔth on private account. Regarding one of these, the Regulation of 03, Mr. Dodwell observes that it only stipulated that the weaver ıo received advances from one person should deliver the product the same person. But the Company did not stop there. Weavers ɛre forbidden to manufacture cloth for individuals till the Comny's goods were delivered, and at one time all private work was ohibited, though this last measure was soon rescinded.[93] The ɔmmercial Resident of South Arcot, in the excess of his zeal, nounced that dyers who engaged in private business "shall be ed 24 pagodas, punished with 24 lashes and returned out of the unds." But this order too, was withdrawn when the Governɛnt was informed of it.

Thus, during the earlier part of the nineteenth century, the ɔmpany was assiduous in developing the textile industry, and rticularly that part of it which was required for the Investment. ıd they succeeded in effecting a great increase in the manufacɛe of cotton goods in some districts. In Rajahmundry, the Comny's Investment nearly doubled itself between 1801-2 and 1813-[94] There was a similar expansion in Masulipatam.[95] In Salem, ɛ weaving population rose from 3,000 to 5,000 in a few years, and ɛ investment reached unprecedented figures.[96] There was con-

91. S. Arcot District Records, Vol. 107, pp. 91-2.
92. Letter from the Board of Trade to Govt., 27th May 1802.
93. Letter from the Board to the Collector of Coimbatore, 27th November, 4.
94. Letter from the Acting Collector of Rajahmundry to the Board of venue, 15th January 1845.
95. Letter from the Collector of Masulipatam, 31st January 1845.
96. Dodwell, Madras Weavers, I.H.R.C., Vol. IV.

siderable improvement in the Ceded Districts too and the output averaged 20 lakhs of rupees between 1801 and 1804.[97]

Meanwhile, the British cotton textile industry which had started late in the eighteenth century was well established, and cheap machine-made British goods began to flood world markets. Indian piecegoods (including those comprised in the Company's Investment) began to lose ground gradually. For a considerable length of time, the Company continued to make up the Investment for Europe, in spite of diminishing profits, but finally, they were obliged to give it up. From 1818, the Commercial establishments were gradually reduced; one by one, the factories in the various districts were closed down, and the Board of Trade was abolished in 1824. A few factories in the Northern Circars continued in an anaemic condition till the thirties, but finally, the entire commercial establishment was dissolved in 1835.[98]

The Board of Revenue account for the cessation of the Investment as follows:—"Either the actual improvements that had taken place in the manufactures of Europe, or the arrangements adopted by the different states on the continent to encourage such improvement, had operated to the disadvantage of the manufacturers in this country by creating a demand for the raw, instead of the manufactured material, a demand for cotton instead of cloth."[99] The improvement in the manufactures of Europe, and particularly of England, was indeed one of the main causes, but there were other factors as we shall see later. At the time of the first reduction of the weaving establishments in 1818, the Board tried to discover from the various Collectors, how far the cessation of the Investment would affect the weavers, to what extent private manufacture would replace it and what proposals they could offer for the amelioration of the condition of those workers who would still remain unemployed. As the forces of decay were not fully operative at that time, the Collectors believed that the withdrawal of the Company's support would have no serious consequences, especially since there was a rising demand for commercial crops.

The Board, therefore, concluded that the "increased demand for cotton and consequent benefit to the great agricultural population of the country would, to a certain extent, counter-balance any

97. Letter from Munro to the Board, B.P., 21st June 1804.
98. Commercial Despatch to England, 6th January 1835.
99. Letter from the Board of Revenue to Government, Proceedings, 20th August 1818.

decreased demand for particular sorts of cloth or injury to the less numerous body of manufacturers, and further that when an advantageous market was still to be found for the manufactures of India, private and native merchants would not be wanting to take up the trade relinquished by the Company..... Whatever temporary inconveniences, therefore, the people might sustain from the abolition of the factories in question, we were of opinion, would in time be obviated by private merchants, in all cases where the trade might actually be advantageous; where it might be the contrary, the evils suffered by the manufacturers or by the Company, as their rulers, could not be effectually remedied by the Company as merchants, continuing to force an unprofitable trade; but only by their endeavouring to open the markets of the continents to their subjects here and consequently turn what is at present an unprofitable, into a profitable speculation."[100]

Accordingly the Company did their best to foster the growth of commercial crops, but nothing was done for the relief of the weavers thus suddenly thrown out of work. On the contrary, the fiscal policy of the Government only tended further to discourage industry. Piecegoods manufactured in this country had to pay a duty of 5% on the raw material, 7½% on yarn, a further 2½% on the manufactured article, and another 2½% if the cloth was dyed outside the place of its manufacture, or in all 17½%.[101] British piecegoods, on the other hand, were admitted into this country on the payment of a nominal duty of 2½%.

Mr. Weston, Master Attendent at Cuddalore once suggested that the additional duty on cloths, after they were dyed, be removed in order that the manufactures of the country could "enter into more equal competition in the market with those from the United Kingdom." But the Board believed that the removal of the duty would not be very helpful;[102] and in any case, they were not prepared to sacrifice revenue.

The Decline of Textiles

The decline of the textile trade and industry began in the second decade of the nineteenth century, but the seeds of decay may be

100. Letter from the Board of Revenue to Govt., Proceedings, 20th Aug-1818.

101. Report of the Customs Committee, 27th January 1836. Trevelyan's *Report on Inland Duties.*

102. General Reports of the Board of Revenue, Vol. 46-49, p. 708.

traced even earlier. At the time of British Occupation, the Mysore and other wars as well as administrative mismanagement had dislocated industry and trade and led to diminished production. In the Political Survey of the Northern Circars, James Grant observes that the fabrics for which Chicacole, Berhampore and other places had once been so celebrated were now "rather objects of curiosity and meriting encouragement than considerable in quantity and benefit."[103] In fact, towards the close of the eighteenth century, the weaving industry had already passed its apogee. In 1744 the exports of piecegoods from the Presidency to England had amounted to £644,563. But in the next few decades, they fell drastically and averaged about £250,000.[104]

With the establishment of peace there was a revival of trade and in 1801-2, the Investment amounted to nearly 63 lakhs of rupees.[105] But after a few years decline set in again and in 1811-12, the value of the Company's Investment was Rs. 44,41,784 of which Rs. 44,16,163 represented the exports to England. The private trade, (exclusive of the exports to a few places, in regard to which figures are not given) amounted to 29 lakhs of rupees, or, making some allowances for the statements omitted, about 30 lakhs. Subsequently, the decrease was even more remarkable, and in 1820-21 the exports to England fell to Rs. 16,81,551 or less than 35% of their value in 1811-12. The decline continued throughout the half-century and in 1849-50 the exports amounted to little more than 3½lakhs. The exports to other countries also experienced a similar contraction as may be seen from Appendix VII which gives quinquennial statements of the exports of piecegoods on private account to different places. Complete figures are not available up to 1824, hence the earlier years are omitted. To the Mediterranean Ports, the exports in 1825-26 amounted to Rs. 3,36,059, but in the succeeding years, the trade disappeared. The exports to Manilla also ceased in 1830-31. The exports to Bombay rose slightly in the third and fourth decades, but declined again towards the end of the half century. Within three decades, the extensive markets in America, the Mediterranean Ports, Manilla and the West Coast of Sumatra

103. *Fifth Report*, Vol. III, p. 8.

104. *Report from the Select Committee on the Cotton Manufactures of England*, 1793, App. II.

105. Letter from the Superintendent of the Investment to the Board of Trade, 6th April 1802, in Public Cons., 21st May 1802.
Report on External Commerce for 1804-5.

were entirely lost, while those in Great Britain, Persia, Arabia, Malacca and Pegue shrank greatly. The total exports were subject to large fluctuations, but the tendency was always downward. After 1838-39, there was a rapid fall, and at the close of the period total exports were only about 30 lakhs.

While exports dwindled, imports of British textiles which we shall see increased rapidly, began to drive out the local manufactures even from the home market. By the middle of the nineteenth century, India's pre-eminence in cotton manufactures was a thing of the past. In the Madras Presidency, Pharoah's Gazetteer gives a melancholy picture of the industry in the different districts. "Time was when the principal part of the Madras Investment of piecegoods was provided" in Ganjam, but now there were few vestiges of industry. South Arcot formerly carried on a very profitable export trade in piecegoods with the Malay Archipelago, but British manufactures had ousted the Indian. As for Masulipatam, "fifty years ago, the trade with the Persian Gulf was 50 lacs, but Manchester has superseded Masulipatam and the trade is now half a lac" and so on *ad infinitum*[106]. In every district, it was the same tale of decay and distress.

In this period, the manufactures declined not only in quantity, but also in quality and beauty of design and colour. Owing to the fall in demand from the courts of princes and from zamindars who had decayed, the art of producing superfine fabrics was well-nigh lost. Partly also it was attributable to the change of fashion for the worse, and the development of a taste for things British. This deterioration became still more marked in the latter half of the century, but in this period we see the beginning of the process. In many of the districts, the manufacture of the finer sorts was entirely destroyed.[107]

Causes of the Decline

The decline may be attributed in some measure, to the introduction of machinery in the West which enabled the European manufacturer to produce large quantities of cloth at an extremely cheap rate. This was especially so in the case of the medium fabrics required by the majority of the people, the foreign machine-made goods being sold at about half the price of the indigenous

106. Pharoah's *Gazetteer*, pp. 9, 53 and 285.

107. Letter from the Collector of Vizagapatam to the Board of Revenue, 9th Aug. 1844.

Letter from the Collector of Trichinopoly, 29th July 1844.

Letter from the Collector of Nellore, 14th Sep. 1844.

product. Foreign competition first drove out Indian manufactures from the external markets. Thus the exports from Vizagapatam fell from 7 lakhs to 1 lakh at the end of the period. The exports from Masulipatam to England and Persia declined from an average of more than 10 lakhs in the second decade of the nineteenth century to Rs. 2,750 in 1843-44. Similarly in Nellore, the production of Bunder Muttem and Bustine pieces which were painted in Masulipatam and sent to Persia, dwindled from Rs. 1,80,000 in 1817-18 to Rs. 360 in 1842-43.[108] Meanwhile, British piecegoods began to invade Indian markets in increasing quantities. The process became accelerated after the passing of the Charter Act of 1814, when the Company was deprived of its monopoly. Within a few years, the imports of British piecegoods rose from about half a lakh of rupees to nearly 5 lakhs in 1822-23 and more than 10 lakhs in 1850-51.[109] The fall in the price of the raw material which took place owing to a rapid extension of cultivation in America, also assisted the British manufacturer.

The home demand which was reduced owing to the influx of cheap foreign fabrics, became further restricted because of the agricultural depression which prevailed at that time. Agriculturists suffered heavy losses over their crops and were hence obliged to curtail expenditure on articles of consumption. At the same time, as many of the substantial ryots were both farmers and merchants who financed industry,[110] the advances which they had formerly been making to the weavers were now withdrawn, and this resulted again in a decline in production.

To a considerable extent, the decay of the textile industry was due to state policy.* The exports of piecegoods were handicapped by excessive Transit Duties, and the Moturpha. British textile imports, on the other hand, received every encouragement. Further the Company during its active participation in trade had imposed various restrictions on the freedom of the weavers. There were also other obstacles to trade, such as the difficulties and excessive cost of transport, the absence of insurance etc. To some extent, the decay of the industry, and especially of the manufacture of the finer

108. Letter from the Collector of Nellore, 14th Sep. 1844.
Letter from the Collector of Masulipatam, 31st Jan. 1845.
109. See Appendix V.
110. Letter from Munro to Read, 13th December 1793.
Letter from the Collector of North Arcot to the Board, 7th October, 1844.

*This will be dealt with in some detail in the chapter on External Trade.

sorts, was, as we have said, attributable to the decline of zamindars and chiefs. The Collector of Ganjam observed, "the comparative opulence of the zamindars and of private individuals at that time (previous to 1815) and their love of buying valuable cloths were sources of profit to the weavers." But since the zamindars had been reduced to poverty (because they had to bid too high for their estates), there had been little demand for the finest and most highly profitable varieties of cloth.[111] The same view is expressed in Sir Robert Montgomery's Report on the decline of revenue in the Northern Circars in 1844, and in Mr. C. R. Cotton's Report on the defalcation of revenue in the Presidency in 1840. Occasionally special causes contributed to the decay, such as the emancipation of the slaves in 1835, when the negresses, it is stated, refused to wear the red cloths of the Madras Presidency.

Effects of the Decay of the Industry

When the commercial factories were being wound up, the Board of Revenue wrote, "Whatever temporary inconvenience might be experienced by the weavers....we do not apprehend any serious or permanent injury to the prosperity of the country from the abolition of the factories."[112] But the Board was entirely mistaken. The cessation of the Investment resulted in extreme distress, especially in the Northern Circars and the districts of Tinnevelly, Coimbatore, Salem, North Arcot and Bellary.[113] In Vizagapatam, it "inflicted a fearful blow on weavers." There was much "ferment" among them, and those of Salem assembled in a body in 1831, declaring that they would not pay the Moturpha. The Collector had to use all his patience and tact in explaining that the local authorities could not do anything in the matter.[114] Conditions became aggravated when the foreign demand and finally even the home demand suffered a drastic reduction. Large numbers of weavers were thrown out of employment and forced to seek their livelihood either in agriculture or emigrate as coolies to Ceylon, Burma and even Bourbon and Mauritius. Many also enlisted as sepoys in the army[115] Abbe Dubois observed that just

111. Letter, 19th November 1844.
112. Letter to the Government, Board's Proceedings, 20th August 1818
113. *Revenue Consultations,* 8th October, 1832.
114. Revenue Consultations, 25th August 1832.
Board's Proceedings, 8th October 1832.
115. Letter from the Collector of Rajahmundry, 15th Jan. 1845.
Letter from the Collector of Masulipatam, 31st Jan. 1845.

before his return to Europe in 1823, misery and desolation prevailed everywhere and that thousands of weavers were dying of hunger in the different districts of the Presidency.[116]

As for those that remained in the industry, their position had greatly deteriorated. In 1844, the Board of Revenue instituted an inquiry into the operation of the Moturpha, and the reports sent in response, contain, incidentally, much information regarding the condition of the weavers. Formerly the weavers were a highly favoured class enjoying various privileges and amenities. They used " to be sought and humoured by advances and good payment ; now though he seeks the trader, and volunteers to work for reduced hire, he meets frequent disappointment, the merchant declining to embark capital in a sinking trade ".[117] Those who were supplying the foreign markets were hit first and hardest, prices and therefore their profits being greatly reduced. But with the influx of British piecegoods into this country, even those who catered to the home markets received a severe blow. Many of these were obliged to take to the manufacture of the coarse varieties which could alone withstand foreign competition. But, here the net income had always been low, and was now still further reduced owing to the depression in industry and agriculture. In Vizagapatam, the price of Punjum cloth of the Company's assortment fell from Rs. 6 per piece in 1815 to Rs. 3—8—0 in 1844, and the profits of the weaver from 1 or 2 rupees to 8 or 4 annas.[118] In Bellary, prices in the case of the inferior varieties diminished by 35% and net income by 75%.[119] From every district without exception, it was reported that prices had fallen and profits dwindled.

The profits of the workers were further reduced by an increase in the number of weavers in some of the districts. It may be wondered how this occurred when the industry was depressed and many had been thrown out of employment. It must be ascribed to the growth of population, and the fact that agriculture was even less paying than industry in some localities. According to the Collector of Tinnevelly, the weaving population had " outrun its means of subsistence and trammels of caste prevent them from taking to other work."

116. Dubois, *op. cit.*, p. 95.
117. Letter from the Collector of Nellore, 14th Sep. 1844.
118. Letter from the Collector of Vizagapatam, 9th August 1844.
119. Letter from the Collector of Bellary, 31st July 1844.

Naturally the condition of the weaving population was most distressing. In Masulipatam, the survey revealed a depressing state of poverty and misery in village after village.[120] The Collector of Madura believed that "very many families of the 5,000 weavers in Madura town alone have not means to take more than one meal of rice a day"[121] This is not surprising in view of the fact that the weavers' profits had been reduced to a few annas per piece. Even in Malabar which was not a great industrial district, there was the same "melancholy depression and decline;" the weavers were greatly impoverished and obliged to borrow at exhorbitant rates of interest.[122] Conditions were similar throughout the Presidency. The diffusion of various articles of consumption had created new wants and led to greater expenditure while income dwindled, and hence about 60% of the weavers were heavily in debt.[123]

But these were not the only effects of the decay of the weaving industry. The industrial debacle had its repercussions on the entire economic organization. To begin with, the cessation of the Investment and the decline of the export trade resulted in a remarkable contraction of currency. In the District of Rajahmundry more than 8 lakhs of rupees had, on an average, been disbursed at the Company's factories between 1805-6 and 1822-23, and in consequence, revenue was seldom remitted to Madras.[124] At Ingeram and Maddepollam the expenditure on account of the Investment rose gradually to Rs. 1,165,118 in 1813-14, and though there was some diminution later, the expenditure continued till the closing of the factories. Private exports of cloth to Malacca, Manilla and other places brought in large quantities of bullion annually. When these sources of supply were cut off, there was naturally a great scarcity of money and consequently a fall in agricultural prices. At the same time, many of the unemployed weavers, fell back upon the land, and thus increased the pressure on it. Agriculturists lost valuable customers with the diminution in the income of the weaver and this contributed further to the decline in prices. Thus we find a close interaction of cause

120. Letter from the Collector of Masulipatam, 31st Jan. 1845.
121. Letter from the Collector of Madura, 26th Aug. 1844.
122. Letter from the Sub-Collector to the Collector of Malabar, 3rd August 1844.
123. Letter from the Collector of North Arcot 2nd October 1844.
124. See Appendix IV.

and effect intensifying the depression both in agriculture and industry.

The cotton manufactures reached their low water-mark in the nineteenth century. At the middle of the century, however, though they had received a great set-back, they did not entirely die out. We have seen that the export trade fell drastically, but it did not cease. Even to England, piecegoods to the value of Rs. 3,61,089 were exported in 1849-50. Speaking of this, the Reporter of External Commerce observed in 1844-45 that though foreign competition had affected the exports adversely, there was "still no immediate prospect of the cotton piecegoods of India in which so flourishing a trade was once carried on, being altogether driven from the market." At the end of the period, the cotton industry had lost its former pre-eminence, but it was still the premier industry in the Presidency and second in importance only to agriculture.

PART IV

TRADE, TRANSPORT AND PRICES

CHAPTER XII

INTERNAL TRADE

We shall now take up the question of trade. It may be divided into two sections, the internal trade, and the external. The former comprises the trade within the Presidency both by land and sea and the latter consists of the trade with places outside the Presidency including the neighbouring native states. The internal trade will be dealt with first.

The first half of the nineteenth century witnessed some increase in the volume and a change in the character of internal trade, corresponding to a greater change in external commerce. The impact of Western civilization widened the range of comforts and luxuries in requisition among the people, while exports improved even more markedly owing to the rising demand for the country's raw products. The capital formerly employed in the trade in piecegoods was diverted to the distribution of a large variety of British manufactures in the interior and to the gradually developing trade in commercial crops. Even in 1820 Hamilton could say in his *Gazetteer* that "not only the principal towns and cities, but many of the larger descriptions of villages are abundantly supplied with European manufactures of every sort," such as English woollens, chintzes, scissors, knives, glasses and hardware.[1] The growth of population and improved communications also led to an increased exchange of commodities between the different districts and provinces.

At the beginning of the period, trade was at a low ebb. It has been noted in the first chapter that the numerous wars, the general insecurity of person and property, the oppression of rulers, high and undefined transit duties, and other restrictive measures had brought commerce to a standstill. The reports of the early Collectors and writers are unanimous on the point. The exports from Rajahmundry and Guntoor had declined greatly.[2] The Jaghire, which was once in a flourishing condition,

1. Hamilton, *Description of Hindustan*, Vol. II, p. 2.
2. Letter from the Collector of Rajahmundry to the Board of Revenue, 18th February 1801; Letter from Mr. Oram to the Board, 12th June 1789.

had at the close of the eighteenth century ceased to have any commerce at all, while trade centres were deserted and the shops were in ruins.[3] In the Ceded Districts trade was "languishing"[4] and Tanjore's commercial activity had reached its nadir.[5] As to Malabar, Buchanan stated that fifty years before the Moplahs were very rich and had extensive dealings with Bombay, Madras, Calcutta, Arabia and Persia, but that at the period of his tour there were few vestiges of former prosperity.[6]

With the establishment of peace and settled government, merchants returned to their homes and trade revived. Collectors assisted the recovery to some extent by the institution of fairs and markets, by encouraging the construction of shops and bazaars and occasionally giving advances to petty traders. According to Mr. Place, the commerce of the Jaghire improved remarkably under his administration. In Carangooly "goods to the amount of some thousands of Pagodas were to be found, where possibly 100 would before have purchased the whole stock.... Of the shops in general, throughout the Jaghire, it may be said that from my attention to them, they were more deserving of the appellation than they had been." For the rest of the period, progress was steady though slow, the internal trade being free from violent fluctuations, unlike external commerce.

The Trading Classes

The machinery of internal trade was directed by certain classes and castes whose hereditary avocation it had been for ages. First among the trading castes of South India were the Chettis, who were subdivided into various groups such as the Telugu Komatis, the Tamil Nattukottai Chettis, Beri-Chettis etc. The Komatis were among the wealthiest people in the country, and were the chief traders not only in the Telugu districts, but also in Mysore, Coimbatore,[7] Kanara and other places. Indeed they were found in greater or lesser numbers in every part of India and had dealings with the most distant places. They traded in every commodity, particularly in money, cloth and jewels, but not in

3. Place, Report on the Jaghire, 6th June 1799.
4. Heyne, *op. cit.*, p. 325.
5. Mr. Petrie's evidence before the *Committee of Secrecy*, 1782, App. 22.
6. Buchanan, *op. cit.*, Vol. II, p. 102.
7. Hamilton *op. cit.*, Vol. II, p. 269.

liquors. Trading was their sole occupation. The Nattukottai Chettis were the chief bankers and financiers of South India, and their business extended even to Burma, the Malay Peninsula and the Eastern Islands. The Beri-Chettis traded chiefly in drugs, grain and cloth. Occasionally they took to industry but they never cultivated land even if they possessed it.[8] At the opening of the century, they were described as a respectable kind of pedlars, travelling in caravans, and occupying within their districts the position held by the Brinjaries in the trade between the Madras Presidency and the Deccan. The Panchama Banijigaru or Balijawar and Telugu Balijawar comprised the next considerable group of traders. They resided chiefly in the Canarese and Telugu districts and in smaller numbers in the Tamil districts and on the West Coast. The Panchama Banijigaru did not confine themselves to trade, but it was their main pursuit. They had an efficient organization under a headman who regulated dealings and provided lodgings and warehouses for agents who came from different parts of the country.[9] The Telugu Balijawar were dispersed generally betwen trade and agriculture, but very seldom took up a mechanical profession. In Rajahmundry they were the chief dealers in cotton in which they carried on a highly profitable trade.[10] Besides these, there were the Lubbays or Mohomedan merchants,—an important element in the trading section of the Tamil districts. They were very keen businessmen and exceedingly energetic and capable. By the middle of the century much of the trade between Madras and the Southern districts passed through their hands.[11]

Apart from these major trading classes, there were various other castes, the members of which frequently traded in particular articles, or took up trade as a sideline to their regular profession of Government service, farming etc. To the first group belonged the Jains who traded in brassware and cloths, chiefly in the Ceded districts,[12] the Curubaray who were cattle breeders and traders, and the Gandhaki merchants of Mysore[13]. The

8. *Ibid.*, p. 181.
9. Buchanan, *op. cit.*, Vol. I, p. 166.
10. Letter from the Collector of Rajahmundry to the Board of Revenue, 17th October 1803.
11. Pharoah's *Gazetteer*, pp. 412, 414, 415.
12. Account, *Historical, Geographical and Statistical of the Ceded Districts, Madras Journal of Literature and Science*, Vol. X, p. 128.
13. Buchanan, *op. cit.*, Vol. II, p. 207.

Lingayats of the Canarese tracts dabbled a good deal in trade, and the Coramas had dealings in grain and salt, while the Reddis whose main occupation was agriculture, often carried on a small business in grain. During the slack season, when cattle were not employed on the fields, ryots took their grain for sale to neighbouring markets.[14] These "interlopers" were at times a positive nuisance, as the Collector of Tanjore complained. "Commerce suffers not only by the degree in which agriculture, manufacture and the subordinate duties of revenue are abandoned, and in which the grain trade is unskillfully interfered in, but it also suffers by an almost total dispersion of the body of grain merchants.[15]"

On the West Coast, most of the trade was in the hands of Syrian Christians called Nazrani Mappilas, and of Mahomedan merchants known as Moplahs. Both these were farmers as well as traders, but predominated in the latter profession. The internal trade of Cochin and Travancore was financed mainly by the Nazrani Mappilas, while the Moplahs were found in larger or smaller numbers throughout Malabar and Canara. In Canara, the Moplahs shared the functions of trade with the Konkanis who also conducted the banking business of the country.[16] The Pannekar of Canara followed the same lines of activity as the Konkanis but in a restricted field. Besides these, there were the Tarranganmar who functioned as agents and warehouse-keepers,[17] and the Bunters who were petty traders. The Putteras of Malabar constituted the only section of the Brahmin community which took to trade as a regular occupation. They carried on a considerable import trade in cloth and other articles from Salem, Coimbatore and the eastern districts generally. As to merchants belonging to other provinces, their number was inconsiderable except on the West Coast. Prominent among these were the Parsis, an extremely enterprising people. They conducted much of the sea-borne trade of Malabar and Canara where they came and settled in increasing numbers after the British occupation. There were also many men of the Vysia caste from Bombay, Surat, Cutch, Gujerat and other places to the north, besides Gossai merchants from Poona, Marwaris and Banias.

14. Munro's letter to the Board of Revenue, 11th Jan. 1805.
15. General Reports, Vol. 12, p. 155.
16. Letter from the Collector of Malabar to the Board of Revenue, 25th June 1812.
17. Buchanan, *op. cit.*, Vol. I, p. 141, Vol. II, pp. 59 and 11.

An extremely useful community of traders or rather carriers were the Brinjaries, also known as Lombardies, through whose hands passed much of the trade between the Madras Presidency and the neighbouring Native States. The Brinjaries have been described as "a set of people who support themselves by carrying salt from the coast to the interior of the country, and cotton, wheat, etc., from the interior to the coast. They live constantly under tents and carry their families always with them.[18]" They also purchased European articles at Bombay and distributed them all over the inland districts; and when they halted anywhere for a few days, their women gathered fuel and supplied it to the local market. They were supposed to be the descendents of the camp followers who accompanied Shah Jehan and Aurangazeb during their Deccan campaigns.[19] A large number of families travelled together, and were governed by an elected Naik who regulated their itinerary and bargains. In a period of general insecurity they seem to have obtained immunity from attacks on their property, and in times of war they enjoyed the rare privilege of having their goods paid for by whichever party happened to meet them, even if it was known that they were intended for the enemy. The impost laid on them was very light, and in the districts whence they took salt, even this was remitted. They were under the special protection of the Government, and shroffs and other inhabitants were prohibited from taking any fees or fines from them.[20] Dr. Heyne observed in 1814 that " they must continue to possess their privileges, as long as the roads remain in their present bad state." He added that they were satisfied with so moderate a profit that "it is not likely the roads will soon be attended to."[21]

At the end of the half century the position of the local merchants, i.e. Chettis, Lubbays, etc., seems to have remained unchanged, but with regard to outsiders we find that the Parsis rose considerably in importance while the trade of the Brinjaries decayed. The special privileges of the latter had their origin in a period of war and anarchy when they were probably the only people who had the courage to engage in the transport of goods over long distances

18. Heyne, *op. cit.*, p. 82.
19. James Grant, Political Survey of the Northern Circars, ***Fifth Report,*** 1812, App. XIII, p. 9 foot note.
20. Letter from the Collector of Masulipatam, 15th April 1811.
21. Heyne, *op. cit.*, p. 83.

and as they performed a very necessary function, they were allowed several concessions. But with the advent of peace and security, others could and did engage freely in trade and hence there was no need for special concessions to the Brinjaries. Further, the improvements in communications, though limited, tended, as Dr. Heyne foresaw, to destroy their monopoly. The extension of cotton cultivation in the Presidency was also responsible for their decline, since their imports had consisted chiefly of that article.

The wealth of the trading classes was proverbial, but the amount of the fortune of individual merchants varied considerably. As has been said, the Nattukottai Chettis were the richest community. Next came the Komatis, while the Parsis, though few in number, possessed not a little of the wealth of the country. In 1834 the Royal Asiatic Society sent a questionnaire on the subject of trade, which was circulated among the Collectors. From their reports we find that in Vizagapatam, the richest merchants possessed about 20 lakhs of rupees, while in Ganjam and Masulipatam the wealth of the merchants seldom amounted to more than a lakh, and of this not more than 1|5 was invested in trade.[22] It was probably owing to this cautious procedure of speculation that bankruptcies were rare. Elsewhere, their wealth was even less, amounting to Rs. 50,000 at Nagore, 35,000 at Negapatam,[23] and 30,000 to 50,000 at Nellore.[24] At Mangalore it was still lower, the merchants speculating " on grounds of trifling but certain profits."[25]

Organization of Trade

The following observations have been based mainly on the various collectors' reports to the above questionnaire. We find that commercial transactions were generally relegated to agents who were dispersed all over the country. Every big merchant had one or more agents as permanent residents at each of the important trading centres. At Bangalore, there were brokers from all

22. Letter from the Collector of Vizagapatam to the Board of Revenue, 14th February 1836; Ganjam, 18th March 1836; Masulipatam, 6th April 1836.

23. Letter from the Collector of Tanjore to the Board of Revenue, 12th September 1834.

24. Letter from the Collector of Nellore to the Board of Revenue, 12th November 1834.

25. Letter from the Collector of Canara to the Board of Revenue, 26th February 1836.

over South India to whom principal merchants consigned their goods and who exchanged them for local products which were despatched to their headquarters. In Coimbatore, earlier in the century, rich merchants who resided mostly in villages, collected commodities for export from the neighbourhood and sent them to their agents at different places.[26] In Buchanan's time even at the small town of Kollengode, there were merchants from Calicut, Tiruvana Angadu, Ponany, Parupanadu, Tanjore, Valatoor, Choughat, Cochin, Coimbatore, Dindigul, Salem, Dharapuram, Satyamangalam, Palni, Trichinopoly, Tanjore, Madura, Tinnevelly, Seringapatam and Madras. In the Ceded Districts, trade was concentrated in the hands of a few business men. If agents were employed, dealings were only nominally in their control since they were merely "brokers of men in power."[27] In Canara there were not many merchants from outside. A few traders belonging to other parts of the Presidency and Bombay and Cutch visited the trade centres during the season, but seldom remained there for any length of time.[28]

As to European traders, almost all their business within the country was conducted through Indian middlemen. Usually every house of agency employed one "chief confidential agent" to whom all affairs were entrusted and who in turn obtained the services of sub-agents in the different towns.[29] Many local merchants at the various centres also employed agents in settling their bargains. Besides these, there was another class of brokers who owned warehouses where goods were stored till a purchaser came along. Sometimes, as in the case of the Tarranganmar of Canara, the warehouse-keepers also undertook to sell the goods in case the merchant did not wish to remain at the place. Brokers were not held responsible for theft or fire, or even damage due to the bad condition of the godown. During the period under review, the system of dealing through agents became firmly established. Formerly merchants retained most of the trade under their direct control, and sent members of their family to the various trading

26. Buchanan, *op. cit.*, Vol. I, p. 138.

27. Heyne, *op. cit.*, pp. 325-6.

28. Letter from the Collector of Canara to the Board of Revenue, 26th February 1836.

29. Proceedings of the Board of Revenue, 15th September 1803; Evidence of Mr. Sydenham before the *Select Committee of the House of Commons*, 1813 Minutes of Evidence, p. 603.

centres.[30] But the development of bill transactions and the improvement in communications gave a great fillip to the employment of agents.

We have no evidence of the existence of regulations regarding commission except at Madras, where local merchants periodically framed schedules of the rates then prevailing. The general rate was 5 per cent, but it varied considerably according to the nature of the transaction and the locality. Where agents incurred any risk, or where the dealings were difficult, the rate was higher. Thus, on providing a shipment of goods where the agents advanced money and undertook all the risks, or if merchandise was sold by retail, the commission was as much as 10 per cent, while on bills of exchange and for procuring loans of money, it amounted to 1 per cent.[31] Elsewhere customary rates seem to have prevailed. In Nagore and Negapatam resident merchants gave their subordinates a monthly salary, but if merchant and agent were at different places, a commission of 3 to 5 per cent was allowed.[32] At Nellore, the rates of remuneration differed at each place, being settled by the parties for individual transactions. In the grain trade, brokers received a percentage on the value, while gumasthas were paid Rs. 4 a month, and in addition Rs. 8-8 per Garce for measuring.[33] At Rajahmundry, 5 to 8 per cent was charged where Europeans employed Europeans, 3 to 5 per cent if they engaged Indians, and 2 to 3 per cent among the latter.[34] Elsewhere, the rates of commission ranged from 1 to 2½ per cent. As to warehousing, in the western districts, merchants had to pay ¼ fanam (about 1 anna) per tolam whether goods were stored for a day or two, or for a year, while for piecegoods ½ fanam was charged.[35] At Madras the rates of godown rent varied from about 1¼ pagodas in the case of spirits and wine to 6 fanams per bag of rice. For piecegoods the charges amounted to 30 fanams per bale of silk goods. In the Telugu districts the hire was 6 to 8 rupees according to the nature of the accommodation.

30. Buchanan, *op. cit.*, Vol. I, p. 143.

31. Milburn, *Oriental Commerce*, Vol. II, pp. 66-67.

32. Letter from the Collector of Tanjore to the Board of Revenue, 12th September 1834.

33. Letter from the Collector of Nellore to the Board of Revenue, 12th November 1834.

34. Letter from the Collector of Rajahmundry to the Board of Revenue, 14th November 1834.

35. Buchanan, *op. cit.*, Vol. II, p. 60.

Banking.

Banking institutions were in their infancy, and in fact we find from the Collector's reports that there were few regular banking establishments outside Madras, while of note-issuing banks there were none. One of the earliest attempts at organized banking was made in the time of the Mohomedan rulers who immediately preceded the British. Tippu Sultan carried on commerce and banking as a sideline, and established "Mullicul Tyal Coties" or banking houses all over the country, co-ordinated by a central bank at Seringapatam. These institutions had the entire management of exchange and trade, and being backed by Government authority and the public treasury, they drove private merchants out of the field.[36] But with the death of Tippu the system came to an end.

At the beginning of the nineteenth century there were 3 private banks in Madras, the Carnatic Bank started in 1788, the Madras Bank of 1795 and the Asiatic Bank which had its origin in 1804. According to the Committee of Finance of 1805, these banks were not as useful as they might have been, although the magnitude of commercial transactions at Madras was sufficient to ensure business for all three. An unhealthy spirit of rivalry prevented co-operation, and though notes were issued, very few of them were in circulation, while the credit provided by them was mainly short term. In their report dated 26th October 1805, the Committee recommended the establishment of a new bank with adequate provision for a paper currency. The proposals were taken up and after considerable discussion, the Madras Government Bank was opened in 1806. It could issue notes which were to be current all over the Presidency, it could receive and deposit specie, and keep current accounts for merchants; but no advances or loans were to be made without the security of Government paper. Discounting of Government and "unexceptionable private bills" was allowed within a three month limit. The Governor was the sole director, but the Bank was supposed to be quite distinct from and uncontrolled by Government. (Governor's Minute, 16th Feb. 1806). The bank served a very useful purpose in facilitating monetary transactions for both government and public. Its note circulation was found to be most satisfactory while the rate of interest was lowered.

36. Read's Report on the Ceded Districts North of the Cauvery, 15th November 1792.

In the mofussil there were, as has been said, few banking houses. Masulipatam had a number of private banks, some of them of very old standing. The shareholders were jointly and severally responsible for the bank's solvency. The banks discounted bills at 12½% and paid 9% on all deposits, and according to the head partner of the chief house, 10 to 15% was the usual dividend. In 1836 the Collector of Masulipatam reported that "the trade of banking is not so lucrative as formerly. Much of the money used for Government purpose which in former days passed through their hands now no longer does so and a very considerable portion of the returns for merchandise sent from the interior to the Presidency is transmitted in bills on the district treasuries given by government as a means of remittance."[37] In some of the other trading centres there were one or two banks, but their functions were limited and the accommodation they offered was inconsiderable.

At the beginning of the period transactions were largely based on cash. The dangers of the road and the fact that carriers did not hold themselves responsible for loss during transit compelled merchants to carry money in person or transmit it through younger sons, relations, and trusted servants. But with the establishment of peace and the issue of bills by Government, hundies or bills of exchange came into general use. Government encouraged hundi dealings by issuing bills in great numbers and undertaking to receive them for all payments, while the rapid diminution of gold circulation rendered bill transactions inevitable. According to the Collector of Bellary "the cotton merchants who travel to Wallajapet in N. Arcot formerly used to bring their proceeds with them when returning, but now they make it a practice to obtain Madras Government bills." Similarly those who went to Hyderabad procured hundies drawn by the local correspondents on their agents at Madras. These were either sold to Bangalore merchants or sent to Madras and exchanged for Government bills which were readily acceptable everywhere. "In short from the explanation of the merchants, the old practice of travelling with money, has, for the last twelve years been changed into bill transactions."[38] Bills of exchange were drawn for sums upwards of 1000 rupees, payable at sight or within one to three months.[39] The premimum varied from 1 to 5%.

37. Letter from the Head Assistant Collector in charge of Masulipatam to the Board of Revenue, 6th April 1836.
38. Letter from the Collector of Bellary to the Board, 31st January 1840.
39. Letter from the Collector of Ganjam to the Board 18th March 1836.

Markets and Fairs

Except in the principal towns, the people purchased most of their requirements at markets (సంతలు) and fairs (జాతరలు) held periodically throughout the country. Even at Madras, markets were held only once a week till the close of the eighteenth century, and it was after the last Mysore war that markets were established daily for the convenience of merchants from Hyderabad and Mysore.[40] At Wallajanagar in North Arcot there was a market which attracted people from all parts of the country, even Madrasis going there "to purchase cloths, shawls and other costly manufactures for their marriages."[41] Gubi in Mysore was the venue of one of the most important weekly fairs in the south,[42] while at Bailuru was held another fair whence the merchants of Gubi obtained their wares.

Markets were usually small affairs, held on certain fixed days, once or twice a week in almost every village. The articles sold were provisions, vegetables, fish etc. and in the larger villages and towns, also cutlery and hardware. Textiles of local manufacture were available, as well as a wide assortment of goods from Europe. The process of convening a market was extremely simple. A flag was hoisted at a convenient place, and the ground was divided into several plots, each of which was occupied by 2 or 3 salesmen.[43] Bargains were made without the intervention of middlemen to a large extent, producers bringing in person their wares (which seldom exceeded one cooly load since markets recurred at frequent intervals) and exchanging them for other products. Farmers, weavers, carpenters, fishermen, all brought their articles, and here women sold the yarn spun during their leisure hours and bought a further supply of cotton. In the earlier period, barter was generally prevalent and not only revenue but several other payments were made in grain. But with the advent of the British, money began to be used to a larger extent. When Hamilton compiled his Gazetteer it was found that dealings were generally in cash except in the case of a few poor people who bartered vegetable and greens for grain. In certain parts of the Carnatic and Mysore, and throughout Malabar, periodical markets were rare, and the people procured articles of consumption from daily bazaars

40. Milburn, *op. cit.*, (1825 Edition), p. 220.
41. Place, Report on the Jaghire, 6th June 1799.
42. Buchanan, *op. cit.*, Vol. II, p. 31.
43. Hamilton, *op. cit.*, Vol. I, p. 38.

where petty tradesmen sold them by retail. In some of the towns, farmers themselves took their goods to the bazaar and disposed of them at first by retail, and later by wholesale to dealers.

Fairs were events of great interest, and took place at several towns every year, usually during certain religious festivals. All the "holy places and resorts for pilgrims are so many fairs for the sale of goods of all kinds. Religion and trade in India are sister arts: the one is seldom found in any large assembly without the society of the other."[44] It was so even in England before the Agrarian and Industrial Revolutions. The great fairs of Winchester, York and other places, synchronized with a religious celebration. The reason of course was that there would be a great concourse of people and vendors could be certain of large sales. Articles of every description were procurable at these fairs such as cotton and silk goods, shawls, carpets, grain and other provisions, steel and iron, English chintzes, knives, scissors, and glasses. At the larger fairs, cattle, sheep and other livestock were also purchased, particularly in the breeding districts of Nellore, Guntoor, Mysore and Coimbatore.[45]

By means of these markets and fairs, the products of the most distant places were interchanged, and even the inland districts were generously provided with imports from Europe. However, the benefits accruing from them were not universal and at the beginning of British rule, we hear frequent complaints from Collectors about the "prodigous inconveniences" experienced by the people "from the want of free and convenient markets."[46] In Malabar, as has been said, there were few markets, and the inhabitants had to be satisfied with the meagre contents of the local bazaars.[47] When Mr. Place first went to Carangooly, one of the taluk towns of the Jaghire, he stated that "all the shopkeepers that could be conveniently assembled, were insufficient to supply my public servants, and attendants on my cutcheree." The shops built in former days of prosperity were in ruins, while the activities of poligars rendered goods insecure. Even a single traveller was often "disappointed of his daily meat. If a company of sepoys passed that way without previous notice, the whole contents of the bazaars, not more than a dozen in number, in both the above

44. Arbuthnot, *op. cit.*, p. 488.
45. Macleane, *Manual of Administration*, 1884, Vol. I, p. 296.
46. Proceedings of the Board of Revenue, 16th October 1800.
47. Buchanan, *op. cit.*, Vol. II, p. 129.

mentioned places (Carangooly and Madurantakam) were consumed, and the next person who passed, even after an interval of a few days, could not supply his wants."[48] The consequence was that travellers were obliged to carry a supply of provisions with them and even the residents used to go to Madras, Pondicherry, or Wallajanagar for everything except grain.

On the representation of the various Collectors, a number of markets were established in several parts of the country, and bazaars were built at convenient places of resort. Mr. Place effected much improvement in his district. On his initiative, many neat looking shops and granaries were constructed, their number increasing by 219 in 3 years; and traders who had deserted their homes during the preceeding period of anarchy were encouraged to return.[49] Later Mr. Hodgeson instituted a weekly market in his name at Conjeevaram, where cloths, provisions, vegetables, brassware, pearls, corals and jewels were sold.[50] In Malabar, Mr. Warden established markets in a few towns at the beginning of the century, and in 1828, markets were opened at Angadypuram and other places, which the Collector declared, succeeded beyond his most sanguine expectations.[51] At Coimbatore, Mr. Macleod encouraged the building of shops and offered traders advances of money, repayable in small instalments, in order to set up business.[52] By a Regulation of 1800 regarding the control of markets, vendors prepared to supply the bazaars with provisions etc., were to be given advances on their furnishing adequate security.

However, the facilities afforded by these measures were at first impaired by a system of strict government supervision and control, with all its attendant abuses. According to the Regulation of 1802, the superintendence of bazaars was vested in Collectors, who had to see that they were regularly and abundantly supplied, if necessary, through "the interposition of power."[53] Collectors manipulated the prices of all articles except fish at their discretion, and the system "was one of perpetual interference with the dealers and control over the markets through the instrumentality of Cut-

48. Place, Report on the Jaghire, 6th June 1799.
49. *Ibid.*
50. Proceedings of the Board of Revenue, 16th October 1800.
51. Malabar Settlement Report for Fasli 1238.
52. Letter to the Board of Revenue, 24th March 1800.
53. Regulation for vesting the control of bazaars with Collectors, 1802.

walls, Peons and other native servants."[54] It was only gradually that this system of Government interference disappeared after the advent of *laissez faire* ideas.

Trade Centres

Madras, as the capital of the Presidency, naturally absorbed most of the trade, and it was at one time among the very first emporiums in India. Merchants of every place had agents resident at Madras, and European firms conducted most of their business in the city. Next in importance came Wallajanagar whose trade was in an extremely flourishing condition during the earlier part of the nineteenth century. Heyne attributes its prosperity to its "centrical" position which enabled it to "unite the trade of the Mahrattas, the Nizam's and the Mysore countries."[55] The situation of Wallajanagar, however, is not remarkably favourable, and did not prevent its decay during the later period. Its commercial activity may be attributed to the Nawab's residence, the needs of his court being sufficient to ensure an extensive commerce. At Wallajahnagar was concentrated "almost the whole of the trade of the country above the Eastern Ghats and the sea," and it was stated that a greater variety of goods was obtainable there "than at any other town to the south of the Krishna, Madras excepted."[56]

Tanjore occupied a pre-eminent position during the time of the Rajahs, Mysore, Hyderabad and other places being supplied from thence with all kinds of manufactured goods. Misrule and war destroyed most of the trade, but it improved later and the place recovered much of its old importance. In the Karnataka country the chief seat of trade was Bangalore. It was the resort of merchants from all over India. Priyapattana in Mysore was an extrepot for the trade with the west coast, and Candhully for the trade between the countries above and below the Western Ghats, while Cauverypuram occupied a similar position with regard to the Eastern Ghats. At Nidy Cavil which marked the boundary between Mysore and Malabar 200 ox-loads of goods passed in one day during Hyder's time. Sircy in Canara was an "intermediate mart" for the cotton and arecanut trade, and Buntwal was the emporium of the coffee trade. Other centres were Juggiahpetta, Nizampatam, Masulipatam, Adoni, Gooti, Sidhout, Nellore, Vellore and Arni.

54. General Reports of the Board of Revenue, Vol. 18, p. 77.
55. Heyne, *op. cit.*, p. 22.
56. Hamilton, *op. cit.*, Vol. II, p. 435.

By the end of the half century several of the old centres of trade decayed, while new ones rose to importance. Wallajanagar declined along with the fortunes of the Nabobs of the Carnatic and in Pharoah's *Gazetteer* there is no mention of it even as a second or third rate town. At Nidy Cavil hardly 20 ox loads passed daily during the subsequent period. Bednore once a large and populous town was a mere village, while Serah had fallen in ruins. On the other hand Coompta in Canara developed from a small village to a busy town after 1835, owing to the rapidly increasing export trade in cotton, and Sircy and Buntwal owed their prosperity to similar causes. In the North, Barwa, Bimlipatam, Nizampatam, Bunderlanka and other places ceased to have any considerable trade, while others rose from obscurity, such as Bezwada, Cocanada and Toonee.

The period under review witnessed a certain increase in trade. In some districts, however, as in Guntoor, there was a certain falling off in trade in the thirties. The Collector in his report to Mr. C. R. Cotton attributed it to the withdrawal of troops, the decay of the zamindars and the fact that the former authorities and officials spent all their incomes within the country, while the Company's servants were more intent on amassing fortunes and remitting them to England.[57] But these were general causes, equally applicable to the other districts. The decline of trade in Guntoor was also due to the famine of 1833, which affected the district most severely. After 1840 there was a gradual improvement. In most of the other districts, however, there appears to have been a certain amount of progress.[58] The fall of prices did indeed have very injurious effects on trade, but by 1850, the worst was over, and the reports sent in response to an inquiry into the Commutation Rates in 1852 indicate that trade was reviving.

The occupation of trading had formerly been more or less confined to certain hereditary castes. So much so that when others participated in it, they were dubbed as " interlopers. " But by the end of the half century, " interloping " became so general that it was no longer called by that name. The Brinjaries as we have seen, ceased to be the great carriers, owing to the advent

57. Letter from J. Goldingham, Collector of Guntoor, to C. R. Cotton, 13th Dec. 1839.

58. Sullivan's Report to Government, 28th December 1840.

of law and order, and partly to the improvement in communications. The Reports and other works of the later period make no mention of this class which had once figured so prominently. They now degenerated into bead sellers. But other classes began to take part in trade. The increase in the number of traders, as well as the decline of the cloth trade and the depression in prices (which we shall deal with shortly) must have affected their profits; and such indeed seems to have been the case in two districts for which we have information—*i.e.*, North Arcot and Guntoor.[59] As to their actual wealth, no figures are available after the Royal Asiatic Society's inquiry previously referred to.

The employment of agents was on the increase, but the commission paid to them does not appear to have changed. With regard to organized banking, we find little development apart from the opening of the Government Bank in 1806. As to private banking we have no information except the little gleaned from the 1834-36 reports. Cash had replaced barter, markets and fairs which had been suspended at the beginning of the century were revived, and new ones were instituted. A few of the old centres of trade decayed, but others were rising into prominence. On the whole, the period may be regarded as one of slow and gradual progress in the internal land trade.

Coasting Trade

We shall now deal with the Coasting Trade.[60] There is little material for this aspect of trade. The Annual Reports on External Commerce which form the only source of information, merely give statements of the total exports and imports every year, and the value of certain staple articles exported and imported during certain years. Even these are not complete and there is a big gap between 1806 and 1820 when no figures are available. The coasting trade showed little improvement during the greater part of the period. Indeed for some years there was a positive decline. It will be seen from Appendix X that the imports in particular diminished drastically from about 70 lakhs during the first few years to 40 lakhs in the early forties. The exports

59. Sullivan's Report to Government, 28th Dec. 1840.

60. In the Annual Reports on External Commerce the Coasting Trade is taken to represent the inter-portal trade of the Presidency.

also suffered to a certain extent. The greatest decline was in piecegoods which fell from Rs. 20,75,339 in 1805 to Rs. 7,22,295 in 1830-31 and Rs. 3,62,534 in 1845-46. The grain trade also suffered a set back, but this may be attributed to the growth of population and the increasing exports of grain to places outside the Presidency and hence taken as a satisfactory sign. In cotton on the other hand, there was a great improvement. The exports rose from Rs. 45,485 to Rs. 1,401,350 in 1840-41 though there occurred later an appreciable fall. The indigo trade also improved considerably, while the pepper exports continued without fluctuations.

In the earlier period, piecegoods, cotton, grain, indigo and pepper seem to have been the only articles of trade worth mentioning. They continued to be the main items of export, but a trade in coffee, chayroot, snuff, liquors and wines developed gradually. Another article which figured prominently in the early accounts of trade was firewood, in which Indian small craft found a highly profitable employment. A considerable portion of the Proceedings of the Board of Trade during the first decade of the nineteenth century was taken up with the quantity and value of firewood exported and imported in the various districts.[61]

The chief grain exporting districts or the "granaries" of the Presidency as they were termed, were the Northern Circars, Tanjore and Canara, and Nellore in a lesser degree. Cotton came from Tinnevelly, Coimbatore, the Ceded Districts and Salem, while Nellore, Cuddalore and North and South Arcot supplied indigo. Piecegoods were exchanged between every district, but they were exported in very large quantities from the weaving zones mentioned before. As to imports, Ganjam imported grain and drugs, Vizagapatam metals and cotton thread and Guntoor grain. metals and cocoanuts. Betelnuts were the chief imports to Tanjore, and metals to Tinnevelly, while piecegoods formed the main article of export to Malabar and Canara. But much the greater proportion of the imports were to the account of Madras. They came from every district and included every article, and particularly cotton, indigo, grain and pepper intended for re-export.

The fag end of the period witnessed a spectacular increase in the Coasting Trade. The statement in Appendix X will show that the import trade nearly trebled itself within a few years, rising

61. Proceedings of the Board of Trade, 1806 and 1807.

from Rs. 38,32,372 in 1843-44 to Rs. 1,14,69,277 in 1848-49. The exports also rose considerably. The increase was partly due to the development of trade in grain, cotton and even piecegoods, but above all to the Company's trade which rose rapidly at this time. The Company had always contributed largely to the total trade by the transfer of treasure and by despatching cotton, sandalwood, saltpetre and other articles for making up the new investment to Europe and China which replaced the old investment in piecegoods. In the middle of the century there was a marked development in the cotton trade of the Company.[62]

62. External Commerce Reports 1841-42 to 1850-51.

CHAPTER XIII

EXTERNAL TRADE

With regard to external trade, we have more information regarding the course and volume than in the case of the trade we have just discussed. The Company was always most interested in this aspect of trade and from the very beginning of its administration, voluminous if ill-compiled reports were prepared annually and transmitted to the Court of Directors. An Officer was appointed specially for the purpose—the Reporter on External Commerce,—and when this office was abolished in 1824 the duty devolved on the Collector of Sea Customs. The Reports on External Commerce were, as the name suggests, principally concerned with foreign trade, and in the earlier reports, the internal trade was either totally neglected or summarily dismissed. The following account is based mainly on these reports. Appendices V to VII which will further illustrate the development of trade have also been compiled from the same source.

During the eighteenth century, external commerce was in a highly satisfactory condition. There was a vast export trade in piecegoods to England, Malacca, Manilla, Sumatra and the Eastern Islands, and at the middle of the century, Madras was rivalled only by Goa and Batavia among the European Settlements in the East.[1] At the opening of the nineteenth century, however, the exports of piecegoods had already begun to decline, and misrule and internecine wars had led to a general stagnation of trade. The earliest reports of Collectors teem with accounts of the depressed condition of trade and industry. Trade revived rapidly with the establishment of settled government, but was still far below the eighteenth century level. Unlike Bengal and Bombay, Madras afforded few articles of export other than piecegoods, and in spite of its extensive seaboard, the number of good ports was limited. Its external trade therefore was much less than that of the other two Presidencies.

At the beginning of the period, trade averaged between two and two and a half crores of rupees. The trade with Bengal was

1. Milburn, *op. cit.*, Vol. II, p. 3.

the most valuable and consisted largely of imports of grain, raw-silk and piecegoods. The exports of piecegoods, chanks, salt, etc., were always but a fraction of the imports. The United Kingdom and Bombay came next, the trade with the former declining in the first few years, and with the latter improving remarkably, especially in the branch of exports. To the Eastern Islands there was an enormous export of piecegoods, the returns being pepper, benjamin, gold dust and treasure. The trade with China constituted the next considerable section, the imports being Nankeens, china-ware and tea, while the exports were mainly pearls and cotton. Ceylon's share was slightly less than that of China, but she improved her position steadily. The other countries with which the Presidency had dealings were in the order of importance, Manilla, Batavia, Pegu, Persia and Arabia, America, the Maldives, Travancore, the port of Tranquebar, France and other European countries. Among exports to these places, piecegoods were in overwhelming predominance. There were also large consignments of pepper, precious stones, coconuts, betelnuts, grain, wines, etc., while the imports were mostly grain, metals, betelnuts, drugs, dyes, raw-silk and sugar.

By the end of the first decade of the nineteenth century, peace and security had accomplished their task, and there was a certain increase of trade in all its branches. Bengal still retained its leading position, but Bombay's share had been augmented, and in the case of the United Kingdom, while exports improved, imports dwindled. Piecegoods were already on their downward trend, the private exports amounting to hardly 20% of the total, but this was balanced by the great increase in the exports of grain, coconuts, indigo and other articles. There was a similar increase in total imports though not to the same extent. Further, new openings for trade were provided on the West Coast of Sumatra and in Prince of Wales Island. During the second decade there was a general decline of trade,[2] the fall in the imports being the most remarkable.[3] Even in 1812 the Reporter of External Commerce referred to the stagnation that had been spreading over " this quarter of the world." In 1815 the Collector of Tinnevelly stated that the trade of his district had been reduced to very insignificant proportions compared to what it had been in the past. The imporrts of coir, betelnut and copra

2. G. H. Hodgson, *Thomas Parry, Free Merchant, Madras*, 1768-1824; p. 119.

3. See Appendix VIII

from Ceylon had dwindled almost to nothing.[4] By 1820 the depression had become most pronounced. Adverse seasons and the general unfavourable influences that prevailed during the period of the village leases had led to a fall of prices and a decline in purchasing power. Hence the great reduction in imports from practically every place. The Reporter in 1819-20 declared that the stagnation of trade greatly exceeded that of any period within his recollection. Owing to the Napoleonic Wars in Europe the exports also suffered to some extent, as may be seen from Appendix VIII.

Subsequently trade revived.[5] The exports in particular improved in a marked degree, in spite of frequent fluctuations due to political and economic conditions at home and abroad. The trade with Batavia practically ceased; but on the other hand there was a great development of the commerce with Malacca Straits, Mauritius and Bourbon and West Coast of Sumatra in coarse blue cloths from the southern districts, and also with France, the Gulfs of Persia and Arabia, China, Ceylon and other places. The relative importance of the different places also changed during this period. Bengal whence the bulk of the imports had been obtained during the first quarter of the century was relegated to the third position. This was partly due to the policy of Bengal in discouraging imports from Madras, especially salt in which a most valuable trade had once existed.[6] Grain from Bengal was formerly in great demand here, but since vessels could not proceed to Bengal solely for a return cargo of grain, this trade declined. And this was further assisted by the progress of rice cultivation in the irrigated tracts of the Presidency which rendered grain imports less necessary.

Meanwhile the United Kingdom was absorbing an increasing share of the import trade and to a certain extent, of the export trade as well. The imports of British cotton and other manufactures rose by leaps and bounds. Even in 1818, the Reporter of External Commerce observed that the commerce of the Presidency was "becoming more confined to one channel. Since the opening of the free trade with Great Britain, the chief part of the capital of India has been turned that way." By the middle

4. Letter from the Collector of Tinnevelly to the Board of Revenue, 2nd January 1815.
5. See Appendix VIII.
6. General Reports of the Board of Revenue, Vol. III, p. 8.

of the century the imports from England were decidedly the most extensive and amounted to about 34% of the total imports. If the imports of merchandise alone be taken into account, England's share was nearly 42%. The increase was particularly rapid after the passing of the Charter Act of 1834 when the trade nearly doubled itself.

Bombay also improved her position considerably and gained a predominant place with regard to exports, receiving 31% of the total. Ceylon and the Foreign European Settlements continued to participate more and more in the trade of the Presidency, Ceylon's percentage rising from about 10% in 1820-21 to more than 26% in 1850-51. In the earlier period there was a complaint that the trade with China was a "losing" one, since there were few exports to pay for the Nankeens, tea and china-ware imported.[7] Before that, the China trade was even more "losing," for not only did an excess of exports of merchandise never bring in any bullion, but large quantities of silver were annually remitted to China to provide the Company's Investment to Europe. Later, however, the exports of cotton developed greatly while imports dwindled. But the balance of trade with China continued to be adverse, for the payments for the exports were never made directly to Madras, but were sent to England in the form of tea and porcelain in order to enable India to meet the Home Charges.[8]

Of far greater significance than the change in the direction of trade was the revolutionary change in its character and composition. Throughout the ages India had been noted as an exporter of manufactured goods. In fact the trade in manufactures was the *raison d'etre* of the East India Company which was later so instrumental in annihilating it. Even at the beginning of the nineteenth century, cotton manufactures constituted by far the most important staple of commerce, and the exports amounted to about 85 lakhs of rupees.[9] Other exports were precious stones, pepper, coconuts, grain and betelnuts. There was very little cotton, less indigo and no sugar or oilseeds. The imports on the other hand were grains, wines, glass-ware, stores, cotton

7. Report on External Commerce, 1813-14.

8. Evidence of Mr. Melville before the *Select Committee on East India Produce*, 1840.

9. Milburn, *op. cit.*

and silk. Some piecegoods were imported but they were almost entirely from Bombay and Bengal. Thus the Presidency was chiefly exporting manufactured goods and importing raw materials.

By 1850, however, there was a phenomenal decline in the exports of piecegoods which fell by 65% to less than 30 lakhs of rupees. The table in Appendix VII will illustrate the decline in the exports of piecegoods to different places. It will be seen that the total exports diminished from Rs. 67,51,245 in 1825-26 to Rs. 29,42,874 in 1850-51. That the fall was not even more remarkable was due to the fact that during this period there was a progressive increase of exports of piecegoods to places within the Indian Empire, such as Bombay, Bengal and Ceylon. It will be seen that excluding these, the exports in 1850-51 were hardly to the value of 11 lakhs. From 1816-17 we find Reporter after Reporter bewailing the decline of the "staple" export of the Presidency, till it became a sort of refrain to the annual trade reports and continued long after piecegoods had ceased to be the staple. To Great Britain the exports at the opening of the century averaged more than 50 lakhs annually (including the Investment). By the close of the first quarter they fell to 25 lakhs, and in 1850-51, they amounted to about 4½ lakhs. As for the other foreign markets, they were almost totally destroyed. The reason why the trade with Manilla disappeared and that with the West Coast of Sumatra, Arabia and Persia, etc., dwindled greatly was that it was largely dependent on piecegoods.[10]

While the local manufactures were thus relegated to a position of insignificance, British manufactures gained ground rapidly within the country. Before the year 1814-15 the imports of British piecegoods were negligible and in that year their value was Rs. 51,931. The Statement in Appendix V compiled from the annual reports on commerce will show that within an incredibly short space of time they rose to nearly 5 lakhs. Later there was a decline for some time owing to the fall of purchasing power, and fluctuations were frequent throughout, but the imports continued their upward course and at the end of the half-century amounted to Rs. 10,39,563. The imports of cotton twist and yarn which commenced in 1825-26 also indicate a remarkable development increasing more than eight-fold by

10. Supplementary Report from the Mint Master, 16th December, 1851.

1850-51. The imports of metal and other manufactures from the United Kingdom improved similarly though not in the same degree as piecegoods. Metal imports rose from Rs. 49,411 in 1811-12 to more than 4 lakhs at the end of the first quarter and more than 17 lakhs in 1850-51.

The displacement of Indian manufactures by the British was partly due to the cheapness of the foreign machine-made goods, but it was also in large measure attributable to British policy. The British cotton manufacturing industry which had started late in the eighteenth century found it hard to withstand Indian competition, and hence measures were taken to restrict the import of Indian piecegoods. Even at the beginning of the century there was a prohibition of the use of all calicoes and muslins except plain white ones, in the interests of the English woollen industry. This was repealed later, but high duties continued, and from the close of the eighteenth century they rose progressively. Between 1800 and 1819 the import duty in England on plain and flowered muslins and flowered calicoes from India increased from 30% to 44% *ad valorem*. The duties on plain calicoes and dimities rose from 21% and 22% in 1800 to 85% in 1813.[11] These restrictions continued with slight modifications till the close of the first quarter of the nineteenth century, when British manufactures had definitely established themselves and Indian manufactures had been equally definitely ousted from the field.

While imports from India were being thus prohibited or restricted, every attempt was made to ensure the wide diffusion of British manufactures in India. The East India Company was the instrument by which this was accomplished, its territorial possessions serving as a convenient market for England's surplus production. It was generally understood that the Company should supply this country with British manufactures of every variety at prime cost or even less if need be, "as the best and most substantial return they could make to the public, for their exclusive privilege."[12] And whenever British producers were embarrassed with an excess on their hands which was "unsaleable in any other market," there was an agitation that the Com-

11. C. J. Hamilton, *Trade Relations between India and England*, pp. 285-6.

12. *Report from the Select Committee on the participation of Ireland in the Export Trade from Great Britain to the East Indies*, 1793, p. 5; *Report from the Select Committee of the House of Commons*, 1813, p. 473.

pany should buy and get it disposed of in India. The Company claimed that " on these occasions " they had " contributed in the most liberal manner to their relief and augmented the exports accordingly."[13] Threatened with very existence, the Company reiterated that they would " cheerfully try any experiments their Lordships may be pleased to suggest, as they are desirous at all times of exciting every endeavour to promote the advantage of the export trade of this country."[14] The Directors were prepared to do anything to assist British manufactures, and export even empty bottles if necessary. Every Committee and Commission appointed with reference to Indian affairs went into great length on the question of extending the export of British goods, in spite of continued discouragement and unfavourable reports.[15] All the witnesses examined by the Committees bear testimony to the difficulties of exporting goods to a country like India, possessing " raw materials in the highest perfection and millions of ingenious and industrious manufacturers, who work for one-fifth part of the wages given in England."[16] But they persevered and eventually gained their object.

In this country, the local manufactures were subjected to various transit and export duties which frequently amounted to 17½%, while British manufactures received bounties on export; and while Indian goods were burdened with prohibitive duties in England, British goods were admitted here after paying a nominal duty of 2½%.[17] Instructions were sent to all the Presidencies " to use every possible endeavour in promoting and extending the sale of European goods, particularly the manufactures and produce of Great Britain ".[18] Articles were sold at the lowest possible prices and even much below the invoice price.[19]

The effects of this policy were soon apparent. As early as 1813 Munro stated that the staple exports—piecegoods—, had fallen

13. *First, Second and Third Reports from the Committee on the Export Trade from Great Britain to the East Indies,* 1793, p. 15.

14. *Ibid,* p. 17. Papers respecting negotiations for the renewal of the Charter.

15. *Report from the Select Committee,* 1813.

16. *First, Second and Third Reports from the Select Committee,* 1793, p. 17.

17. Letter from Lord Ellenborough to the Chairman and Deputy Chairman of the E.I.C., 18th March 1855.

18. *Report, Select Committee,* 1793, p. 11.

19. *Report, Select Committee,* 1813, pp. 473-4.

greatly and were "likely to fall still lower, as they cannot rise without interfering with our own manufactures. All that is necessary is to supply ourselves the demand which still remains, without the aid of foreigners".[20] And they did this most thoroughly. After 1820 the Company was obliged to give up the Investment which between 1792 and 1809 averaged more than 50 lakhs of rupees annually.[21] Private traders tried for a time to take the Company's place, but they could not survive long in the face of British competition backed by unequal duties, which continued long after British manufactures had gained supremacy. The East India Company occasionally pointed out that it was "unnecessary and oppressive" to retain the duties, now that Indian manufactures had declined,[22] but nothing was done.

Meanwhile the imports of English piecegoods continued to increase. Speaking of this the Reporter of External Commerce remarked in 1829, "These (piecegoods) are now produced in England at so low a rate and the difficulty there is so great in finding a market for the amazing quantity manufactured, that it is probable the importation may continue to increase, even whilst the small profit to be obtained would lead one to expect that no encouragement was held out".[23]

While the exports of piece goods declined, cotton, indigo, grain, cocoanuts, and to a certain extent, pepper improved. (See Appendix XII). These articles hardly entered into the export trade of the Presidency at the opening of the nineteenth century, (except for pepper) but by the close of the period there was a great development in the exports of all of them. The Company was as assiduous in encouraging the exports of these raw products as in assisting British industry. Dr. Wight in his Report relating to commercial crops in 1836 expressed the Company's policy as follows. "Every encouragement which can in any way tend to increase production and facilitate the exportation to Great Britain of the raw material, should be given . . . . . Whatever policy is adopted in Britain, by draw-backs, etc., to stimulate manufacturing enterprise, and external commerce, is equally applicable in this country

20. *Ibid.*, Munro's Evidence.
21. Milburn, *op. cit.*, Vol. II, p. 69.
22. Petition of E. I. C. to Parliament, 18th December 1839.
23. Report on External Commerce, 1828-29.

to stimulate the growth and exportation of raw materials."[24] He suggested that excessive production of food crops should be discouraged since they would interfere with the extension of cotton, sugar, etc. Other measures for stimulating the cultivation of commercial crops have already been dealt with.

Thanks to the Company's efforts, and the increase in demand from Europe, China and elsewhere, the exports of raw materials improved rapidly. This gave rise to considerable speculation which occasionally led to a crisis. Thus in 1835-36 and the succeeding year, the loss of the American cotton crop resulted in an unusually heavy demand for Indian cotton, the export of which rose from about 1½ lakhs in 1834-35 to Rs. 42,85,876 in 1835-36 and Rs. 56,55,600 in 1836-37. Encouraged by this favourable state of affairs, merchants speculated freely in cotton and large shipments continued, with the result that there was a glut and the price of cotton dropped to 4d. per pound in England, and from 12 to 9 tales per pecul in China. As a consequence, the exports in 1837-38 fell to Rs. 99,201. Again in 1848-49 there was "a great commercial panic and crisis," this time extending to other exports also. Both cotton and indigo exports fell considerably, and other articles to a lesser extent. The situation, however, was safely tided over while no serious consequences appear to have resulted and exports recovered rapidly.

The exports of cotton in particular, indicates a spectacular development. They were valued at a little more than a lakh of rupees at the beginning of the period, but rose remarkably after 1820, as may be seen from the table in Appendix XII. The reasons for the marked fluctuations that are noticeable have been referred to above. A considerable portion of the exports were to England. China was also a great consumer of Madras cotton but figures are not available for all the years. The crisis of 1834-35 led to a considerable decrease as we have seen, but they improved later though it was not till 1841-42 that the previous figures were reached.[25] The crisis of 1848-49 had a similar depressing effect, but exports soon recovered and in 1850-51 they amounted to nearly 60 lakhs.

The exports of indigo were negligible in 1800, but they rose rapidly from the very beginning. Here also fluctuations were usual,

24. Report of Dr. Wight to Government, 20th May, 1836.
25. Reports on External Commerce for 1837-38 and 1841-42.

but not to the same extent as in the case of cotton. The value of indigo exported increased from a few thousands of rupees in the first few years of the century to more than 6 lakhs in 1825-26 and more than 25 lakhs in 1850-51. (See Appendix XII). These were the figures furnished by the Customs Department, but the actual value was much greater, since the official estimate of the price was believed to be at least 50% below its real worth.[26]

The exports of other raw products improved similarly, as may be seen from Appendix XII. The amount of sugar sent from Madras was not worth mentioning till the end of the first quarter of the century, and indeed in the earlier years a large quantity was imported from Batavia and elsewhere. In 1835-36 the exports were valued at 1 lakh, and thenceforward they rose steadily till they reached 15 lakhs in 1845-46 and 21 lakhs in 1850-51. The exports of pepper and grain doubled themselves, and those of cocoanuts also improved, though the amount varied largely from year to year. Oil-seeds did not enter into trade at all till the very end of the period, when they came into prominence and the exports continued to increase every year.[27]

Thus the character of the trade of the Presidency changed radically between 1800 and 1850. Instead of exporting manufactured goods and importing raw material, the Presidency exported raw products and received in exchange finished goods—a considerable portion of them prepared from her own material. Except for a few who still lamented the decline of the indigenous industries, the general official opinion was that an all-round benefit was secured by this mode of exchange. Mr. Wight for instance, was deeply impressed with the advantages of this process which he described as "a skilful division of labour." "To the English the profits of manufacture are such as to enable thousands to live not only in comfort, but in affluence, from the fabrication into piecegoods of an Indian article, which scarcely affords the Hindu weaver . . . . . a livelihood for himself and his family." Elsewhere he observed that not only was India of the greatest benefit to Great Britain by providing her with raw material, but "India

26. Report on External Commerce for 1826-27.
27. Supplementary Report from the Mint Master, 16th December 1851.

is equally benefitted by the union, as she receives back her own raw material, fabricated into the most perfect forms that human skill has yet attained.....and that after traversing a distance nearly equal to the circumference of the globe, and affording in its course, a livelihood to thousands engaged in every stage of its progress."[28] Apparently, India was combining philanthropy and economy besides cultivating the aesthetic sense.

The effects of the decline of the textile trade on the manufacturing classes have already been dealt with. As to the repercussions on the community at large, this will be considered in chapter XV in connection with prices.

Land Frontier Trade

The account of the external commerce by sea being over, we may now take up the trade by land with places outside the Presidency. Under the caption of Land Frontier Trade was included the commerce with the neighbouring Native States and with Bengal. As has already been stated, the Annual Trade Reports furnish very meagre information about this branch of trade. They give only figures of the total imports and exports and sometimes the value of the trade with each place. Even these statements were not entirely reliable, as they were taken from the renters of the customs whose accounts were notoriously inaccurate. Further, there is seldom or never any attempt at an explanation of the figures, of the factors that made for increase or decrease or for any change in the trend of trade.

At the beginning of the period the Land Frontier Trade had suffered along with other trade, and was practically at a standstill. No figures are available upto 1811, but the reports of Collectors indicate that there was a considerable decline. Rajahmundry which had formerly carried on an extensive trade in metals, spices, piecegoods etc., with the Nizam's dominions had few articles of export, and the trade of Guntoor was similarly reduced. Indeed the trade between Hyderabad and the Company's territories as a whole experienced a marked deterioration.[29] As for Mysore, the wars with Tippu had naturally put a stop to the trade with that state, especially in view of the fact that Tippu had issued stringent orders

28. Report from Dr. Wight to Government 20th May 1836.

29. Letter from the Collector of Rajahmundry to the Board of Revenue, 18th February 1801; Letter from Mr. Oram to the Board of Revenue, 12th June 1789.

against trade with the Company's territories. The trade with the Mahratta country was similarly circumscribed. Subsequently there was a steady, if slow, development of the Land Frontier Trade. In Appendix XI is given a statement of the Land Frontier Trade from 1811-12 to 1850-51. It indicates that the imports rose from Rs. 46,45,349 in the former years to Rs. 1,03,04,676 in 1843-44. The exports, however, did not improve so rapidly. This may be ascribed largely to the decline of the textile trade. The extremely large imports in 1827-28 amounting to Rs. 3,03,11,172 were due to a remittance of treasure on the Company's account of the value of Rs. 2,30,66,200. Any wide fluctuations in other years may also be attributed to the same cause.

The places traded with were, Mysore, Hyderabad, the Mahratta States, the Foreign European Settlements, Kurnool, Coorg and Bengal. Mysore ranked first in importance, the trade with that kingdom comprising nearly half the total trade. The imports from Mysore were chiefly betelnuts, sugar and jaggery, cattle, pepper, piecegoods, sandalwood and tobacco, and amounted to 30 to 40 lakhs of rupees annually. They were imported into the districts of Bellary, Cuddapah, Arcot, Salem, Coimbatore, Malabar and Canara, the returns from these places being cotton, silk, salt, indigo, piecegoods and ghee. The trade with the Nizam's Dominions was carried on mainly from Vizagapatam, Rajahmundry, Masulipatam, Guntoor, the Ceded Districts and North Arcot. The imports in the earlier period were dyes, raw silk, gold and silver lace and opium. Later, much cotton, thread and timber were also included. The exports were cocoanuts, cotton, piecegoods, grain, salt and tobacco. The trade with the Mahratta States was practically confined to Canara and the Ceded districts, the exports being rice, betelnut, cardamoms, pepper and jaggery. The imports increased considerably during the half century, particularly of cotton. Other items were cattle, chillies, cumblies, piecegoods, dates and metals.

From the foreign European settlements the merchants brought piecegoods mostly, and some sugar and cotton thread. The returns were cotton twist and thread, grain, piecegoods, metals and timber. Cotton was the principal article of import from Kurnool, which found its way to the Northern Circars, as also piecegoods and cattle to a small extent. These were exchanged for piecegoods, salt and metals. The land trade with Bengal was never considerable, and it declined greatly by 1850. Grain, raw silk, silk piecegoods, drugs,

dyes and lace comprised the imports into Ganjam, while the exports from thence were ghee, gingelly oil, jaggery, tobacco and piecegoods. From Coorg came cotton seeds, cattle and some cloth, which were paid for by cocoanuts, sugar and piecegoods.

We have already seen that the Land Frontier Trade improved in a great degree during this period. The trade was actually much more extensive than the figures indicate : for not only were they obtained from the renters of choukies who usually underestimated the value of trade, but they took into account only those articles which were liable to duty. There were no accurate data for estimating the amount of grain and other articles which were duty free. Before 1826 cotton imported from the Nizam's Dominions was exempt from an impost and hence it was omitted from the statements, but later it was included. When a tract was annexed to British territory the trade with that place ceased to appear in the accounts of Land Frontier Trade. Again, when the Inland transit duties were abolished in 1844, the official figures indicate a remarkable decline in commerce. It will be seen that the imports fell from Rs. 1,03,04,676 in 1843-44 to Rs. 44,49,768 in 1844-45 and to Rs. 12,19,627 in the next year. The exports, similarly dropped from Rs. 64,55,402 in the year before the abolition of the duties to Rs. 29,74,402 in 1847-48. Actually, however, the repeal of the duties resulted in a considerable extension of trade. This discrepancy was due to the fact that the commerce with Mysore, Bengal, Coorg, etc., which was by far the most considerable, was no longer reckoned with in the Frontier Trade. After 1844, only the trade with the foreign European Settlements, Hyderabad and Travancore was entered in the accounts.

CHAPTER XIV

TRANSPORT

Roads

At the beginning of the period, roads, properly so called, were almost non-existent. In several parts of the Northern Circars there were no roads whatever, and such traffic as there was, passed over cultivated fields. When Lambadi traders crossed a district with their cattle, immense quantities of grain were destroyed. These traders, therefore, were allowed to travel through certain villages only during a few months of the year after the crops had been harvested.[1] Roads in the Carnatic seem to have been slightly better than in the Circars,[2] especially during the dry season, but even here their condition was far from satisfactory. There were but few roads in the Jaghire and these were so badly kept that wheeled traffic was out of the question. Bullocks were the only means of transport and in several divisions containing more than 500 villages there was not "literally a single cart."[3] Regarding Canara, Munro once wrote in a journal to his sister that he took more than six hours to travel as many miles, and was obliged to proceed some of the distance on foot, as the road was unfit for riding. Buchanan indeed testifies to the existence of a few good roads and one or two that were "excellent" and "fit for any kind of carriage;"[4] but he is evidently referring to the artillery roads, and even here the term 'excellent' is entirely relative. Malabar seems to have been comparatively well-equipped with roads. Mr. Warden in his report dated 20th March 1801 observed that the roads in that district were tolerable, especially the military roads constructed for the artillery, and a few years later, Mr. Thackeray who had visited several districts expressed the same opinion. In fact, according to him, Malabar at that time, could boast of better roads than any other part of India.[5]

1. Report from Charles Flager, Paymaster of Samalcottah to the Board of Revenue, 4th May 1787.
2. B. Heyne, *op. cit.*, pp. 14-15, and 231.
3. Place's Report on the Jaghire, 6th June 1799.
4. Buchanan's *op. cit.*, Vol. III, p. 383.
5. Thackeray's Report on Malabar, Canara and the Ceded Districts, 7th September 1807.

In other districts of the Presidency there were few roads deserving the name. According to the Public Works Commission Report of 1852, "throughout the whole peninsula there was not one complete road of any length on which it would have answered to employ wheeled traffic." The only "made roads" were those constructed for the use of the army during the Mysore wars, but the monsoon rains had washed them away and they were of little use now. In some parts, their condition was so unsatisfactory that though practicable for artillery, they destroyed every cart or conveyance that passed over them.[6] As for old roads, there were few or none. The Company received a rich legacy from the earlier rulers in regard to irrigation works, but in the case of communications, it was less fortunate. Roads had indeed been constructed, as was apparent from the magnificent avenues of trees which stretched for hundreds of miles in several parts of the country, but they were unbridged, imperfectly drained and out of repair for centuries; so that "they were roads no longer, but in most cases, from being worn down by former traffic, and washed by the rains of the monsoon, they have become the drain of the country that they passed through, and were so much more rugged than the land on either side, that their only use was as a guide to travellers who took a course as nearly parallel as the ground permitted."[7]

The condition of roads under the Company's Government.—In the earlier days of its rule the policy of the Company was mainly one of inactivity. Except for the military roads already referred to, there was hardly any attempt at road-making or even road-repairing. When the new judicial system was established, the revenue officers presumed that the magistrates would take up the responsibility, while the latter refrained from doing anything in the absence of positive orders. The result was an almost complete neglect of roads. When an inquiry was made into the state of communications between 1813 and 1815, it was found that little or no improvement was perceptible since the advent of the British and that on the contrary several of the old roads were rapidly approaching ruin.[8] Numerous complaints were constantly being

6. Letter from the Board of Revenue to Government, 9th November, 1813.
7. Report of the P. W. Commission, 1852, p. 43.
8. Letter from the Board of Revenue to Government, 9th November 1813.

received as to the woeful condition of roads and the consequent delays and inconveniences of travellers. Several parts of the Northern Circars were impracticable for wheeled traffic, the roads being mere tracks, and frequently intersected by channels, which rendered them impassable in the rainy season and dangerous in the dry.[9] The Board of Revenue suggested various improvements such as clearing jungles, levelling slopes and constructing bridges, but added that the expenditure might be prohibitive. The Government made the most of this last consideration and hence nothing came of all the enquires and suggestions except a vague permission for effecting any "cheap improvements which might be considered particularly desirable".[10] A few Collectors tried to do something in the way of these cheap improvements and those of Salem and Tanjore in particular did succeed to a certain extent, mainly by forced labour.

Later, the pioneer corps which had been employed on the military lines was relegated to the task of constructing other roads as well. The officers, however, seem to have possessed more zeal than engineering knowledge and skill, and the result was an enormous waste of money. Thousands of coolies were employed on one or two roads without proper direction and lakhs of rupees were thrown away. As an instance of such injudicious expenditure, we may take the road from Masulipatam to Hyderabad. When 8 lakhs of rupees had been spent, it was found that only 120 miles had been completed at an average rate of Rs. 7,000 per mile ; then the Court of Directors ordered the cessation of the work. The road from Madras to Poonamallee, 11 miles long, was even more expensive and "as in this case the pioneer officer was able to communicate constantly with the authorities in person, he was not so restricted about expenditure as in the other case; and accordingly Rs. 5,50,000 were spent on this line or 50,000 rupees a mile.[11] The Court of Directors now saw that it was necessary to apply a remedy; and it was to order that no more roads should be made. This was simple and effective."[12]

Extravagance of the above type, however, was rare ; indeed the actual expenditure on roads came to little more than ·5 p.c.

9. Gen. Rep. Vol. 19, pp. 122-3.
10. *Ibid.* Vol. 21, p. 344.
11. Perhaps the expenditure was not so much of a waste after all. The Poonamalle High Road is decidely one of the best in the city of Madras.
12. Cotton: *Public Works in India*, pp. 5-6.

of the total revenue. The fact was that "the construction of a road or canal was regarded by them (Court of Directors) much in the same light as a war would be, as an unavoidable evil, to be undertaken only when it could not be postponed any longer, and not, if possible to be repeated."[13] In 1845 a Road Department was established with an engineer at the head, assisted by two subordinates. These officers worked untiringly and indeed wore themselves out and even within the short period of 5 years, they were able to turn out good work in the case of 1 or 2 trunk roads from Madras and a few branch roads in the districts. The table on next page will give an indication of the remarkable benefits accruing thereby. It will be seen that the rate of hire for a cart from Madras to Wallajahnagar fell from Rs. 10-1-3 per ton in 1844 to Rs. 5-1-2 in 1851, while the cart load increased from 1000 lbs. to 1600 lbs. The Road Department would no doubt have achieved more if the staff had been adequate, but as it was, they were completely lost in their routine duties and for the Presidency as a whole, there was not much progress.

By the middle of the century we find a slight improvement in the state of roads. Roads in Madras and the neighbourhood were tolerably good, and some of those leading to the cantonments were remarkably so. The district of Chingleput benefitted greatly owing to its proximity to the seat of the Presidency. Tanjore, Salem, Madura and Canara were provided with a fairly extensive network of main and branch roads, constructed largely by forced labour.

The district of Guntur enjoyed for the first time the benefits of made roads and wheeled traffic, both of which were formerly unknown.[14] A similar improvement was noticeable in North Arcot and Malabar.[15] For the whole Presidency there were in 1846, 3110 miles of 'made road' i.e., road considered fit for vehicular traffic. The use of bullock carts which had formerly been confined to a few districts became general, and in 1848 there were 90,000 bandies in the Presidency. The improvement in roads facilitated the introduction of a better type of carts, the old massive

13. Strachy, *India*.

14. Letter from the Collector of Guntoor to C. R. Cotton, 13th December 1839. Appendix 'Statement of persons who live by traffic.'

15. Letter from Bourdillon to the Board of Revenue, 28th August 1854. Letter from Clementson to C. R. Cotton, 31st December, 1838.

carts with solid wooden or stone wheels drawn by several pairs of bullocks being replaced by lighter ones drawn by a single bullock or a pair. The charges of transport also indicate a marked reduction in several parts. Between 1800 and 1840, the hire from Guntur to Hydérabad fell from Rs. 25 for a cart and Rs. 8 for a bullock or cooly, to Rs. 12 and Rs. 4 or 5 respectively. Similarly the Western Road from Madras more than repaid its exorbitant cost of construction of Rs. 10,000 per mile by the reduction in the cost of transit from 4½ as. per ton mile to 1¼ as. at the close of the half century.[16] The following table reveals a progressive diminution in the rates of cart hire from Madras to Wallajahnagar—a great emporium of trade, 70 miles from Madras.

Year	Cart load	Hire	Rate per ton
		Rs.	Rs.
1823 ..	900lbs.	7 0 0	17 6 9
1835 ..	900lbs.	6 9 0	16 7 9
1837 ..	900lbs.	5 0 0	12 7 1
1844 ..	1000lbs.	4 8 0	10 1 3
1847 ..	1000lbs.	4 0 0	8 15 4
1851 ..	1600lbs.	3 10 0	5 1 2

In Malabar the advent of carts had led to a fall in the cost of conveyance by about 50% when compared to the rates prevalent during the first decade of the nineteenth century.[17]

Conditions, however, were still far from satisfactory, and facilities most inadequate to the needs of the country. Wheeled traffic was yet impossible over a great portion of the Presidency. The Public Works Commissioners reported in 1852 that notwithstanding all the improvements, "much of the produce of the country can only be transported to the coast, or even to the markets of the district in which it is grown, upon bullocks, and in many places the roads are yet impassable for laden cattle and men carry the goods from place to place."[18] A considerable extent of such roads as existed were "totally unbridged and totally unmade." Cuddapah with an area of 13,000 square miles had "nothing that deserves the name of road" so that the journey to Madras was dreaded by the ryots,[19]

16. J. B. Norton's *Letter to Robert Lowe*, p. 262.
17. Letter from Clementson to C. R. Cotton, 31st December 1838.
18. P. W. Commission Report, p. 44.
19. Letter from Mr. Murray, Collector of Cuddapah to the Board of Revenue, 28th October 1853.

and Bellary which was of equal extent had not a single bridge of more than 2 yards span.[20] The inquiries made by the Public Works Commissioners elicited the information that in district after district the state of roads was 'wretched,' 'intolerable,' 'lamentable,' 'execrable,' etc. In Kurnool, there had been no attempt at improving communications since the district came under British rule and its roads were "little better than tracks through the fields marked principally by their being worn down to a lower level than the surrounding country." Trunk roads were equally defective, with the solitary exception of the road to Bangalore. The great Northern Road to Calcutta which was the sole means of communication between all the northern districts and the capital was mostly unbridged and often indistinguishable from the fields. Even the roads of Salem and Tanjore which were so frequently held up as objects of admiration left much to be desired. Few of the trunk roads were serviceable throughout their extent even in the dry season and practically useless in the wet, while branch roads were most inadequate and imperfect except in Tanjore, Salem, Madura and Canara.

Navigation

The Presidency enjoyed considerable natural facilities in respect of navigation, both inland and coastal. The Kistna, Godavari and Tungabadra in the north, the Cauvery and Periyar in the south and the numerous streams and backwaters of the west afforded convenient and cheap means of transport within the districts. As for coastal navigation, the sea-board was extensive and there was no lack of ports and anchorages. Further, the Presidency had excellent timber resources, while skilled labour was both abundant and cheap.

The Indian shipping industry was an ancient one, and even in the seventeenth and eighteenth centuries it was second to none in the world. At the time of the advent of the British as rulers, Indian ships were admittedly more durable and economical than British ships. James Grant, in the Political Survey of the Northern Circars, bears testimony to the "facility, convenience and cheapness with which ships of war or of burthen" had been built at the ports of Coringa and Narsapore.[21] He added that large ships could be

20. J. B. Norton's *Letter to Robert Lowe*, p. 48.
21. Fifth *Report*, Vol. III, p. 8.

constructed in greater numbers at these and other ports. Cochin on the West Coast was another great shipbuilding port which had enjoyed much prominence during Dutch rule. Indian built ships were used largely not only in coastal navigation, but also in external commerce and participated in the East India Company's trade between England and India.

The arrival in London of Indian ships manned and captained by Indian seamen aroused certain strange apprehensions and also much hostility on the part of British shipping interests. A strong agitation was started for the closing of British ports to Indian built and Indian manned ships. British shippers declared that they would be ruined if Indian ships were allowed to compete with theirs, for the former were not only cheaper to construct, but owing to the superiority of the timber, at least twice as durable as British ships. The East India Company found an extraordinary reason for prohibiting the entry of Indian sailors into Biritish ports. In a Despatch dated 27th January 1801 they observed "The native sailors of India are to the disgrace of our national morals, on their arrival here, led into scenes which soon divest them of the respect and awe they had entertained in India for the European character. The contemptuous reports which they disseminate on their return cannot fail to have a very unfavourable influence upon the minds of our Asiatic subjects, whose reverence for our character, which has hitherto contributed to maintain our supremacy in the east, will be gradually changed for most degrading conceptions....and if an indignant apprehension of having hitherto rated us too highly or respected us too much should once possess them, the effects of it may prove extremely detrimental.... Considered, therefore, in a physical, moral, commercial and political view, the apparent consequences of admitting these Indian sailors largely into our navigation, form a strong additional objection to the concession of the proposed privilege to any ship manned by them."[22]

Accordingly, an Act of 1814 declared that ships whose crews were not at least 75% British were liable to forfeiture, while the captain had in all cases to be British. Even the use of Indian built ships was prohibited from 1814 onwards, though this regulation was often evaded, and merchant vessels as well as war ships were in fact built at the various ports of India up to the middle of

22. Supplement to the Fourth *Report of the East India Company*, App. 47, pp. 23-24. Quoted in Digby's *Prosperous India*, pp. 101-103.

the century. At Cochin, on the west coast, several vessels of 500 to 800 tons and more, as well as some frigates were built for the British in the early years of British rule.[22]

In India, local shipping was discouraged by discriminating tariffs. From 1812, the general import duty on goods brought into the Presidency in Indian ships was raised to 15% as against 7½% in the case of British ships. Even other foreign ships were given preference over local ships. These measures dealt an effective blow to the shipping industry and, combined with various other influences, reduced it to negligible proportions.

As for ports, no attempt was made during the course of the half century, to develop any of the ports and harbours of the Presidency. Even in the case of Madras, the only achievements were a few minor alterations and the construction of a lighthouse. Other ports were totally neglected. Coringa in Vizagapatam was known to be one of the best harbours in India and the safest anchorage between Calcutta and Colombo.[24] Its mud docks could accommodate ships of 700 tons and more, and it had every facility for becoming an important port in the proximity of timber forests, a large sea-fairing population, and an abundance of cheap provisions and skilled labour. Early in the nineteenth century, the Master Attendant at Coringa drew the attention of the Government to the possibilities of the port and suggested certain improvements.[25] Nothing, however, came of these proposals, and the well-known natural advantages of Coringa remained entirely undeveloped. Further, no efforts were made even to preserve it, and huge banks of sand were allowed to accumulate.[26]

Several ports throughout the Presidency decayed during the period, due to various causes. An attempt was made to concentrate all maritime trade at Madras by means of port and other regulations. Smaller ports also suffered from a lack of docks for landing and repairs, and of loading and unloading facilities. Further, the British agency houses which controlled most of the trade operated from Madras. The decline of particular branches of

23. John Edye, *Description of the Seaports on the Coast of Malabar*, J.R.A.S., Vol. II, 1835, pp. 325-6. Sea Customs Proceedings of the Board of Revenue, March 1820, p. 282.

24. Capt. Cotton's Report on Rajahmundry, 12th August 1844.

25. Report on External Commerce, 1803, Pub. Con. 13th April 1806.

26. Capt. Cotton's Report on Rajahmundry, 12th August 1844.

trade also led to the decay of certain ports. Thus Masulipatam lost its importance with the fall of its textile exports. Cochin suffered similarly with the decline of the pepper trade. Numerous other ports both on the east and the west coast described in earlier gazetteers deteriorated into small fishing villages. By the end of the half century ports such as Narsapur and Vizagapatam in the Circars, Covelong near Madras, Porto Novo and Devipatam further south, and Anjengo and Honawer on the west coast were reduced to insignificance.

The period witnessed no improvement in inland and coastal navigation. Little was done to preserve or develop the fine timber resources of the country. Forests were closed to the public, the timber trade being entirely a government monopoly. According to the Customs Committee of 1821 the coast merchants were unable to procure the smallest teak timber for the repair of the trading vessels of the country.[27] The results were highly inimical to the shipping industry which we have seen was already severely handicapped. There was a solitary attempt at canal making—i.e., the construction of Cochrane's canal. It was highly remunerative and yielded a revenue of Rs. 30,000 a year, but the attempt was not repeated. At the end of the half-century, inland navigation remained entirely undeveloped in spite of the facilities offered by the numerous streams and rivers and the extreme cheapness of boat carriage as compared with other means of transport.[28] The only districts where rivers were utilised to any extent were Tanjore, Trichinopoly, Coimbatore and Malabar. Coastal navigation was equally backward owing to the decay of ports and the shipping difficulties noted above.

Communications by land and by water were thus entirely undeveloped and constituted one of the main obstacles to the expansion of trade. Another unfavourable factor was the great fall of prices which occurred during this period not only in this Presidency, but in other parts of India. This subject will be dealt with in detail in the ensuing chapter.

27. Report of the Customs Committee, 26th March 1821.

28. On the West Coast, the cost of transit per ton per 100 miles by cart, bullock, cooly and water was Rs. 26-8-0, Rs. 46-8-0, Rs. 53-8-0 and Rs. 2-8-0 respectively. Sullivan's Report on Malabar and Canara, 1841.

CHAPTER XV

THE COURSE OF PRICES

Prices and price movements are of vital importance to all sections of society. In the modern world with its close interdependence of units and elaborate mechanism of exchange, price changes have far-reaching effects. In India before the nineteenth century, price fluctuations were frequent and great, but they were usually caused by a local scarcity of the food supply and hence their effects were not widespread. In the nineteenth century, however, British rule entailed a close connection with the rest of the world and with Europe in particular, and the course of prices, though still largely governed by local factors, conformed more nearly than might be expected with conditions outside.

This chapter deals mainly with the prices of food grains. Being most widely produced and consumed, they constituted the chief source of income on the one hand, and the great item of expenditure on the other. The economic condition of the people, therefore, was affected most by changes in the prices of food grains. The other articles that entered into exchange were commercial crops and manufactures. Kitchen crops, as has been said, were often grown in the backyards of houses for individual consumption. Even if they were sold it was usually by barter,[1] in exchange for grain, etc., and, at any rate, the expenditure on that account was negligible. With regard to commercial crops, it has already been stated that they came into prominence only at the end of the period. Though fluctuations in their prices did occur they affected but a section of the community. Figures are not available of prices in all districts, or for the whole period, but such as we have indicate that, to a certain extent at least, their trend was similar to that of the staple crops. Manufactures will be dealt with later.

Price Variations

Great variations in the prices of food grains constituted a feature of the earlier half of the last century. There were wide fluctuations from period to period in the same place and also great dif-

1. The custom of bartering kitchen produce for grain still prevails to some extent.

ferences in prices at different places at any particular time. Owing to the uncertainty of the monsoons and the difficulties and high cost of transport, there was an extreme inelasticity of the supply of food grains. The produce of each locality had generally to find a market within that place and there was not much prospect of import or export in case of scarcity or glut. The result was that prices would be very low in one town or village, while famine prices ruled in another a few miles away. While first sort paddy sold at Rs. 110 per garce in Vellore, the price at Chittoor was Rs. 221.[2] And the difference between districts was even greater. In Fasli 1234 (1824-25) the prices of paddy in Malabar and North Arcot were Rs. 83 and Rs. 311 respectively. This is an extreme instance, but even in ordinary years the differences were certainly great. In the same place there were great fluctuations from year to year and even from month to month.

The annual variations depended on the supply for the whole year, while the monthly changes were regulated by the progress of the crops. Prices were at their highest during the period of sowing and lowest immediately after the harvest, and usually there was a regular or irregular rise and fall within these periods. If the season was unusually dry and the yield expected to be scanty, prices would automatically go up. The rise and fall of prices at seed and harvest time indicates that the majority of the cultivators were obliged to sell their crops immediately after being reaped and did not or could not retain even grain required for sowing. The difference between the highest and the lowest prices in any particular year amounted to 100% and often more. In Rajahmundry the lowest price of ragi in Fasli 1226 (1816-17) was Rs. 75, while the highest was Rs. 200 per garce. In such circumstances, unscrupulous moneylenders naturally found ample scope in manipulating bonds in order to mulct the poor ryot.

There were certain districts in which prices were generally high and others in which they were low. In the 'granaries' of the Carnatic, the Northern Circars, particularly Ganjam and Vizagapatam, and in Malabar and Canara, the level of prices was always much lower than elsewhere. Fluctuations, both long period and short period, were also less sharp, for Malabar and Canara were always assured of an abundant rainfall, while in Ganjam and

2. Prices of food grains in the Presidency, Miscellaneous Volumes of the Board of Revenue, No. 24.

Vizagapatam it was seldom that the rains failed completely. The severest scarcities touched these districts lightly. In Trichinopoly, Madura and Dindigul, with their network of channels and streams which at once ensured fair crops and served to carry the produce from one part to another, prices were fairly low and steady. In Tanjore price fluctuations were considerable in the beginning of the century, but after the construction of the Cauvery-Coleroon anicuts these were reduced from 43% to 4¾%, according to Capt. Cotton.[3] This did not hold good throughout the subsequent period, and at times there were changes amounting to 20% and more, but there was undoubtedly a marked improvement.

The district in which prices were highest was certainly North Arcot. For one thing, it was not a great grain producing district—its speciality being indigo and to some extent, sugarcane. Besides, as it was near Madras, a considerable portion of its produce found its way to the Madras markets, where all articles naturally fetched high prices. For a similar reason, and in a more marked degree, prices were rather high in Chingleput. Here there was difficulty even in the cultivation of lands, for the labourers often found the prospects of high wages available in Madras too tempting to be resisted.[4] The needs of the seat of the Presidency led to the construction and repair of roads from that district to Madras and hence transport conditions were also favourable to export, and thus most of the produce of Chingleput was sent to Madras. In Bellary, Cuddapah and Guntoor—the districts which benefited little from either monsoon, famines and dearths were most frequent. Indeed practically every other year was, and continued to be, one of scarcity, and prices there were decidedly above the average.

The Course of Prices

The above observations are mainly applicable to short period price movements. In regard to long-term movements, we find that in spite of the remarkable variations above noted, the trend is similar in practically all the districts. In the table below is given a list of the average prices of foodgrains most widely cultivated and consumed in the Presidency—paddy, 1st and 2nd sorts, ragi and cholam. It is compiled from statements of monthly and

3. Cotton, Report on the Irrigation Department, 13th December, 1837.
4. Mr. Hodgeson's Report on the State of the Jaghire, 3rd February, 1799.

annual prices in each of the districts. The general trend is indicated clearly in the index number, for which the years 1801-2 to 1810-11 have been taken as the base. The accompanying graph will further illustrate the course of prices.*

PRICES IN RUPEES PER MADRAS GARCE†

	Paddy 1st sort	Paddy 2nd sort	Ragi	Cholam	Index Number Base 1801-2 to 1810-11=100	
1801–2	109	96	117	124	93	
1802–3	110	93	105	123	90	
1803–4	127	106	126	138	103	
1804–5	139	117	145	157	117	
1805–6	121	102	128	140	103	
1806–7	158	144	151	210	138	famine
1807–8	143	122	148	183	124	
1808–9	99	87	101	104	81	
1809–10	86	75	90	96	73	
1810–11	91	80	90	100	75	
1811–12	110	95	112	119	91	
1812–13	130	118	141	159	114	famine
1813–14	123	111	136	156	110	
1814–15	105	94	114	135	93	
1815–16	86	76	83	104	73	
1816–17	91	80	80	100	73	
1817–18	95	82	94	116	81	
1818–19	92	81	103	119	83	
1819–20	92	81	107	120	83	
1820–21	93	78	105	125	84	

* The index numbers have not been weighed. For one thing, we have no accurate data for assessing the relative importance of the various grains. Further, we know that rice, which would receive special weightage in the present day, was not so widely consumed at that period. Recent price studies in the West have also shown that the difference between weighted and unweighted index numbers is not great.

PRICES IN RUPEES PER MADRAS GARCE (Contd.)

	Paddy 1st sort	Paddy 2nd sort	Ragi	Cholam	Index Number Base 1801-2 to 1810-11=100	
1821–22	106	95	118	132	96	
1822–23	104	93	116	136	93	
1823–24	130	120	157	178	122	
1824–25	164	148	190	210	148	famine
1825–26	125	111	138	164	142	famine
1826–27	93	86	99	105	80	
1827–28	84	78	89	91	72	
1828–29	87	81	92	95	74	
1829–30	95	87	102	114	83	
1830–31	87	79	87	90	72	
1831–32	81	72	79	85	66	
1832–33	121	110	138	149	108	
1833–34	162	140	185	200	143	famine
1834–35	110	97	122	137	97	
1835-36	87	79	82	91	71	
1836-37	110	98	106	113	89	
1837–38	113	98	111	124	93	
1838–39	123	100	120	132	100	
1839–40	102	85	102	112	83	
1840–41	99	78	87	91	74	
1841–42	76	65	70	76	60	
1842–43	71	61	64	68	55	
1843–44	65	53	60	66	50	
1844-45	78	64	67	79	60	
1845–46	112	96	115	125	93	
1846–47	114	96	114	129	94	
1847–48	97	85	99	114	83	
1848–49	83	73	80....	90	68	
1849–50	80	70	75	86	65	
1850–51	77	66	74	88	62	


150
140
130
120
110
100
90
80
70
60
50
1800–01
1805–06
1810–11
1815–16
1820–21
1825–26
1830–31
1835–36
1840–41
1845–46
1850–51

GRAPH

The figures given above have been compiled by a comparison of all the available data in the records. The statistics of those days, however, suffered from numerous defects and hence they are not to be taken as absolutely accurate. There were a great many vagaries in the methods of compilation and differences between district and district. It was also extremely difficult to reduce the multiplicity of weights and measures to a common unit for purposes of comparison. Sometimes we get an extraordinary price list. Thus in the monthly price statements for Bellary district, the prices of 1st sort paddy for the successive months of fasli 1221 are given as Rs. 86, 87, 93, 86, 87, 93, 86, 87, 93, 86, 87, 93. The next year the alternating numbers are 122, 126 and 124, and for the next 141, 119 and 116, and so on for several years in the case of each of the grains. How the compiler arrived at these remarkable figures it is impossible to guess. Often the price given was not the actual price ruling during the particular week or month, but "simply an estimate of the probable selling price of the coming week or month." For some districts, the prices in each of the divisions were furnished, and for others only those of the larger towns.

The authorities were quite aware of the defects in the statistics, though they did not at the time take any measures to remedy them. Reviewing the various district reports sent in response to an inquiry into the fall of prices, the Government admitted that there was very little uniformity in the method of taking the price lists.[5] Over long periods, however, the various anomalies correct themselves, and the price statements with all their defects, give a fairly accurate indication of the trend of prices, which is all that is required.

The Table and graph indicate that prices were high in the first few years of the nineteenth century. The country had just emerged from a protracted period of war and anarchy during which rival armies and plundering bands had laid whole districts desolate. Cultivators who had fled to the jungles and hills were but gradually returning to their neglected fields. The numerous military establishments which were retained for some years after the acquisition of the Presidency entailed a large demand for food and provisions. The period was also marked by a number of

5. Minute of the Revenue Department in Consultations, 11th June, 1855.

scarcities, more or less severe. The very first year, 1799-1800, witnessed a severe dearth and again between 1805 and 1807 occurred another famine, when prices ruled very high. After this prices were persistently low. The graph will show that from 1807-8 to 1850-51 prices rose above the base only on seven occasions; and these were famine years.

When the pendulum swung back, low prices ruled till 1812, when two dry seasons caused a scarcity which lasted till 1813-14. But with the coming of the rains, a lower level was reached and we hear frequent complaints of the "continued low price of grain."[6] Indeed the period of the village leases (1809-22) was marked by a fall of prices in the Presidency, particularly in the southern districts of Tanjore, Trichinopoly and Tinnevelly.[7] All the Collectors remarked about it, affecting as it did the ryots' ability to pay the revenue.[8] This continued right down to the close of the leases and prices were often stated to be much below the commutation rates at which Government received the revenue. At times the price was "little more than one-half of the average Jamabundi price."[9] Commenting on the "extraordinary state of the grain market" the Collector of Tinnevelly attributed it to the "circumstance of the present lease having been formed at a time when the data upon which the commutation of grain was to be calculated were monopoly prices, which a fair market could never afford."[10] Prices indeed had been rigidly controlled and the essence of the eighteenth and early nineteenth century marketing system was its unfree nature. We frequently find references to Collectors fixing the prices of grain, and also complaints of the inconveniences resulting from such control.[11] But later, as we shall see, the authorities came to be influenced by the ideas of free trade and a policy of non-interference was adopted.

A feature of this period was that low prices synchronized with adverse seasons, and this continued, with occasional exceptions, right down to the middle of the century. During the famine of 1824-5, prices rose sharply, and again in 1833-34 on the occasion of the Guntoor famine, prices ruled high. There was another

6. General Reports, Vol. 29, p. 1.
7. *Ibid.*, Vols. 27 and 28, pp. 261-2.
8. *Ibid.*, Vol. 30, pp. 71, 120-1, 137, 139, etc.
9. *Ibid.*, Vol. 21, p. 349.
10. General Reports, Vol. 30, p. 139.
11. *Ibid.*, Vol. 5, pp. 58 and 100, Vol. 8, p. 32, Vol. 18, p. 77.

scarcity in 1846-47, but this was not of any magnitude. Except for these years, the general trend was downwards, and the decline became accentuated during the second quarter of the century. The graph and table will indicate that except for the 2 years of the Guntoor famine, the level of prices was very low. The bottom was reached in 1843-4 when the index number stood at 50. Even subsequently prices continued to be depressed and it was only in the sixties that we notice a definite upward trend. This great depression was brought about by the operation of a number of factors, which we shall now examine.

Causes of the Depression

The Monetary Factor—Bullion Movements—Up to the close of the eighteenth century and for some years later, the exports of piecegoods and spices ensured a steady supply of money. The sums distributed by the Company for the provision of the Investment amounted to several lakhs of rupees annually. In 1802, the expenditure on this account was nearly 63 lakhs,[12] while piecegoods exported on private account averaged nearly 30 lakhs annually between 1800 and 1805.[13] And some years earlier, the exports and the consequent inflow of specie and bullion were even greater. James Grant estimates that in the Northern Circars, the "commercial benefits" on account of the cloth trade amounted to Rs. 75 lakhs annually towards the end of the eighteenth century.[14] In the district of Rajahmundry alone, the amounts paid into the treasury for the textile establishments averaged, as we have seen, nearly 8½ lakhs of rupees annually between 1805-6 and 1812-3, and 8 lakhs for the next decade.[15] These large payments entered into the circulation and tended to keep prices high.

But with the decline of the textile trade which we have noted began early in the nineteenth century, these supplies were cut off, while the cessation of the Company's Investment in the eighteen twenties meant a great reduction in the circulating medium. Formerly, in several of the districts, revenue was seldom remitted to the Presidency, and all of it returned into circu-

12. Letter from the Superintendent of Investment to the Board of Trade, 6th April 1802.

13. Report on External Commerce for 1804-5, Public Consultations, 15th April 1806.

14. *Fifth Report*, Vol. III, p. 9.

15. See Appendix VI.

lation. But later, as there was no occasion for the retention of money in the district treasuries, most of it was sent to Madras.

Another factor which affected the supply of money was the increasing issue of Bills by the Court of Directors for payments due to the Presidency. Before 1819-20, these bills were negligible, but they assumed very large proportions during the third and the fourth decades of the nineteenth century, as the following table will show.

Bills drawn by the Court of Directors and discharged at the Company's treasury from 1819-20 *to* 1849-50.[16]

		Rs.
1819-20	..	9,427
1820-21	..	18,438
1821-22	..	16,623
1822-23	..	19,905
1823-24	..	9,818
1824-25	..	20,558
1825-26	..	19,371
1826-27	..	8,971
1827-28	..	32,629
1828-29	..	37,410
1829-30	..	9,571
1830-31	..	16,457
1831-32	..	8,109
1832-33	..	—
1833-34	..	20,000
1834-35	..	1,13,485
1835-36	..	2,66,412
1836-37	..	30,18,367
1837-38	..	19,55,339
1838-39	..	15,44,495
1839-40	..	3,73,813
1840-41	..	6,85,125

16. Taken from the Mint Committee's Report to Government, dated 7th August 1851.

		Rs.
1841-42	..	11,42,707
1842-43	..	6,17,044
1843-44	..	20,28,060
1844-45	..	24,64,996
1845-46	..	50,90,346
1846-47	..	38,53,792
1847-48	..	46,61,792
1848-49	..	16,99,892
1849-50	..	43,02,083

It will be seen that the value of Bills drawn on Madras rose from Rs. 9,427 in 1819-20 to Rs. 2,66,412 in 1835-6 and to Rs. 50,90,346 in 1845-6. By fixing their rate below the bullion rate of remittance they prevented the import of bullion from England and from countries with which England had an adverse balance of trade—i.e., England paid for her excess of imports by means of these bills. The result was a great diminution in the imports of bullion.[17] The imports of treasure on private account amounted to Rs. 64,85,138 in 1802; in 1830-1 they fell to Rs. 20,39,287. This decrease is reflected in the average annual supply of merchants' bullion brought to the Madras Mint which diminished from an average of Rs. 32·5 lakhs between 1820 and 1834 to Rs. 1,12,677 in 1847-8.[18]

While bullion imports thus declined, the exports rose remarkably. There were large remittances to England both on account of the Home Charges which mounted up rapidly, and on account of the 'Nabobs of Madras' whose private fortunes were sent in the form of diamonds, treasure, etc.[19] Yet another demand on the monetary resources of the country was occasioned by the Investment from China, which was provided partly by the export of commodities (which were paid for by the Bills of the Court of

17. See Appendix X.

18. Report from the Mint Master, 11th April 1851.

19. This part of the drain began even in the eighteenth century. In the postscripts to the Despatches to England of the middle and second half of that century, we find large exports of diamonds, etc., apparently in payment of coral imported. The amount of these payments would indicate that there must have been an extraordinary demand for coral beads in South India at that time. Actually they were the means by which individuals remitted their fortunes.

Directors) and to a greater extent by the export of specie and bullion from Madras and Bengal. As early as 1733, in a Public Despatch dated 31st May, the Madras Government referred to the great difficulties to which they were put in order to procure silver for remittance and added that it was "impossible to continue this method of supplying the China trade. The scarcity of silver must soon be felt at Bengal as well as here." The next year it was reported that the silver exports had "drained our settlements" and that scarcely a rupee was to be had.[20] The Directors, however, repeated their orders that the Indian settlements should assist the China Investment by every means in their power,[21] and throughout the period we find the local government complaining of the serious effects of their policy, but obliged by pressure from the Court of Directors to continue the same method of financing the trade. A further drain of specie was occasioned by foreign warfare, maintenance of frontier troops and the purchase of military and other stores from England. Besides this, there was occasionally a monetary stringency owing to special causes, as for instance, when large remittances were sent to Bombay in 1809-10. These remittances were a material cause of the depression of prices in 1809-11.[22]

These various factors resulted in a continued outflow of bullion and specie from the Presidency. This as well as the decline in imports will be illustrated in Appendix IX. It will be seen that during the first two years private imports of treasure amounted to more than 40 lakhs, while total exports were considerably less. The result was a large net import of bullion into the Presidency. During the subsequent three decades, however, there were only 7 years of excess as against 23 years of deficit in the bullion trade. By far the larger proportion of the total exports every year were on the Company's account. Between 1821-22 and 1830-31 the Company's exports averaged about 60 lakhs, while in the next two decades they amounted to about 55 lakhs. The Company's imports, on the other hand, averaged only 6 lakhs annually. Private imports which were in a declining condition were unable to meet these heavy deficits. The total drain from the Presidency since 1825-6 was Rs. 789 lakhs, while the average annual drain since 1839-40 was Rs. 75 lakhs, 80% of it being due to Government. In 1839-40,

20. Public Despatch to England, 26th March 1764.
21. Public Despatch from England, 20th November 1767.
22. Reports from the Accountant-General, Public Consultations, 22nd and 26th February and 1st March 1811.

the exports of bullion rose sharply and it was soon reflected in the extraordinarily low prices of 1841 and 1842.

The effect of this change in the bullion trade on prices was remarked early in the century. Even in 1813, the Board of Revenue referred to the fall of prices. They attributed it to the withdrawal of currency from the Presidency for "meeting public demands as well as in other parts of Asia as in Europe, while the supplies which had been customarily derived by means of importation had not.....been continued of late to any considerable extent."[23] Later, there were frequent discussions on the subject. Alluding to the "draining of the precious metals of this country by the combined operation of its political relations with Britain and its external commerce," the Board examined the theory that the tendency of commerce is "to distribute the precious metals as well as other commodities, among the nations of the earth, according to the proportions in which they are required, that they will find their proper level.....In this view of the subject, there appears to the Board to be some truth mixed with no small portion of error. There is undoubtedly a certain level which, in the free course of commerce, the precious metals are constantly seeking. But this level does not depend on the proportional wealth of different countries, but on their demand for the produce of the soil and the industry of one another. It is therefore liable to be altered by improvement in machinery or manufacturing skill, by the imposition, the abolition or the alteration of taxes, or by any other cause affecting the course of trade. And with reference to the external commerce of India, it appears to have actually undergone a change from such causes within the last few years. If in this way the currency of India should be diminished in quantity, the money prices of agricultural produce must in consequence be lower than they otherwise would be, and the Board see no reason to feel assured that the fall may not be in such degree and permanency as to render it a matter of very serious importance."[24] This statement was entirely justified by the actual course of prices. Even subsequently Government frequently alluded to the injurious effects of the

23. General Reports, Vol. 18, p. 163.

24. General Reports, Vols. 46-49, p. 156. The Board's observations have been quoted at length partly in order to afford an illustration of the extent to which economic theories were understood and discussed by the Company's servants and the influence they exercised on policy.

exodus on revenue and prices,[25] but was obliged to make the remittances all the same.

The monetary stringency occasioned by the outflow of bullion and specie was accentuated by the Currency Act of 1835. Gold which had formed a part of the circulation was demonetized, and an attempt was made at securing uniformity by discarding several local currencies. The practical result of this measure was a further contraction of the supply of money.

While these various causes combined to produce a pronounced scarcity of money, a greater duty was thrown upon the currency owing to the supersession of barter by cash transactions. At the commencement of the century, the use of money was limited. The one great demand on the people, i.e., the revenue assessment, was met not in money, but in grain. Even exchange operations were largely based on barter, as has been stated earlier. But with the establishment of British government, money assessments became the rule. Other transactions also, came to be carried on through the medium of money and thus there was a heavier demand for it.

Non-monetary Factors

Mr. Forbes Watson connects the fall of prices with a "fundamental transformation of the economic organization of India", consequent on the British conquest. He observes that a fall of prices occurred wherever British Government was newly introduced. According to him, "the British occupation profoundly affected agriculture.....not only by the system of collecting the land revenue, but by the large extension of cultivation owing to the disbandment of the old armies, establishments and courts. The proportion of food producers thus considerably increased, and the proportion of food consumers decreased."[26] Mr. Peddar also attributes the fall of prices to the extension of cultivation.[27] This opinion is not borne out by facts. The English occupation certainly gave the country peace and security and encouraged the return of cultivation to its normal state. And in a few districts there was indeed an increase of cultivation. We have already seen that such was the case in Tanjore. Similarly in Nellore, the wet cultivation increased from

25. Supplementary Report from the Mint Master, 16th Dec. 1851
26. Forbes Watson, *The Industrial Survey of India*, 1872, p. 43.
27. *Report on the Moral and Material Progress of India for 1882-3.*

13,576 *gortoos*[28] in fasli 1211 (1801-2) to 47,740 *gortoos* in fasli 1260 (1850-51) and the dry cultivation from 65,149 to 77,909 *gortoos*. In North Arcot, Trichinopoly and Tinnevelly also, there was some extension of cultivation. In the other districts, however, there was no appreciable increase in cultivation. On the other hand, there was in many cases a marked decline owing to the high assessment, as we have observed in a previous chapter. Even in the case of Nellore, where there was an improvement, the Collector lays stress on the "increasing difficulty with which the cultivation engagements are known to be concluded, and the cultivation itself kept up." In an earlier report, it was declared that "cultivation was unwillingly pursued" and "unwillingly extended" and that owing to the excessive land assessment the cultivation of certain lands designated Bottabhavulu and Moolum had been entirely given up.[29] In Bellary, land was forced upon unwilling ryots, and cultivation was maintained only by compulsion and by pecuniary assistance from the revenue department. In the Presidency as a whole, only a fifth of the total area was under cultivation in the middle of the century.[30]

The depression, therefore, was not due to overproduction. Such increase as occurred in cultivation in a few of the districts was more than balanced by the growth of population which was considerable during this period. But there were other causes for the fall of prices. The decay of zamindars and chiefs, the disbandment of troops, and the reduction in the purchasing power of the weavers owing to the decline of industry affected the demand for articles of consumption. The zamindars had formerly maintained a large number of retainers and *sibbendies* and spent lavisly on their equipages, and on various luxuries, as well as for marriages and other ceremonies. But with the decline of their power and position, owing to heavy pecuniary losses (many of them defaulted after 1817-18) their expenditure was greatly curtailed.[31] Similarly the disbandment of troops meant a fall in the demand for food and provisions.

28. A Gortoo is ·86 of an acre.

29. Report from Mr. A. Mellor, Collector of Bellary on the operation of the Ryotwari system, 25th July 1846.

30. J. M. Ludlow, *British India*, Vol. II, p. 42.

31. Montgomery's Report on the Decline of Revenue in Rajahmundry, 15th March 1844.

As for the weavers, the deterioration in their condition has already been referred to. Large numbers had been thrown out of employment. True, there was an increase in the number of weavers in some districts, but it was more than counterbalanced by a great reduction of profits. And the production of the finer and more remunerative sorts of cloth had almost entirely disappeared. Naturally the weavers had less money to spend than formerly. We have seen that in some parts of the country, it was difficult for them and their families to get even one meal a day.[32]

Yet another factor was the import of Arakkan rice, especially in the eastern districts. This rice was brought not for profit but to provide ballast. It was the export cargo of salt which ensured high profits and more than compensated for any loss on grain. Hence large quantities were imported and sold at very low prices. These imports increased rapidly, rising within a decade from 828 garces to 4,768 garces.[33] The various influences reached their culmination in the forties, and hence we find the greatest fall of prices in that period.

Effects of the Fall of Prices

The fall of prices occasioned great distress among the agricultural classes. Their income dwindled remarkably, while their expenses and other charges remained undiminished. The Collector of Nellore calculated that in wet cultivation out of every Rs. 100 worth of produce, the ryot's share was reduced from Rs. 42-1-2 in Fasli 1236 (1826-27) to Rs. 32-9-7 in Fasli 1261 (1851-52), resulting in a loss of Rs. 9-7-7. But as he had to "bear the additional loss of converting the Government's share into money at the low rates prevailing" he incurred a further loss of Rs. 11-9-0 making a total loss of Rs. 21-0-7.[34] And thus the ryot was left with little more than 20% of the produce for the costs of cultivation, value of seed, labour and the subsistence of himself and his family. In the case of dry grain his share fell from Rs. 40-9-10 to Rs. 4-6-10 or less than 5%. It is not a wonder therefore that cultivation was kept up by compulsion and that the ryots had become greatly impoverished. Distress was all the more marked owing to the fact that except for

32. Sullivan's Report, Revenue Consultations, 25th December 1840.

33. Report on External Commerce, Sea Customs Proceedings, 20th June 1842.

34. Letter from the Collector of Nellore to the Board of Revenue, 19th May 1853.

indigo, "no new or valuable product, no new sources of industry, no augmentation of resources of any kind" had afforded the ryot any relief.

The fall in the income of the agriculturist naturally affected the revenue. In spite of heavy borrowing, the ryots found it extremely difficult to meet their obligations to Government, and there was a marked decline of revenue. Land revenue receipts fell progressively from Rs. 4,16,40,810 to Rs. 3,79,19,310 in 1819-20 and Rs. 3,22,56,000 in 1839-40. In 1838-39 Mr. C. R. Cotton was appointed Commissioner to inquire into the causes of this decline. The reports received by the Commissioner reveal that in many of the districts, prices were falling while the seasons were unfavourable. Later, Government became more alive to the gravity of the situation and an inquiry was made in 1852-54 into the causes of the spectacular fall of prices, its effects on the ryots, and the feasibility of a reduction of the commutation rates of grain.

The Collector of Bellary reported that there was a great deterioration in the condition of the agriculturists.[35] According to a survey in 1850, out of the whole body of farmers, only 17% were in easy circumstances and able to pay the land assessment without having recourse to merchant or moneylender. Out of the remaining 83%, about 49% were obliged to borrow by mortgaging stock and crops, and the other 34% had to sell their crops as soon as reaped and even their stock in order to pay the kist. In Rajahmundry the depression was marked immediately after the abolition of the Company's commercial factories; but here, the construction of the Godavari anicut exercised a beneficial effect and greatly mitigated the distress. The Collector does not lay sufficient stress on this fact, but merely observes that after Fasli 1254 (1844-5) ships flocked to Coconada and that the expenditure on public works acted as a stimulus to industry.[36]

Tanjore was one of the chief grain producing districts. The depression in prices, therefore, affected the district severely and the position of the cultivator deteriorated considerably in spite of the advantages conferred by improvements in irrigation.[37] In Chingleput the fall of prices and the high land assessment pressed very

35. Letter from the Collector of Bellary to the Board of Revenue, 22nd Nov. 1853.

36. Letter from the Collector of Rajahmundry, 19th Jan. 1853.

37. Letter from the Collector of Tanjore, 29th Jan. 1853.

heavily on the agriculturists and the revenue was realized only in favourable seasons.[38] The Collector of North Arcot reported that as there had been no improvement in production to set off the fall of prices, the ryots were "in worse condition than they were at the beginning of the century. However that may be, their condition now is indubitably very bad and ought to be improved."[39]

Conditions were similar in other districts. In Salem the ryots had suffered to a considerable extent, and in Canara relief was imperatively required by a large body of the people. In Vizagapatam there were large balances due by the ryots, who were in great distress. There were few substantial ryots.

In a few districts, however, i.e., Ganjam, Malabar, Cuddapah and Guntoor, the depression seems to have been less pronounced. In the first two districts, prices were always low, and fluctuations slight, and hence they were not severely hit by the fall of prices. Further, there was a considerable increase in the production of commercial crops to compensate for the loss due to grain. Thus in Ganjam, sugar cultivation, which was highly remunerative, was greatly extended, though even here it was admitted that the condition of the people required amelioration.[40] In Malabar, there was steady expansion in the cultivation of pepper and coffee.[41] As for Guntoor, though *jonna* and paddy, the former staples of the district, had depreciated in value, the increased production of cotton, tobacco, wheat and the various pulses had redressed the balance. An appreciable reduction in the revenue assessment brought further relief.[42] In Cuddapah there was decided improvement owing to a large remission granted by Sir Thomas Munro. "The produce formerly of a coarser nature is now changed to a better, generally ragi and indigo, the value of which being greater than the coarser grains formerly cultivated, the ryot is able without sustaining any loss to meet any depreciation which may take place in the different market prices of grain." Owing to the large demand for the products of the district, all the money collected as revenue returned into circulation. The Collector reported that the condition of the ryots was extremely satisfactory.[43]

38. Letter from the Collector of Chingleput, 22nd July 1854.
39. Letter from the Collector of North Arcot, 28th Aug. 1854.
40. Letter from the Collector of Ganjam, 27th Jan. 1853.
41. Letter from the Collector of Malabar, 8th Jan. 1854.
42. Letter from the Collector of Guntoor, 31st Dec. 1852.
43. Letter from the Collector of Cuddapah, 28th Oct. 1853.

In all the other districts, however, the fall of prices was felt severely, and the Collectors almost unanimously favoured a reduction of the assessment and of the commutation rates at which grain was converted into money. Reviewing the various reports, Government observed that the fall of prices was not a great evil in itself since "the aim and effect of all improvement is to cheapen production, in the case of agriculture as well as of all other arts; and the money price of all commodities must therefore have a tendency to fall with the progress of improvement."[44] This would have been the case if the demands on the agriculturist had experienced a corresponding reduction, but as things were, the ryot's plight was certainly very sad. Government realized this and accordingly undertook a general revision of the assessment, and at the same time began a vigorous public works policy which was largely responsible for the lifting of the depression. This subsequent development however, is outside our purview.

The Depression in Industry.

The prices of manufactures experienced a similar decline during the period. The decay of the textile and iron industries has already been dealt with; and the fall of prices was merely a corollary of it. In the case of textiles, *punjam* cloth of the Company's assortment which sold at Rs. 7½ and 9½ per piece in 1802 fetched only Rs. 5-8-0 to 5-12-0 in 1845.[45] In Bellary, prices of silk-bordered cloth of the first sort declined progressively from Rs. 5 per piece in 1805-6 to Rs. 4-4-0 in 1822–3 and Rs. 3–4–0 in 1843-4, while the prices of the inferior varieties fell by 35%.[46] In general, prices were lower by 30 to 40%.[47] Thus the depression in manufactures was almost as pronounced as in the case of food-grains and further the distress of those thrown out of employment was most acute. But, on the other hand, this decline affected only a section of the population. Besides, it was compensated by, and in fact partly due to, the lower prices of cotton

44. Government Minute, Revenue Consultations, 11th June 1855.
45. Letter from the Board of Trade to Government, 27th May, 1802.
    Letter from the Collector of Rajahmundry, 15th Jan. 1845.
46. Letter from the Collector of Bellary, 31st July 1844.
47. Letter from the Collector of Vizagapatam, 9th August 1844.
    Letter from the Collector of Salem, 7th Sep. 1844.

and cotton thread, and the extreme cheapness not only of grains, but of provisions and other articles of consumption.[48]

Thus the agricultural depression was both an effect and a cause of the industrial depression. As the Collector of North Arcot observed: "In India, as elsewhere, the manufacturing classes are dependent on the agricultural body; as agriculture prospers, so does a demand arise for manufacture".[49] The fall of agricultural prices affected both the supply and demand of manufactured goods. Ryots with greatly reduced incomes were obliged to curtail their expenditure and hence there was a fall in the demand for cloth. On the other hand, substantial farmers who had formerly financed industry had now sustained heavy losses in the sale of crops, and were therefore forced to withdraw their support to the weavers. Thus there was a vicious circle of depression in agriculture and industry.

The slump in prices was not confined to the Madras Presidency. Similar causes led to a depression of varying magnitude in most parts of India, and especially in Bombay, Kathiawar, Bundelkhund and the Central Indian States. In England also, the period witnessed a considerable decline in prices, which was attributed to an inelastic currency at a period of rapidly developing industrial and commercial activity.[50] Here it was due largely to a contracting currency which at the same time had a greater duty to perform.

48. Letter from the Collector of Trichinopoly, 29th July 1844.
Letter from the Collector of Nellore, 14th Sep. 1844.
Letter from the Board of Revenue to Government, 22nd September 1845.

49. Letter from the Collector of North Arcot to the Board of Revenue, 28th August 1854.

50. Layton & Crowther, *An Introduction to the Study of Prices* (1935), p. 63.

PART V

GENERAL ECONOMIC CONDITION

CHAPTER XVI

THE ECONOMIC POLICY OF THE STATE

Before examining the general condition of the people we shall deal with Government policy, which exercised a profound influence on all phases of economic life. The survey will be necessarily brief, for certain aspects of State policy have already been discussed in earlier chapters. In the circumstances in which the East India Company became a territorial power, it is not to be expected that it could begin its administrative career with any definite economic policies in view. "Throughout the eighteenth century up to the last decade, no power in South India felt itself secure enough to spare serious attention for the improvement of the territories under its authority. The more energetic rulers found their time fully occupied with the task of suppressing rivals and rebels, and raising the armies and revenues necessary for this end. The rest were content to make hay while the sun shone."[1] As far as the Company was concerned, such economic policy as was formulated had nothing to do with the well-being of the governed. Mr. Barlow, Secretary to the Indian Government, declared at the close of the eighteenth century that " the two principal objects which the Government ought to have in view in all its arrangements are to insure its political safety, and to render the possession of the country as advantageous as possible to the East India Company and the British nation."[2] The policy enunciated above was strictly adhered to throughout the period under review.

In the nineteenth century, the East India Company was in a fairly strong position, and secure enough in South India; but in other parts, wars and disturbances continued throughout the half century. Even in the South, the new rulers were, for the first few years, engaged in putting down Poligars and other chiefs who were troubling the peace of the country, in building up an efficient administrative machinery, and in making revenue experiments. Hence we find their actions guided by expediency or the exigencies of the time, and not by any particular policy.

1. *Cambridge History of India,* 1929, Vol. V, p. 462.
2. W. Kaye, *East India Administration,* 1854, p. 1.

In many respects, they followed the practice of their predecessors. They assisted agriculturists by the issue of Takkavi loans and interfered actively in trade, regulating the price of grain and participating directly in the grain trade. They imposed taxes on all kinds of professions under the name of Moturpha, and various duties on the transit of goods within their territories, as well as on imports and exports. On the other hand, irrigation works which were already decaying, were wholly neglected. Nothing was done to improve the means of communication except the construction of a few military roads, which were washed away by the monsoons in a short time.

Meanwhile, the Company's servants, who had studied political economy, became imbued with the ideas of *laissez-faire* and free-trade and they began to apply them to the problems of administration. The civil servants of the day had a flair for writing, and in spite of their multifarious duties, entered into lengthy discussions of current economic theory. Much of the apathy of the Government in regard to improvements in agriculture, irrigation, industry, trade and communications may be attributed to the influence of the Smithian doctrines.

Thus in industry no attempt was made to improve the conditions of life of the workers (apart from the earlier measures taken in order to assist the Investment) owing to a belief in the subsistence theory of wages. Mr. Place wrote that "the wages of labour are said always when left to their natural operation, to be proportionate to the price of provisions and to rise and fall with them. They cannot be less than subsistence requires, and if much more, they invariably occasion idleness; for a relaxation from work is almost the only enjoyment that the labouring poor languish for,"[3] and hence the authorities would do nothing to ameliorate the conditions of labour.

In regard to prices, they were, as we have said, fixed by Government in the early years. In 1807 Mr. Hodgeson complained that "the grain market has never been free for many years. The Sircar has always had grain of its own in the store and constrained the market." Evidently Mr. Hodgeson was a believer in free trade. Later Mr. Dalzell, Collector of Cuddapah, drew the attention of the Board to the great fall of prices in

3. Place's Report on the Jaghire, 6th June 1799.

his Settlement Report for Fasli 1238. He attributed it to an excess of the supply of food, and declared that agricultural production had increased more rapidly than the population. The Board of Revenue, however, criticised this view. They observed that "what he (the Collector) takes for granted as a fact is contradicted by all experience as well as at variance with one of the best established truths of political economy. Population, if its principle of increase be unrestrained by any difficulty in finding the means of subsistence, will always increase at a much more rapid rate than anybody at all conversant with the subject can imagine it possible that the agricultural produce of India should increase for any considerable number of years. The Board do not subscribe to the theory of rent for some years past generally prevalent, according to which the price of agricultural produce must of necessity rise with the progress of society, unimpeded by war or disastrous commotions, not only in the early but also in its advanced state, but this opposite doctrine of Mr. Dalzell's appears to have no foundation".[4] They give a better explanation for the fall of prices (already referred to in the chapter on prices) and emphasise the importance of the bullion movements. They admit, however, that the "increasing quantity too of the produce of land and labour" would tend to aggravate the depression. "Suppose the amount of currency to remain unaltered, the augmentation of the commodities which it is employed in circulating, and the number and extent of the transactions in which it is required, must raise its value relatively to those commodities, or in other words, must lower their prices." They were fully alive to the effects of the drain of specie, but they were unable to do anything in the matter. In the case of famines also, we shall see that non-interference was the creed of the day.

This policy, however, was not always rigidly adhered to, and it is hardly to be expected of any Government. The variations of this policy, as far as they are in evidence, in regard to certain crops as cotton, sugar and indigo, and also in connection with irrigation, credit, industry, trade and prices have been dealt with in the respective chapters. Here we shall take up other aspects.

Lord Mayo wrote in 1869 that "agriculture, on which every man here depends is almost entirely neglected by the Govern-

4. Board's Proceedings on the Cuddapah Settlement Report for Fasli 1238.

ment." It is true that it was only in the second half of the century that the Government embarked on an active policy in the improvement of crops, construction of roads, irrigation works, etc., but even in the earlier period, agriculture was not wholly neglected and given over to "free competition." The Company's efforts to improve cotton cultivation are well known, and it is supposed that this was about the only crop in which anything had been done in the first half of the century.[5] But the Company was interested in the improvement of various other crops as well. A Botanist was employed by the Madras Government in order to introduce new crops and improve existing ones. Doctors Heyne and Roxburgh were among the earliest of the Company's Botanists. Dr. Heyne succeeded in extending the production of cocoanuts in the Northern Circars and some thousands of trees were reported to have been planted by him in the Circars.[6] Dr. Roxburgh experimented with Nicobar palmyrah, bread-fruit, jack-fruit, cinnamon, pepper, etc., in the Northern Circars, and the first of these was stated to be thriving in 1797.[7] Cochineal and sunn-hemp were also introduced in various parts of the Presidency.[8]

In almost all cases, however, the experiments were confined to the Government farms.[9] (There was only one instance in which the people took to the cultivation of the plant—*i.e.,* Nicobar Palmyrah). Indeed the crops do not seem to have survived the experimental stage. The first attempts were usually reported to have been extremely satisfactory, but owing to their limited means and small establishment little actual improvement occurred. The Botanists had hardly any assistants. Even in the case of cotton where very vigorous measures were adopted, we have seen that the improvements were not remarkable as far as the quality or new varieties were concerned. Subsequently the Botanists were discharged and the experiments ceased.

5. A. O. Hume, *Agricultural Reform in India,* pp. xiii & xx.
6. Report to the Board of Revenue, 21st October 1794.
7. Report from Dr. Roxburgh to the Board of Revenue, 24th May 1797.
8. General Reports, Vol. 13, p. 169.
9. Report from the Botanist, 21st October, 1794, General Reports, Vol. 14, p. 31.

After this, we hear occasionally of attempts to introduce sunn-hemp, cochineal, etc., and in 1812 eight examiners of cultivation were appointed to carry on crop experiments. Their remuneration, however, was limited to 4 pagodas per month[10], and naturally we do not hear of their experiments at all. Again in 1835 when the decline of industry was beginning to tell upon the revenues of the Presidency, there was renewed interest in crop improvements. It is stated that " the extraordinary disproportion which has long been felt to exist between the state of trade and agriculture of the provinces under the Presidency, as compared with the extent and fertility of the soil and its adaptation for the successful cultivation of many of the most valuable productions, renders it of essential importance to the interests of the people and of Government that advantage should be taken of the present favourable state of trade for the effectual encouragement of improvement in the quality, and increase in the quantity of cotton, tobacco, and other articles with which the British and foreign markets might be advantageously supplied from these provinces."[11]

The Board of Revenue had no doubt that "notwithstanding the great difficulties inseparable from undertakings of this kind from the character of the people and the circumstances of this country, American cotton and tobacco and the valuable Bourbon cotton plant may by a moderate encouragement be successfully introduced into the provinces under the Presidency." They believed that the limited success of previous exertions was due to the want of information, and accordingly Dr. Wight was appointed to report on the resources of the Presidency, the condition of agriculture and various crop experiments. He was of the opinion that the " excessive production" of food crops should be discouraged while commercial crops could be developed with great advantage not only to the Presidency but to England.[12] Government therefore concentrated for a time on cotton, tobacco and other crops in so far as experiments, distribution of new seed, etc., were concerned.

But when it came to remissions of revenue which were usually suggested by the Collectors as the means by which production

10. Letter from the Board of Revenue, 6th April 1812.

11. Minutes of Consultation, 17th November, 1835. (The above sentence is a fair sample of the verbiage of official reports. Such compositions naturally took up a good deal of the time of the administrators. This combined with red tape gave little chance for actual improvement).

12. Report, 23rd November 1837.

could be augumented, the authorities did not approve of it. The principle on which this policy was based was explained early in the century by Mr. Thackeray, member of the Board of Revenue. When a remission of the tax on pepper was suggested, he stated: "it appears to be needless for Government to afford any particular encouragement to the growth of pepper, or any other production. If they take a fixed land-tax on the ground rent they afford the owner the means of cultivating what he pleases. If the demand for pepper be great, the owner of the land will cultivate pepper, if the demand is less, he will cultivate something which is in greater request. By relieving the land appropriated to any particular produce from all tax Government in reality offers a bounty for its production and may thus promote the culture of what is not wanted and discourage the production of what is in great demand and would otherwise have been cultivated. Government should tax the land equally whatever it may produce and if they wish to draw a separate revenue from the article they should do it by a duty or licence."[13] Thus apart from these experiments, there was no systematic attempt to improve crop production till the Agricultural Department came into existence.

As for trade, it has been noted that at the beginning of the period it was clogged by a variety of imposts. Soon after their accession to power, the new rulers abolished the Transit Duties and a few other taxes in order to allow freedom of trade. But they were not satisfied with the results. Mr. Place enters into a lengthy discussion of the evils resulting from the abolition of the Inland Transit Duties in his report on the Jaghire. After quoting Adam Smith on the question of the different ways in which capital may be employed, he observed, "the abolition of the customs had a tendency not only to reduce the wholesale and retail merchant to the same level, or what was impossible, to render the one independent of the other, but to make them employ their capitals in two different ways at the same time (i.e., in financing trade as well as transporting produce), which could only be usefully employed in one." The duties were soon reimposed owing to monetary exigencies. The authorities justified themselves by declaring that the collection of duties would be conducive to the resort of merchants at the various centres and thus benefit internal commerce. The actual effect, however, was far otherwise. Merchants were subjected to great inconveniences and unlimited exactions. Goods

13. Report, 7th September 1807.

were frequently detained so long that they became damaged. Further, not only the rates but even the tariff valuation varied from *chouki* to *chouki*. Thus cloves were assessed at Rs. 39 per maund at Madras, Rs. 40 at Wallajahnagar, Rs. 71 at Sholingur and Rs. 85 further away, while camphor was valued at 7½ pagodas at Madras and 30 pagodas in the Ceded Districts.[14] Numerous complaints received from various sources revealed that the duties tended to discourage rather than promote the resort of merchants. In fact the *chouki* hampered and checked trade. Manufacturers left the towns and traders deviated from their route in order to escape the *choukis*.[15]

In 1806 this anomalous system of duties was abolished and a general duty of 6% was imposed on (1) imports by land and sea into Madras or produced within the limits of the town, (2) on goods exported from the other ports, (3) on imports and exports across the frontiers of the Madras territories, and (4) on goods imported into certain provincial towns or produced or manufactured within their limits. Articles belonging to the Company, cotton and cotton thread and a number of unimportant articles were exempt from duty. Thus in the case of the trade within the country, there were a frontier duty, a town duty and an export duty, altogether amounting to 18%. These duties pressed heavily on commerce and especially on the textile trade. The substitution of an *ad valorem* frontier duty for a toll on the bullock load fell particularly heavy upon cloth. The new regulation amounted to an increase of about 5 to 6 times on the duty upon cloth, for the value of the bullock load of cloth was equal to 5 or 6 times that of most other articles. The duties thus contributed directly to the decay of the textile industry and trade while the exemption of cotton from duty greatly encouraged the export of the raw produce.

Other manufactures were similarly discouraged since the levy was made at every successive stage of manufacture as well as on the raw material. Thus the duty on raw hides was 5%, on leather another 5% and on boots and shoes a further 5%, making a total of 15%. Similarly sugar on coming into towns paid 5% customs duty, 5% Town duty and on export to another town an extra 5%. According to a Public Despatch, "the effect of these and similar duties is virtually to prohibit the manu-

14. Report on External Commerce for 1803, Pub. Con. 15th April 1806.
15. General Reports, Vol. 13, p. 92.

facture in towns of all articles not absolutely required for their own consumption, to confine manufactures to the place where the raw material is produced and by such restrictions, much more than by any tax actually levied, to depress the productive industry of the people."[16] The customs officials being low paid, bribery and peculation were rampant, the public were forced into collusion with the officials and smuggling was general. These defects of the system were repeatedly referred to, but nothing was done to remedy them beyond a few minor alterations in 1808 and 1812. It was not till 1844 that the entire system of transit duties was abolished. The immediate effect was a considerable expansion of trade as we have noted in an earlier section but the full effects were perceptible only in the second half of the century.

Besides the transit duties, there was the tobacco monopoly in Coimbatore and Malabar and the Howlett Duty on grain in Canara. As it was against their admitted principles of *laissez-faire,* Mr. Thackeray justified this last duty as follows: "a duty on the export of grain is apt to startle considerate persons who have observed the general good effects of a free trade in grain, but the peculiar climate and situation of Canara make it the granary of the western coast and in spite of a heavy duty it must continue to supply the Arabian, Bombay and Goa markets. The duty on grain is one of the best taxes levied. It is making the foreigners contribute to our revenue, taxing the rich Arabs who can afford to eat the rice of Canara. If the duty were doubled I do not think that the export will be diminished."[17] There is no doubt, however, that the duty was detrimental to cultivation, as is evidenced by the poor progress that was made in the extension of rice cultivation,[18] in spite of the facilities enjoyed by the district in respect of the supply of water. Canara had no monopoly of rice production and other markets were open to the Arabs whence they could import grain.

The policy of the Company was thus beneficial in some respects, while in others it retarded progress to a great extent. It is as much as could be expected, considering their circumstances and the two main aims of the administrators mentioned in the

16. Public Despatch to England, 2nd September 1835.
17. Report, 7th September 1807.
18. Letter from Mr. Maltby, Collector of Canara to the Board of Revenue, 9th August 1853.

beginning of the chapter. The local Government certainly seems to have been anxious at times to improve the country. But its freedom of action was restricted by the higher authorities at Fort William and in England who were apt to overlook the needs of the subordinate Presidency, especially in view of the pressing problems that confronted them before their power was firmly and completely established. A broad-based policy was built up only after their position was quite secure.

We shall now study the general economic condition of the people in its various aspects.

CHAPTER XVII

CONDITION OF THE PEOPLE

Section 1—Population

The population of the Presidency may be divided broadly into the agricultural, industrial and trading classes. But there can be no sharp demarcation, for the several classes merge into one another. Frequently, agriculturists participated directly or indirectly in trade. We have already observed in the Chapter on Internal Trade, that substantial ryots often dabbled in the grain trade. Others also participated in this trade, such as government servants, industrialists, etc. Ryots who had acquired some fortune financed both trade and industry. In regard to industry also, there was considerable over-lapping. Spinning in particular was a general spare-time occupation followed by the agricultural class during the slack season, while weavers fell back upon the land when they were unable to obtain a livelihood by means of their usual occupation. Iron miners and smelters also, as we have seen, became cultivators when smelting operations were over.

As regards the numerical strength of the different sections of society, no figures are available for the period. Buchanan and Dubois, the two writers who discuss the subject of classes, or rather of castes, at length, give no information beyond vague statements that some were numerous and some were not. The only statistical accounts for the Presidency are those of the total population found in the Revenue Records. These, however, must be studied with caution, for it was only after 1870 that census statements were taken regularly and systematically. Previously, little was attempted beyond a rough estimation of the population and sometimes of the number of pattah-holders, i.e., those holding land from the Government, and such figures as were obtained were by no means accurate. The absence of a register of births and deaths rendered compilation of population statistics extremely difficult. Even in advanced countries accurate methods of enumeration have been followed but lately, and it is not to be expected that such methods could have been employed in India in the early nineteenth century. Besides, the newly inaugurated administrative system was directed by men who understood little of the language, customs and condition of the people; and they would naturally be unable to cope with the problem satisfactorily.

The result was that such statements of the population as they were able to compile were arrived at largely by guess work. Mr. Place, one of the most energetic Collectors of the Jaghire, thus computes the population of his district in Fasli 1204 (1794-5). He ascertained that there were 52,445 'houses or families' in the district. This figure must have been obtained from local karnams and others and therefore cannot be relied on—See Chapter on Villages. Allowing 4 persons for each family he estimated the population at 2,09,780. To give 4 persons for a house or family at a time when the joint-family system was still fairly intact and the average family included 2 or 3 generations, would naturally result in a great understatement of the population. And Mr. Place was not the only person who enumerated the population in this manner. It was the general practice at the time.[1] Occasionally the result would be checked by taking 2 or 3 "representative" villages, ascertaining their population by detailed enquiry and multiplying the average for one village by the total number of villages.[2] Gradually, however, a more reliable system was evolved. Hence the remarkable increases recorded at successive enumerations.

In 1801-2 the population was computed at 9,574,458,[3] and in 1823-4 it was 13,476,923. This great increase was only partly due to an actual addition to the numbers of the people. The rest should be attributed to the fact that the first census did not include all parts of the Presidency (it was not possible at the time to get figures for the permanently settled estates and certain districts) and also to improvements in the methods of enumeration. According to the census of 1836-37 the population was returned as 13,967,395. On this occasion the rise was not marked because the enumeration was made soon after the great famine of 1833-4 when the population of Guntoor was reduced by about half, and other districts also suffered to a considerable extent. By the time of the next census in 1851-2, the country had recovered, and further improvements had been effected in the method of enumeration and we find that the population rose to 22,031,697.

Thus the population more than doubled itself within half a century, according to the census statements. Much of this increase was due to the gradual adoption of comparatively accurate

1. Thackeray's Report on Malabar, Kanara and the Ceded Districts, 7th August 1807; Nellore Settlement Report for Fasli 1211.
2. Macleod's Annual Report on Dindigul, 20th February 1794.
3. General Reports of the Board of Revenue, Vol. 7, p. 77.

methods of enumeration in place of guess work, and to the return of inhabitants to their villages which they had deserted during the period of disturbance and insecurity immediately preceding the establishment of British rule. But it also indicated a substantial growth of the numbers of the people owing to the advent of peace and security.

The increase would have been considerably greater, if it had not constantly been kept in check by famine and disease, which made their appearance frequently. Small-pox annually carried away thousands of the inhabitants;[4] and it was only very gradually that its ravages were checked by the introduction of vaccination. And the prejudice against vaccination seems to have been very great at that time.[5] In the Southern districts, particularly Madura and Dindigul and to a certain extent in Tinnevelly and Coimbatore, the opening years of the nineteenth century witnessed a most destructive fever which swept away a large number of the people. It raged with unabated violence for about two years at the end of which those that survived were reduced to such a debilitated condition that they were incapable of cutting the crops which "in innumerable instances perished on the ground."[6] Its ravages were so great that a Committee was appointed at the time to inquire into its causes. The Committee reported that the fever was due to insalubrity of climatic conditions caused by a succession of irregular seasons, while the extreme poverty and low standard of living of the people rendered them easily susceptible to attack.[7] In 1818 cholera raged with great violence all over the Presidency,[8] and in some parts this was succeeded by a virulent fever.[9] Frequently famine was followed by epidemics which caused almost as heavy a mortality as starvation. All these causes combined to check the growth of numbers.

Section II—General Stock and Property

The condition of the country at the time of British occupation has been dealt with in the first Chapter. It must be clear that such circumstances were not conducive to the accumulation of wealth or

4. General Reports of the Board of Revenue, Vol. 7, p. 63.
5. *Ibid.*
6. *Ibid.*, Vol. 21, p. 200 and Vol. 23, p. 110.
7. Srinivasa Raghavaiyangar, *op. cit.*, p. 8.
8. General Reports of the Board of Revenue, Vol. 26, p. 1.
9. *Ibid.*, Vols. 27 and 28, p. 137.

stock. Speaking of the Baramahal or Salem District, Major Munro stated: "a long series of oppressive governments, and particularly under Tippu, had reduced the country, when delivered over to the Company, to such a state that a rich farmer was nowhere to be found; not one among them perhaps was worth 100 pagodas (Rs. 350) exclusive of his farming stock. Scarcely one of them rented lands to the amount of 50 pagodas. One half of all the farms was not above 10 pagodas and if there anywhere appeared a farm of 50 pagodas or 100, though nominally held by one person, it was in fact occupied by 3 or 4 families of brothers or relatives. The farmers were then (1791) as now, composed of 3 classes. The first contains the small number of those who are able to give their lands the highest degree of cultivation; the second contains those who can give them sufficient to produce an ordinary moderate crop; and the third, which is as numerous again as the second contains those who from want of cattle cannot half plough their lands and never manure or weed them at all".[10] The entire property of the majority of the ryots may be estimated as follows:— Taking the capital value of land to be double the rental value, (which is not an understatement—even in 1826 land often fetched only 2½ years' purchase) the value of the farms of half the ryots would be 20 pagodas or 70 rupees. A ryot had 1 or 2 ploughs and 2 or 4 oxen. The value of these, at Rs. 1-8-0 for a plough and about Rs. 4 for each of the cattle, would amount to between 10 and 20 rupees, or 15 rupees on an average. The ryot would have little besides this, and his whole property would therefore amount to Rs. 85.

As regards Canara, Buchanan who toured the district in 1801-2, found that about half the cultivators had only 1 or 2 ploughs at the most, and could cultivate no more than 6 or 7 acres. Three or four ploughs were common but this was considered a large stock, and few had as many as 20 or 25.[11] Conditions in other districts were no better. In Coimbatore, Buchanan ascertained during his journey that rich farmers who in Hyder's time possessed 370 acres of dry or 158 of wet land with its necessary complement of 48 oxen, 150 cows, 200 sheep and 12 ploughs, were now in possession of 4 ploughs and 8 oxen.[12] Obviously, the earlier part of

10. Letter from Munro to Read, 5th Sep. 1797.
11. Buchanan, *op. cit.*, Vol. II, pp. 227, 410.
12. *Ibid.*, Vol. I, p. 441.

the statement must have been an exaggeration, and Buchanan himself admits it. However, there was undoubtedly a considerable decline in wealth and stock and the figures given for the period of his tour may be taken to be fairly accurate, especially since they are borne out by evidence from other parts. Most of the ryots of Coimbatore had but one plough and cultivated about 6½ acres.[13] In Mysore, the possession of 6 or 7 ploughs indicated "prodigious wealth" and indeed there were very few who had as much. Four or five meant a substantial farmer while one plough was a poor stock. But in several parts of the country there were large numbers of ryots who were so poor that they could not buy even that.[14] In Malabar only rich farmers had 5 ploughs and 35 acres.[15] In regard to the Ceded Districts, Munro observed in 1801 that the ryots were the poorest of the Company's subjects. Later he declared "many of them (ryots) are so poor that it is always doubtful whether they will next year be in the rank of cultivators or labourers." Few were "so rich as not to be liable to be forced by one or two bad seasons to throw up a considerable part of their farms. The loss of a bullock or a member of the family who worked in the field, or confinement by a fit of sickness, frequently disables them from paying their usual rent the next year."[16]

Only in Tanjore was there any indication of wealth. It was always considered one of the most favoured districts of the Presidency. But even here conditions were by no means satisfactory. The district seems to have suffered from great extremes of wealth and poverty. One of the earliest Collectors, Mr. Harris, invited the attention of the authorities to the fact that the wealth and property of Tanjore was monopolised by a small class. "One inhabitant has all the enjoyments to be procured from a fertile country, while another cultivating the same soil obtains little more than he would were he the cultivator of a desert." The Collector had "socialist" leanings and proposed a system of revenue which would "raise the poor and depress the rich to a natural and happy level."[17]

13. *Ibid.*, Vol. II, p. 5.
14. *Ibid.*, Vol. I, pp. 84, 270
15. *Ibid.*, Vol. II, p. 68.
16. Report, 25th August 1805.
17. Proceedings of the Board of Revenue, 23rd June and 4th August 1800.

During the next twenty years, though population and cultivation increased to a certain extent, we find no change in the wealth and property of the inhabitants. Abbe Dubois who resided several years (between 1792 and 1823) in the Presidency and was well acquainted with conditions of life among the various classes makes a division of the population according to wealth in his *Hindu Manners, Customs and Ceremonies*. Only a small percentage possessed 1200 pagodas (Rs. 4200) and more. They would be the very richest and were found mostly in towns and agraharams including wealthy merchants, financiers, etc. Those who held large *manyams* on favourable terms and enjoyed it for several years had been able to acquire some property and were worth 500-1200 pagodas (Rs. 1750-4200). Substantial ryots and village dignitaries possessed 120-240 pagodas and these constituted 7½% of the population. The absolute accuracy of these figures cannot be vouchsafed, but considering Dubois' great opportunities for obtaining reliable information, he could not be far wrong. At any rate they certainly afford a rough basis for comparison. From this it may be inferred that the condition of the richer classes had improved since Munro's time when even in the Baramahal (by no means the poorest district) there was hardly one person worth more than Rs. 350. This improvement in the position of the richer classes is also evident from a report of the Collector of Coimbatore in 1823, which stated that stock and capital were accumulating fast.[18] During the previous governments the oppression of the rulers and their revenue officers, as well as the disturbed state of the country prevented the growth of property. But now Pax Britannica secured to them the fruits of their labour and allowed the accumulation of wealth. The system of land revenue also was favourable to the richer classes.

As for the poorer classes, their case was quite different. Dubois places in the lowest class but one (the lowest are the labourers) the great majority of ryots whose entire property amounted to between 12 and 24 pagodas or 42 to 84 rupees. According to Munro's classification at the beginning of the century, the property of the poor ryots was estimated at an average of about Rs. 85. We may conclude therefore that there was not only no increase but a definite diminution in the property of this class during the period. This would be accounted for partly by the incidence of the land revenue to which we have referred frequently

18. Mr. Sullivan's Settlement Report for Fasli 1232 (1822-23).

recurring famines and unfavourable seasons and the decline of the manufactures, the effect of which was already felt in the country. Dubois himself states that in the manufacturing districts thousands were thrown out of work. Many of these resourceless people turned to agriculture and naturally lowered the standard. Further, the reduction in the demand for food on the part of these people would have its effect on prices and therefore on the agriculturist, resulting in greater poverty and diminution of wealth.

This view is borne out by the statements of some of the ablest revenue officials. Mr. W. Thackeray in a Report dated 21st October 1819 observed, "the agricultural stock and cultivation may have increased under the tranquil government of the Company, but the country is in many respects in a worse state than it was in 1807 and in some than it was in 1801." He attributes this to the high and inequitable assessment and the unfavourable effects of the village leases. His successor, Mr. Campbell, expressed a similar view. Even in the case of the middling class of ryots, their condition was so precarious that the least misfortune reduced them to ruin.[19] Later in 1830, things were no better. Mr. Dalzell declared that there was a general deterioration in the condition of the poor. It was only in tracts where black soil predominated that any improvement was perceptible. Here emigrations were less frequent, farms larger and the ryots better off.[20] This was due to the fact that the cultivation of the black land involved a considerable amount of expense which only substantial farmers could afford, and at the same time the yield was more plentiful and certain.

An inquiry into the condition of the Presidency in 1839-40 in connection with the "defalcation of revenue" revealed that there was a decline in the position of the ryot in a number of districts.[21] In Guntoor the decline was greatest and was attributable to a succession of bad seasons culminating in the famine of 1832-3, revenue mismanagement in the zamindari areas, an inequitable assessment, the cessation of the Company's Investment, and the decline of the cloth trade. Conditions were unsatisfactory in other districts also, such as Rajahmundry, Chingleput, South Arcot, Trichinopoly, Bellary, Cuddapah and Canara. Only the Collector of North Arcot

19. General Reports, Vols. 34 and 35, p. 86.
20. General Reports, Vols, 46-49, pp. 161 and 171.
21. Sullivan's Report to Government, 28th Dec. 1840.

reported that agriculture had improved and profits in agriculture had increased.[22] He based his statements on the fact that cultivation had increased and the number of ryots doubled. But increase in the number of ryots is no index of prosperity. They may be pauper ryots, and such was indeed often the case. It only meant an increasing pressure on the land. As for the extension of cultivation, it was rendered necessary by the growth of the population.

In Bellary there seems to have been further deterioration since 1830. Mr. A. Mellor thus testifies to this decline. "Ryots formerly substantial and capable of laying out their capital on the land and in liquidating the Circar demand reserving their produce until they could meet a favourable price are now sunk in debt, bearing a heavy interest, entirely subject to their creditors, and were it not for the aid of the Collector through his revenue subordinates, one half or at least one-third of the highly assessed lands would ere this have been thrown up. The number of pattah-holders has increased, but they are a poor class who seek a maintenance only in husbandry with less spirit and by no means to be compared with the substantial families who have fallen into difficulties and disappeared from the rent roll of the district."[23] The Board of Revenue, however, was of the opinion that conditions could not have been as bad as the Collector made them out, since revenue and cultivation had increased.[24] But the Board made the usual mistake of the bureaucracy of taking, especially the increase of revenue and of cultivation as the one criterion of prosperity. Mr. Mellor made the assertion that the position of the ryot had deteriorated at a time when the revenue collection showed an "extraordinary increase". The conviction of the poverty of the ryots had been forced in upon him in years of plenty. Indeed a decline in wealth and stock simultaneously with a growing revenue was observable in more than one district.[25] By the middle of the century there was a further diminution of wealth and stock.[26]

22. Report from the Collector of North Arcot to C. R. Cotton, *Ibid.*
23. Report from Mr. A. Mellor, Collector of Bellary, 25th July 1846.
24. Board's Minute on the Report, 5th December 1846.
25. Report from Sullivan to Government, 28th Dec. 1840.
26. Letter from the Collector of Vizagapatam to the Board, 25th July 1854.

Letter from the Collector of North Arcot to the Board, 28th August 1854.

In some of the southern districts, however, an improvement is noticeable. In Tanjore, there was continued prosperity, thanks to its irrigation system. By the end of the half century, not only was there a substantial progress, but the inequality of property complained of by the 'socialist' collector, Mr. Harris, seems to have been remedied to some extent. According to Pharaoh's Gazetteer, the condition of the people of Tanjore compared very favourably with that of the other districts and though there were "few men of large fortune among the land-holders" there were "many possessed of competence."[27] This must have been due partly to the improvement in irrigation works already mentioned, an equitable assessment, (formerly renters and others extorted disproportionately large sums from the poor ryots) and the increased security afforded to the ryots who were free from oppression by *Puttuckdars* and *Nattamwars*, i.e., the great farmers and head inhabitants of the villages. Much of this improvement was due to the vigorous action of the earlier Collectors in checking abuses.[28] In Cuddapah and Coimbatore also, the people were fairly prosperous and in Tinnevelly the condition of the richer classes was satisfactory.

But taking the Presidency as a whole, we find that there was no great accumulation of wealth. From an account of the condition of the Madras ryot in 1853 by Mr. Bourdillon, one of the most experienced and competent of civil servants, it is seen that even among the better class of ryots there was not much wealth. The income of the richest was not usually more than Rs. 180 to 240, and Rs. 360 to 600 was very rare. The entire property of the wealthiest including their house, jewels, etc., was seldom more than Rs. 2200. This is certainly much less than the figure given by Dubois as representing the largest properties, i.e., Rs. 4200 and above. But Dubois spoke of the entire population including merchants and others, while Bourdillon discusses only the ryot. But it compares unfavourably even when we take into account the second class mentioned by Dubois, i.e. those possessing Rs. 1750-4200. This decline must be attributed to the high assessment, the fall of prices, the 'drain' in various forms and the decline of the textile industry and trade each acting and reacting on another to aggravate the situation.

As for the poorer classes, the vast majority, they remained as poor and resourceless as ever. There was no decline either, for the

27. Pharaoh's *Gazetteer*, p. 355.
28. General Reports, Vol. 8, p. 40.

simple reason that formerly they possessed the minimum in a few acres of land, a plough or two and a pair of bullocks and a hut. It would be impossible to have less. In 1848-9 more than half the pattahs averaged about Rs. 4 each. Of this class of ryot Bourdillon states that he was always in poverty and generally in debt. "His ploughing cattle are wretched animals not worth more than 3½ to 6 rupees each, and those perhaps not his own because not paid for. His rude and feeble plough costs when new no more than two or three shillings." Their huts would have no value and they possessed little or no furniture. The stock and property of the country therefore showed no improvement since the beginning of the century.

Section III—Work and Wages

We shall deal here only with agricultural labour. The question of labour in the textile and iron industries has been discussed in the respective chapters. As for labour of other kinds we have not sufficient data for anything like a connected account. However, the omission is not very material. The particular conditions and terms of the several kinds of labour, the mode of reckoning wages, etc., may have differed considerably in each district and locality, but with regard to the fundamental point—namely the return for labour in the form of the necessaries of life—the position of all labourers was practically the same. Labourers seldom obtained anything more than bare subsistence. The utmost they could command was a hut to live in, two or three meals a day, two cloths a year, a blanket and sometimes a pair of sandals.

Hired agricultural labour was of two classes, those who were engaged for the year, and those who performed occasional labour when extra hands were required during harvest, transplanting, etc. Yearly labourers could leave their masters and seek work elsewhere at the expiry of their contract, but in actual practice they were not always able to do so, for they were usually indebted to their masters, either on account of an advance from them at the period of entering into service, or on the occasion of a marriage, etc., and naturally the master would not allow them to leave before the debt was discharged. If they insisted upon seeking other service, the new master had to pay off the debt which would now be transferred to him. In the few cases where there was no advance of money, the labourer was of course at perfect liberty to change his master when he chose.

The hours of work varied from district to district, but on the whole it may be said that they were not very long compared to conditions in the West at the time, when we find even children working for 12 hours a day. On the other hand, considering their wages, the scanty subsistence they obtained and their consequent inferior physical condition, their work was probably as onerous as could be expected. Buchanan states that in Canara labourers worked from sunrise to sunset with a short interval of 20 minutes for their midday meal. Women went to the fields late in the morning after preparing the meals and worked with the men till the close of day.[29] Elsewhere he observed that they worked from 8 a.m. till noon and again from 2 to 6 p.m.[30] The average of the two statements would probably approximate the truth. Buchanan is the only person who gives any information regarding the hours of work. But we have no reason to think that there was any change in practice during subsequent years and considering that they are the same at the present day, we may conclude that there was no difference in the length of work during the period under discussion.

Women were largely employed as agricultural labourers. They were chiefly occupied in weeding, transplanting and cutting. During the intervals between these operations they were without regular employment and in this period—aggregating about 3 or 4 months in the year—they obtained a livelihood by spinning cotton, pounding paddy or gathering grass and firewood. They were paid considerably less than the men, usually about half and sometimes two-thirds.[31]

Wages

The payment for labour was largely in kind, and occasionally supplemented by cash. Yearly labourers received a daily or monthly grain allowance and a few rupees a year in addition, while occasional labourers received only grain. Of course in actual practice there were great local variations. Thus in the Northern Circars, towards the close of the eighteenth century, daily labourers are stated to have received payment in cash.[32]

29. Buchanan, *op. cit.*, Vol. I, p. 359.
30. *Ibid.*, Vol. I, p. 445.
31. *Ibid.*, Vol. II, pp. 359, 298, etc.; Mcleod's Report on Dindigul, 20th Feb. 1794.
32. *Fifth Report*, Vol. III, p. 136.

Again, in Coimbatore and other parts, daily labourers were occasionally paid in money, though the usual payment was in kind.[33] Buchanan gives a large number of figures for yearly wages in different parts, where the proportions of money and grain vary alternately, but we find that they all amount to a monthly allowance of grain and a little oil and condiments just sufficient for subsistence for the worker and his family, two or three rupees a year, and in addition, two cloths. Trifling presents were given on the occasion of festivals and ceremonies. In some parts one cambli or blanket was added,[34] and sometimes a pair of sandals. Day labourers in Canara received 2 hanies of rice ($\frac{1}{12}$ bushel) and a little curry. Near towns, wages were naturally higher and they diminished gradually away from towns.

In 1802 the Collector of Canara reported that wages were "confined to a full sufficiency for the food and clothing of the labourer,"[35] and some years earlier the Collector of Dindigul observed that the "labourer manages to live well." [36] Mr. Elijah Hoole, a missionary who toured the southern districts for several years, also corroborates this view. He states that "in regular seasons the poorer natives can by their daily labour procure a comfortable sufficiency of food."[37] These, however, must have had only a superficial view of conditions. The labourers during the cultivating season probably obtained as much rice as they could consume, and the hot climate rendered it possible to do with two cloths a year. But the statements are not to be taken as an indication that labourers procured anything like a full subsistence necessary for efficiency. The casual labourer had a most inadequate and precarious livelihood, especially in the slack season, while the yearly labourer was a little better off. Elsewhere in the Report on Dindigul quoted above, the Collector states that "no labouring man or woman can procure by the value of his or her labour a full supply of the necessary articles of life". It is difficult to reconcile these two contradictory views. Taking into account the amount of the wages mentioned above, it must be concluded that the latter statement is nearer the truth. It is borne out by Munro's observa-

33. Buchanan, *op. cit.*, Vol. I, pp. 442 and 355, Vol. II; pp. 299; 143-4; 173.
34. Buchanan, *op. cit.*, Vol. II, p. 359.
35. Letter from the Collector of Canara, 30th April 1802.
36. Annual Report on Dindigul, 20th Feb. 1794.
37. Elijah Hoole, *A Mission to the South of India*, p. 174.

tion that the remuneration for labour was so small that it was "barely sufficient for their own subsistence."[38] When large numbers of the ryots were often living on the verge of starvation, it is hardly to be expected that labourers would be better off.

No great improvement is perceptible in the condition of labour during the course of the half century. Dubois observed that the agricultural labourer received the smallest possible wage. If he received cash it varied from Rs. 12 to 20 per annum—just sufficient for him to obtain the coarsest of foods. Along the coast and in the vicinity of towns the rate was no doubt higher. Where they were paid in kind they received in addition to their keep an annual allowance of Rs. 4 to 8 a year.[39] This certainly indicates no increase over the figures given by Buchanan or Captain Macleod. Even subsequently, conditions do not seem to have improved. In his report to C. R. Cotton, the Collector of Malabar stated in 1838 that owing to the increase of population, the cheapness of grain had tended to reduce wages rather than to raise them. The fall of prices would certainly have benefited those who were paid in money, but the losses of the agriculturists naturally induced them to cut down wages.[40] The Collector of Guntoor, after a detailed inquiry among various bodies of ryots in the several divisions, asserted that wages were the same as at the beginning of the century. Those who were paid in kind received food, 2 cloths, a turban, a pair of sandals and Rs. 4 per annum. The wages of day labourers varied with the price of grain.[41] Wages in Masulipatam were practically the same.[42]

At the end of the period, the condition of the agricultural labourer is described thus by Mr. Bourdillon who has already been quoted. "The regular agricultural labourers are usually engaged at the commencement of the season, for the whole year. It is customary to advance them a small sum, about 5 or 10 rupees, as a sort of retainer, which, however, is to be repaid when the connection ceases. Those yearly labourers receive a certain allowance of grain every month which is usually fixed by the custom of the locality; and at particular seasons, some regular, other occasional, the master makes the servant a small present, also fixed by the local custom.

38. Report from Capt. A. Read to the Governor-General, 1st July 1793, Baramahal Records, Vol. VI, p. 32.
39. Dubois, *op. cit.*, Vol. I, p. 83.
40. Clementson's Report to C. R. Cotton, 31st Dec. 1838.
41. T. Goldingham's Report, 13th Dec. 1839.
42. Pharoah's *Gazetteer*, p. 50.

When the wife and children of the labourer work in the fields at weeding, etc., they receive daily hire in grain; and labourers not engaged for the whole year, but only at particular times, are paid in the same manner. The rates of hire are very low. The daily rate varies in different parts of the country from eight pies to one anna; it is rarely or never above the latter sum for purely agricultural labour, and this is paid not in money but in grain. The occasional presents to the yearly labourers are partly in money, and partly in cloths; the entire earnings of a labourer engaged for a year do not exceed from 16 to 20 rupees for that whole term.

"It appears from the foregoing detail that the condition of the agricultural labourer in this country is very poor. Taking his earnings at the highest rate, viz., 20 rupees a year, this would be equivalent in real value to £10 a year in England.[43] The English field labourer earns on the average not less than £28 a year, and thus it appears that the real wages of a field labourer in regular employ, his command of the necessaries and conveniences of life, are in this country little more than a third of what they are in England."[44] Making all allowances for the cheaper living possible here, the labourer would be able to obtain little beyond the coarsest food and minimum clothing.

This account indicates that there was practically no change in the position of labourers. But it is impossible that during the whole period of fifty years conditions were absolutely static. Only we have no evidence of change. In the neighbourhood of towns their position was no doubt better. Towards the very end of the period a considerable demand arose for labour in the coffee, tea and other plantations which were just being started, and attractive wages were offered to induce people to leave their villages. Elsewhere, however, such increase in the demand for their labour as was occasioned by increasing cultivation was offset by the growth of population, and therefore of the supply of labour. Further, there was no rise of prices; on the contrary, there was, as we have seen, a great fall of prices and a general agricultural depression which tended to lower rather than raise wages. Besides, in a country where everything was governed by custom, changes

43. The purchasing power of money in India was variously estimated to be about 4 to 6 times as much as in England. Bourdillon takes the mean.

44. Bourdillon's Report, 1853.

would be rare and almost imperceptible. There was nothing in the general condition of agriculture, either in increased profits to farmers, or introduction of new crops on a large scale, which might result in an improvement of the condition of labour.

SECTION IV—SERFDOM[45]

In dealing with labour an account of serfdom is necessary, for much of agricultural labour throughout the Presidency was performed by serfs attached to the soil. As regards economic condition there is no sharp distinction between the class of labourers described above and agricultural serfs, and they tend to merge into one another. The only ostensible difference between the two is that the former were free to leave their masters if they chose at the end of their engagement and the latter were not; but in actual practice we have seen that the yearly labourer who had received an advance from his master had usually as little liberty as the agrestic serf. One difference was that serfs (as has been noted in the chapter on Tenures) had a prescriptive right to cultivate a certain piece of land, while labourers had not.

As regards conditions of work, wages, etc., the position of the serf was similar to that of the yearly labourer. His wages were a little less, but on the other hand the master was generally bound to maintain him during sickness and old age.[46] He was given a hut, an allowance of grain, two cloths a year, sometimes a blanket and a pair of sandals, and the usual presents on the occasion of ceremonies and festivals. He was usually attached to the soil and transferred along with it. On the West Coast, however, we find many instances of the serf being sold apart from the land, often in order to pay arrears of revenue. Mr. W. Adam in his "Law and Custom of Slavery in British India" (p. 94) suggests that the Company "introduced the practice of disposing of the slaves separate from the soil, the land of their birth," that "private proprietors readily adopted it," and the establishment of courts facilitated such transfers. This, however, is an erroneous view, for

45. The sources are:—Buchanan: Thackeray's Report, 7th September, 1807; Minute of the Board of Revenue dated 5th January 1818; the Proceedings of the Board of Revenue on Slavery, 25th November 1819; *Slavery in India*, 1828; *Report on Slavery*, 1840; and Adam, *Law and Custom of Slavery in British India*, 1840.

46. Buchanan, *op. cit.* (1807 ed.), Vol. II, pp. 370-2; *Report on Slavery* 1840, p. 200.

Buchanan who toured Malabar a few years after its acquisition by the British, observes that serfs were not necessarily attached to the soil and could be transferred in any manner the master chose. And he refers to this, not as a recent innovation, but as the established practice. In this district serfs were also leased out, mortgaged and transferred like any piece of property. The price of a serf and his wife in Buchanan's time varied from 200 to 300 fanams (15-23 Rs.). A few years later the price seems to have been slightly higher,[47] probably owing to the greater demand for agricultural labour with the increase of cultivation. In Canara an enquiry in 1819 elicited the information that a male serf was bought for 20 to 26 Rs. and a woman for considerably less. In South Arcot the price of a family varied from 10 to 50 pagodas (35 to 175 Rs.). Evidently labour was scarce in the district. The value of a puller in Trichinopoly was 5 to 10 pagodas.[48] The average price of a single serf may be taken to be about 20 rupees.

The manumission of serfs is reported to be very rare,[49] though they could at any time become free by paying their purchase money and debts if any. Even if they had the means to purchase liberty they were not anxious to do so. In this connection the Assistant Judge of Tinnevelly remarked that though "the price of a well-bred strong young man very seldom exceeds Rs. 20, yet there are few candidates for the honour of being free at the sacrifice of a comfortable and certain provision."[50] This was probably true in the earlier period, but in view of the subsequent decline of serfdom, we may conclude that a gradual and imperceptible process of emancipation was going on.

The treatment of serfs was by all accounts usually very kind.[51] So much so, that in many of the districts they could be scarcely considered as slaves. Compared with the conditions in the West, the position of serfs in the Presidency was far superior. "Slaves are on the whole better treated by their masters than

47. Thackeray's Report on Malabar, Kanara and the Ceded Districts, 7th Sep. 1807.

48. Proceedings of the Board of Revenue on Slavery, 25th Nov. 1819.

49. *Report on Slavery*, 1840, p. 202.

50. *Ibid.*

51. Proceedings of the Board of Revenue on Slavery, 25th November, 1819; *Slavery in India*, 1828; *Report on Slavery*, 1840; A. D. Campbell, *On the State of Slavery in South India*, Madras Journal of Literature and Science, 1833-4, p. 246.

the common class of free labourers" reported the Collector of Coimbatore in 1819. In Tinnevelly, S. Arcot and Trichinopoly their position was equally favourable. The same opinion was expressed by Mr. Charles Hyde who served in several of the districts between 1797 and 1826, in his evidence before the Select Committee of 1830 (p. 112). In the Telugu districts their treatment was still more lenient,[52] and indeed it was in the interest of their masters to treat them well. Servitude, therefore, was perfectly voluntary and serfs were often deeply attached to their masters. In fact there were many instances where serfs instead of abandoning a master who had fallen into ruin, supported him by the earnings of their labour. The Assistant Judge of Tinnevelly quoted above stated that one landlord in his district who had become impoverished received half a measure of grain daily from each of his 500 slaves.[53]

The diet of the serfs was generally stated to be "deficient neither in quantity nor in quality." With regard to quality, the food not only of the serfs, but of the poorer classes in general was the coarsest of dry grains. But what was lacking in quality was compensated by quantity, and in most of the districts serfs were noted for their athletic and well-built appearance.[54] In Malabar, however, they do not seem to have been so well off. Buchanan testifies to their wretched condition at the beginning of the century. Nearly forty years later it was the same, and they presented a "degraded, diminutive and squalid appearance," and on the whole were hardly better than the cattle which drew their ploughs.[55] It was in Malabar that we find slavery in the worst form in the country, and the general statement of kind treatment is not so applicable here.

The Extent of Serfdom

As to the extent to which serfdom prevailed in the country, there was considerable difference between district and district. The wide existence of serfdom in several parts at the beginning of the century, and the traces of such servitude in others where it had declined indicate that at one time agrestic serfdom must have

52. *Report on Slavery*, 1840, pp. 185-6.
53. *Report on Slavery*, 1840, p. 203.
54. General Reports, Vol. 27 and 28, pp. 372-81.
55. W. Adam, *Law and Custom of Slavery in British India*, 1840, pp. 168-9.

been general throughout the Presidency. During the course of time, however, the increasing demand for labour, the general insecurity of person and property during the period of incessant wars, when masters and serfs fled from their villages, there was a considerable fall in the number of serfs. In Buchanan's time serfdom existed throughout Malabar and Canara. In the other districts through which he toured, the position of the labouring class was similar to that of the Cherumaccal etc., of the west, but he does not call them serfs. In 1819 an inquiry was made into the conditions of serfdom in the Presidency.[56] The reports sent in response by the Collectors reveal that serfdom was very general in Malabar, Canara, S. Arcot, Tanjore, Trichinopoly and Tinnevelly. In Chingleput serfdom was widely prevalent at the close of the eighteenth century,[57] but by 1819 there was a marked decline, though it still existed in some degree. There were few serfs in Madura and N. Arcot and no vestiges of serfdom in Salem, though occasionally children were sold during famine. Similarly in Coimbatore, the institution was practically extinct except in a few villages where there was a class of people attached to the soil and always transferred with it, *i.e.*, padiyals.

With regard to the Telugu Districts, the information is comparatively meagre, for the Board of Revenue having once erroneously concluded that serfdom did not exist there, excluded these districts in subsequent surveys. Such material as we have, consists of information supplied by judges, magistrates, etc. found in the Report on Slavery of 1840. In a Minute on Tenures dated 5th January 1818, the Board of Revenue observed that "the same circumstances that reduced the landlord of Telingana to the situation of a landholder (the Mohamedan occupation, etc.) may have tended gradually to weaken the power he possessed over his slave until they finally became altogether emancipated from his authority." But serfdom was not quite extinct in the Andhra country as the Board believed. Labour in many parts was certainly voluntary and the labourer was free to transfer his services when he chose; but even where there were no serfs properly speaking, the labourers remained attached to the same family for generations. And in some of the districts we have more positive evidence of the existence of serfdom. Mr. Russel, Collector of Masulipatam, asserted in the course of a statistical report dated

56. Proceedings of the Board of Revenue, 25th Nov. 1819.
57. Place's Report on the Jaghire, 6th June 1799.

1819 that "the far greater proportion of the more substantial ryots have slaves, or rather they have men whose families have been in the employment of their ancestors from time immemorial and whose services they have a right to enforce."[58] An inquiry in 1836 revealed that in Rajahmundry there was a distinct class of serfs, while in Guntoor though there was "no slavery in the strict sense of the word," several families called slaves remained attached to zamindars for generations. In Vizagapatam and Ganjam too, there was a distinct kind of servitude, though in the mildest form.[59] The sale of serfs was, however, extremely rare in the northern districts; nor were they ever the subject of civil suits as in Malabar. Nellore, Bellary and Cuddapah were the only districts in which no trace of serfdom was found, though here too, certain classes of labourers had little freedom of movement.

The Disappearance of Serfdom

The decline of serfdom was a gradual, and, in the main, a natural process. Government certainly tried to check the growth of slavery to some extent by a number of regulations and ordinances.[60] Thus in 1789 the Company prohibited the capture and exportation of slaves, and in 1811 the importation of slaves into India was forbidden. Regulation II of 1812 prohibited the exportation of serfs from Malabar, and in 1819 it was declared that serfs could not be sold for arrears of revenue. In 1832 the transfer by sale of serfs from one district to another was made a penal offence. These regulations, however, were not very effective and in many cases they remained a dead letter. Mr. Barber who served many years (till 1828) in Malabar—the district for whose particular benefit the prohibition of 1819 was intended—had never heard of it, and the sale of serfs for arrears continued unchecked. The authorities indeed were extremely cautious in attempting any reform in this direction. In a judicial letter to Fort. St. George dated 28th April 1834, the Court of Directors expressed the opinion that interference was inadvisable lest acts of compulsion should be legalized, whereas existing conditions were not very bad.

Subsequently, the subject received more serious consideration and in 1840 a Report was drawn up on the state of slavery in

58. *Report from the Select Committee of the House of Commons*, 1832, App. III, p. 508.
59. *Report on Slavery*, 1840, pp. 185-6.
60. *Cambridge History of India*, 1932, Vol. II, p. 128.

India as a preliminary to legislation. By Act V of 1843 courts were debarred from taking cognizance of suits involving the sale and transfer of slaves, and later, Sections 370 and 371 of the Indian Penal Code (1860) made the sale or purchase of slaves a criminal offence. Mr. Moreland in his *India at the Death of Akbar* (p. 90) states that before the passing of the Act of 1843 slavery was generally prevalent throughout the country, but that subsequently no trace had been left of the institution. Act V of 1843, however, did not have as much effect on slavery as might be supposed. After 1843, we do not find any accounts of the sale of serfs for the simple reason that they were no longer recorded by the Judicial Department which formerly furnished most of the figures. But the sale of serfs certainly did not cease immediately after the passing of the Act. On the contrary the sale and purchase of serfs in Malabar (the only district in which such transactions had been common) continued long afterwards. Pharoah's Gazetteer affirms that serfs were " still bought and sold by both Hindus and Moplahs."[61] We find evidence of the sale of serfs even at the close of the century. Mr. Logan, compiler of the Malabar Manual, believed that in his time they were still "with their full consent, bought and sold and hired out"[62] and Mr. Srinivasa Raghavaiyangar states in his Memorandum: " In remote parts they are even now covertly sold, mortgaged and leased with the lands by word of mouth."[63]

Nor did the acts and regulations effect any substantial change in the state of serfdom. Even in 1854 the Cherumar of Malabar are referred to as 'agrestic slaves'[64] and in 1857 the "slave population" of Malabar was estimated at 187,812. As late as 1908, the Imperial Gazetteer stated that the Cherumar were " often *adscripti gleboe* in the strictest sense."[65] The position was similar in other districts. According to the Tanjore District Gazetteer, many relics of serfdom existed at the beginning of this century. "Now, as then, the Pannaiyal (agrestic serf) is usually paid in grain and not in money, he is given presents on festive occasions and is often in debt beyond recall to his landowner. Moreover, when an estate is sold the 'right' of the

61. Pharoah's *Gazetteer,* p. 520.
62. Malabar District Manual (1906), Vol. I, p. 153.
63. Srinivasa Raghavaiyangar, *op. cit.,* App. Sec. IV-B, p. lxvii.
64. Pharoah's *Gazetteer,* p. 520.
65. *Imperial Gazetteer,* Vol. XVII, p. 59.

landowner over the pannaiyal (i.e. the debt due by him) is often also transferred in the document which transfers the ownership of the land."[66]

Serfdom, however, did decline gradually, influenced by other causes. We see the beginnings early in the century when Buchanan toured the districts. In Canara serfs were given work and wages only for part of the year. For the rest of the year they hired themselves out.[67] In 1833 the acting Magistrate of Masulipatam reported that masters supported slaves for only 5 to 7 months in the year i.e., when there was work on the fields during which period they gave the latter the usual allowances. In the slack season, the serfs had to maintain themselves by other employment. By the middle of the nineteenth century, serfdom was confined to a few districts, particularly Malabar, and to a certain extent Tanjore, Tinnevelly, and Trichinopoly. With the advent of a money economy, the agricultural serf was slowly transformed into the wage-paid labourer. The imposition of a heavy land-tax, which obliged the farmer to cultivate his fields with the aid of his family was also partly responsible for the decline of serfdom. Conversion to Islam is stated to have been instrumental in freeing the serf, but it was a very minor factor. The morcellement of holdings, bringing in its train new masters and new traditions, severed the links which had connected the serf and the landlord through the ages. The owner of microscopic holdings could not afford to employ serfs; neither did he require them. Further, the comparatively high wages offered in towns and plantations where a large demand for labour was rising, induced many serfs to leave their old homes. But very many still remained attached to their masters; it was only in the second half of the century that serfdom finally disappeared.

Section V—The Standard of Living

The standard of living is an indefinite term which means different things on different occasions. Here we may take it to signify the extent to which people could command the necessities, comforts and luxuries of life. There is no doubt that the standard of life was extremely low in the country. Compared with conditions in England for instance, the resources of all classes were vastly inferior, even after making every allowance for the higher purchasing power of money, and the habits, customs, climatic conditions,

66. R. F. Hemingway, *Tanjore District Gazetteer*, 1906, Vol. I, p. 111.
67. Buchanan, *op. cit.*, Vol. III, p. 106 (1807 ed).

etc., which enabled the people in the Presidency to live on a much smaller income than was possible in the former country.

The people may be divided broadly into two classes, the well-to-do—little more than a fourth of the population, and the poor—the remaining three fourths. As for the condition of the rich, at the beginning of the century, we have seen that Munro calculated the property of the very wealthiest at Rs. 350 or £ 35. The value of money in this country has been taken to be about five times as much as in England, at which rate that property would be equivalent to about £ 175 in that country—certainly an extremely insignificant sum. Even, if we take a later period when conditions were not so bad, the position of the wealthier classes compares most unfavourably to those elsewhere. Mr. Thomas Cockburn who had considerable experience in the country, gives the following statement of the monthly expenses of a Dubash—a member of the fairly well-to-do class, with a family consisting of 6 men, 1 boy and 12 women:—

EXPENSES OF A FAMILY OF 6 MEN, 1 BOY AND 12 WOMEN[68]

	Pags.	F.	Cash
30 mercals of rice, at 1 mercal per day at 5 mercals per pagoda. ..	6	0	0
30 measures of rice, at 1 measure per day, for beggars, etc. ..	0	33	60
30 measures of natcheny (ragi) ..	0	22	0
30 measures of Doll and Green Gram ..	1	0	0
Bazaar expenses, such as Ghee, spices, etc. ..	5	0	0
500 Billets of fire wood and Bratty ..	3	0	0
30 Bundles of Betel, 5 viss of nuts and 1 viss of Tobacco ..	2	33	40
9 measures of lamp oil and 1 measure of gingely oil ..	1	16	0
Sundry expenses for vegetables, currys, etc. ..	5	0	0
	25	15	20
The Dubash kept up a Hackney or carriage, the expenses for which including driver's pay, feed of horses, etc., amounted to ..	4	42	0
Pay of 1 servant (1 pagoda) and a washerman ..	1	22	40
	31	34	60

68. Evidence before the Select Committee of 1813, p. 456.

				Pags.	F.	Cash
Expenditure for clothes for the year and expenses on ceremonies and festivals was as follows:—						
Cloth for men and women	80	0	0			
Anniversaries of dead	25	0	0			
Expenses of Pongal Feast, etc.	15	0	0			
	120	0	0	10	0	0
Total expenses for a month			..	41	34	60
For the year			..	501	12	0

(About Rs. 1,750).

Mr. Cockburn calls this the expense of a "middling family" but the annual amount;—about Rs. 1,750, indicates that the family was fairly rich. Probably it was a "middling family" among dubashes, many of whom were extremely wealthy.

As for the very rich, their standard of life was no doubt better. At one time, there seems to have been a belief that even the wealthiest chose to live in very poor style. James Grant, in his *Political Survey of the Northern Circars,* towards the close of the eighteenth century, observed that "the most voluptuous Hindoo in the country, of whatever denomination, doth not in general, and (without a flagrant deviation from every good principle, moral and religious) cannot in his own person, house, equipage, dress, and proper family subsistence, exceed on a scale of the highest rank from a hundred to one thousand rupees monthly."[69] It is not known whence he obtained this piece of information, but he is greatly mistaken as to the frugality of this class, and there was certainly no obligation on their part, moral or religious, to limit their expenditure. In fact the maintenance of large bodies of retainers by the zamindars (of whom Grant is speaking), and the extravagant expenditure on various luxuries and ceremonies with which they were commonly charged disprove this view.

Col. Munro too, in his evidence before the Select Committee of 1813, thus speaks of the simple mode of life of the people. "Living in low mud houses, eating on the bare earth, they cannot require the various articles used among us. They have no tables, their houses are not furnished except those of the rich which have a small carpet, or a few mats and pillows." This was certainly true of

69. *Fifth Report,* Vol. III, p. 95.

the vast majority of the people, but when he goes on to say that this picture was not confined to the poorest, but applied equally to "the highest and richest Hindu in every part of India" he is obviously exaggerating. Probably he put it in this manner for emphasis, in order to convince the Select Committee that it was impossible to increase the export trade from England to India. Perhaps during the previous administration, when any evidence of wealth was an invitation to extortion, some of the rich pretended to be poor, but they did not do so on principle.

Houses

The vast majority lived in mud and wattled huts. In the case of the poor, the hut contained but one room, in which man and beast lived together. The roofs were of thatch and sometimes of mud.[70] In certain parts houses were of better appearance, though constructed of mud, and the walls were smoothed and painted. As for the rich, in Buchanan's time, some lived in large houses, but others lived in a number of huts grouped together. Some even among zamindars are stated to have lived in such dwellings.[71] At the beginning of the period many houses were in a wretched condition, owing to the wars. In North Arcot a great portion of the inhabited houses were stated to be without roofs in 1806.[72] In the Jaghire similarly, houses were left merely with naked walls. In Malabar however, conditions were much better. The houses were whitewashed and neat in appearance.[73] The roofs were either terraced or thatched. In the case of the rich, their dwellings often consisted of commodious two storied houses.[74]

During the course of the half century there was a gradual improvement. Even in Buchanan's time, we find merchants and manufacturers giving up their pyramidical and conical hovels and building tiled houses. In Dubois' time, tiled houses were usual among the better classes. In the Northern Circars the zamindars who had formerly lived in thatched houses, now built fine palaces

70. Dubois, *op. cit.*, Vol. I, pp. 81-82.
71. Report from the Collector of Guntoor to C. R. Cotton, 13th Dec-1839.
72. Letter from Mr. Ravenshaw to the Sub-Collector, July 1806.
73. Buchanan, *op. cit.*, Vol. II, p. 54.
74. Fra Paolo da San Bartolomeo, *A Voyage to the East Indies*, 1800, p. 155.

and storeyed houses at the cost of lakhs of rupees.[75] Even their employees built "magnificent upstair houses."

By the end of the half century, tiled and storied houses were quite common. But the poor, the great majority, still lived in their thatched huts. In Nellore and Rajahmundry, especially, there seems to have been no improvement. According to Pharaoh's Gazetteer, the people continued to live in their single or multiple huts. But in Ganjam, Masulipatam, Trichinopoly, Malabar and other districts, housing conditions improved.

As to furniture, the huts of the poor were of course practically devoid of anything coming under that name. A few pots and pans, a lamp, and a mat or two, exhausted the list of their belongings. In Malabar, it consisted of a few dishes, a cup, some pots, a villacca or lamp and a mortar.[76] Those who were better off had some more pots and pans and some copper and brass vessels, more mats, a cot or two and some pictures; while the house of the very rich were furnished with tables, chairs, pictures, etc. An inventory made in the house of Cotumrauze Venkataramiah, a defaulting renter, includes a very long list of all kinds of furniture, including a large number of vessels, several cots, sandals, stools, boxes, carpets, books, a pistol, chairs, tables, trunks, looking glasses, fine mats, etc.[77] The houses of the rich, therefore, were not so unfurnished as was generally supposed.

By the end of the century there was no improvement in this respect, according to Bourdillon. He states that the ryots had no chairs, tables, or cots and that people slept on the floor or on mats. But he must have been speaking only of the lower classes of ryots. The general diffusion of cheap articles of comfort indicates that there must have been some change for the better, among the middle classes and the rich.

Food

The people, it has been said, were predominently vegetarian. Even among those who were not vegetarian, meat was eaten only occasionally, when a sheep or goat was sacrificed, or

75. Report from the Collector of Guntoor to C. R. Cotton, 13th December 1839.

76. Fra Paolo da San Bartolomeo, *op. cit.*, p. 155.

77. Proceedings of the Board of Revenue, 18th August 1800.

on certain festivals. As for fish, along the coast it was naturally consumed to a large extent. The chief food, however, consisted of cereals. Rice was generally confined to the better class of the people, most of the labourers and ryots being able to afford only the dry grains such as ragi, cholam and cumbu. In the Telugu districts, jonna or cholam predominated, while in the Tamil districts, ragi and cumbu were also largely consumed. On the West Coast, dry grains were not grown in abundance and rice constituted the food even of the poor.

To these cereals the rich added vegetables, milk, curds, pulses and ghee. But the masses had little with which to season their food, and frequently nothing but salt, pickles or onions. Vegetables were used if they could obtain them. But as a rule, curry stuffs were "not in general consumption, at least such as must be purchased."

There was a considerable increase in rice consumption by the middle of the century. In Guntoor, jonna which had long been the staple food was superseded to a large extent by rice. In other districts also, there was some increase in the use of rice, but otherwise, there was little change in the diet of the people.[78]

Dress

There seems to have been an impression that the mass of the people went about naked or nearly so. This "tradition of nakedness" must have been due to the fact that scanty clothing was extremely strange to the people of the west where custom and climate prescribed a very different mode of dress. Actually, however, the only place where clothing was generally scanty was Malabar, and even here, Buchanan was impressed by the "elegant dress" of people of the higher caste. The usual dress of men was a pancha or dhoti consisting of 8 to 12 cubits long and 2 to 2½ cubits broad, and another cloth for wrapping round the shoulder.[79] Some wore shirts and coats, and Muhammadans usually had trousers and coats. Women wore a saree, according to Buchanan 30 to 40 ft. long by rather more than 4 ft. wide and a blouse. But these dimensions are no doubt a wild guess.

There seems to have been little change by the end of the period. Indeed, even at the close of the century, the dress remain-

78. Bourdillon's Report on the Madras Ryot, 1853.
79. Buchanan, *op. cit.*, Vol. I, p. 145.

ed practically the same. Coats were becoming more common than before, and poor people who possessed only a cambli were now able to purchase a coarse cloth in addition.[80] In Guntoor, well-to-do people who formerly wore the same turban for 6 months, later bought costly cloths from China and Europe; but subsequently with the decay of the zamindars, and the general decline in the condition of the district, they could not afford fine clothes, and indeed did not possess even such as they used to give away to their servants.[81]

We cannot say for certain how far the standard of living improved during the course of the half-century. The Collector of Guntoor indeed observed in 1839 that "a general improvement has taken place among all ranks of society," and that the inhabitants could command better food, housing and clothing. But elsewhere, he himself admits that the position of the better classes had decayed greatly, while the condition of the labourers remained unaltered. Mr. Bourdillon on the other hand declared in 1853 that there was no improvement in the standard of living of the ryots, and that if anything, they were "in worse condition" than before. There is no doubt that the fall of prices and the decay of the iron and textile industries acted as a serious check to progress; but on the other hand, the increasing imports of various articles of comfort and luxury, their wider diffusion owing to the improvement in communications, (limited though it was), and the construction of better houses, indicates that there was some change for the better. On the whole, we may conclude that there was a slight but definite rise in the standard of living.

80. Letter from the Collector of N. Arcot to C. R. Cotton, 26th July 1839.

81. Letter from the Collector of Guntoor to C. R. Cotton, 13th December 1839.

CHAPTER XVIII

THE FAMINE PROBLEM

The condition of the people described above was certainly unsatisfactory at the best of times, and this was aggravated during famine. In a letter dated 1805, Munro declared that real famine was rare in the Presidency. This is true only in the sense that deficiency of crops seldom occurred simultaneously in all the districts. And indeed abundance in one district and scarcity in another, not far away, was a common feature of the period, owing to the undeveloped state of communications and the lack of irrigation facilities. But this does not mean that famines were unusual, and Munro himself observes that scarcity was often magnified into a famine by wars, excessive assessments and "by absurd, though well meant, regulations."

Famine History

Famine occurred at frequent intervals during the last century. A few words may be said about famines towards the end of the eighteenth century, since their effects continued to be felt long afterwards. In 1781 occurred a very severe famine. Its worst effects were experienced in the neighbourhood of Madras, in the Jaghire, and some of the southern districts, and its evils were aggravated by the fact that it immediately followed Hyder Ali's invasion of the Carnatic with all its attendant devastation and ruin. The districts suffered severely from want of food and the country was reduced to "a state of absolute desolation."[1] In the Jaghire, large numbers of the people perished and those that remained emigrated, selling their farms for anything they could obtain. Sixteen years later, Mr. Place remarked that cultivation was still reduced to about half owing to the want of hands. People flocked in thousands to Madras where food was distributed free at the Monigar Choultry, an institution newly established by private charity. At one time about 4000 people were fed at the place, but they still kept pouring in and later about 9000 had to be sent away in batches to the Northern Circars where grain was abundant.[2] This scarcity came to an end only in 1784.[3]

1. Public Despatch to England, 26th January 1782.
2. R. A. Dalyell, *Memorandum on the Madras Famine of* 1866, p. 14.
3. Public Despatch to England, 5th June 1754.

Another serious famine occurred in 1790-92, this time confining its rigours to the Northern Circars. The chief and Council of Masulipatam reported that such a calamity was "altogether unknown in this country,"[4] at least since it came under the Company's rule. Distress was greatly intensified by the disturbed state of the country. All the forces of disorder in the Circars were let loose and plundering and robbery became general. The mortality among inhabitants and cattle was very high. In the Peddapore zamindari three-fourths of the agricultural population and cattle perished. We hear of people rushing into the fields and devouring the unripe grain, while others took to looting houses. Large numbers emigrated to the neighbouring districts and many "drowned and destroyed themselves". At the end of the famine large villages which contained 1000 to 2000 inhabitants had only a few hundreds left, and smaller ones had hardly a score of people. The districts did not recover from this for a long period.

The close of the century was marked by another scarcity which prevailed both in the Northern Circars and in the southern districts of Madura, Ramnad and Dindigul. Its effects were so severe in Ganjam that according to Mr. Brown's Settlement Report for Fasli 1211 (1801-2) the district was reduced to "nearly the last ebb of a frightful and depopulated waste." Villages were in ruins and many of the inhabitants had emigrated. In Madura and Dindigul also, conditions were very alarming and necessitated extraordinary measures on the part of the authorities.[5]

The Presidency was again visited by famine during 1805-7, and on this occasion the distress was more widespread than before.[6] It was very serious in the Ceded Districts, where indeed there had been an almost continuous scarcity since 1802. In severity and duration it had by all accounts never been equalled. Considerable distress was also felt in Nellore, North and South Arcot, Madura and Dindigul, Chingleput, Tanjore and Trichinopoly. No accounts are available of the extent of mortality, but in Madras alone, more than 17,000 perished, and the loss of cattle was so heavy that it was impossible to convey adequate supplies to the stricken areas.[7]

In 1811-12 there was another drought, chiefly confined to Madura and the southern districts, and also Canara—an unusual

4. Letter from the Chief and Council of Masulipatam, 26th April, 1793.
5. General Reports, Vol. 5, p. 82, *op. cit.*
6. General Reports, Vol. 13, pp. 10, 14, 42, 77.
7. Munro's Letters, 7th August 1804, 11th January 1805 and 9th February 1807.

occurrence. The scarcity, however, was not very severe and we have little information of the extent of the loss entailed. For several years though there were several unfavourable seasons, there was no such thing as a general famine till 1823-24. The Carnatic and the southern districts suffered from a great deficiency of rainfall and prices rose very high.[8] At first it was thought that the scarcity would not be so severe as the famine of 1805-7,[9] but soon reports of extreme distress came in from all directions, and it extended even to some of the northern districts. Innumerable instances occurred of death from starvation and people were found to be selling their children into slavery.[10] The poor rushed into shops and houses and devoured the grain and stores.

The last and worst famine was that known as the Guntoor Famine in 1833. It was most disastrous in that district, but by no means confined to it. There was scarcity more or less pronounced in all the northern districts. Even in Masulipatam the famine was very severe. The loss of cattle was immense and the agriculturists became entirely destitute of the means of living. It was accompanied as usual by emigration, rioting and plundering, and followed by epidemics. In Nellore, the roads were filled with corpses though 10,000 were being fed in the town. Large numbers swarmed into Madras in such an exhausted condition that people were dying in the streets every day. As for Guntoor, the sufferings of the poor were intense. The loss of population in the district was estimated by the Collector at ⅓ to ½ of the total and of the cattle, nearly ⅔.[11] The state of the country at the end of the famine was most deplorable, and "a man in perfect health was hardly to be seen anywhere."[12] The Governor who toured the Northern Circars early in 1835 observed that the mortality from famine and the fevers that succeeded it was so great that the dead could not be burnt as usual and the outskirts of every village were strewn with human bones. "There are neither men nor cattle able to carry on cultivation fully."[13]

8. Munro's Minute, 12th December 1823.
9. Munro's Minute, 23rd January 1824.
10. R. A. Dalyell, *op. cit*, p. 31.
11. Settlement Report for Fasli 1242-43, 11th June 1835.
12. Letter from the Board of Revenue to Government, 27th October 1836.
13. Governor's Minute, 30th June 1835.

Since 1834 there was no serious dearth till the close of the hal century.

Famine Policy

In this connection we find much theoretic discussion of the economic principles which guided Government policy. In the earlier period, the Company followed the practice of the previous rulers in actively interfering in the grain trade by laying embargoes on export, offering bounties on import, fixing prices, commandeering grain and selling it below cost. Later, however, the authorities became imbued with the principles of *laissez faire* and impressed with the great benefits of free competition. Government gradually ceased to interfere in the grain trade, and became more interested in allowing free play for the forces of individual interest; and thus in the end we find the Indian Civil Servants trained in the economic doctrines of Adam Smith and Malthus, adhering more closely to *laissez faire* than the administrators in England. For instance, during the scarcity in England at the beginning of the nineteenth century, Government bought up large quantities of wheat, appropriated grain even from neutral vessels, offered a bounty on all imports and placed various restrictions on bakers as to the time and manner of their sales. Again, at the time of the great Irish famine of 1846-7, a large consignment of Indian corn was ordered on Government account (though Peel apologized for the departure from principle), grain duties were repealed, the Navigation Act was suspended and various relief measures were undertaken.

In the earlier days of its administration, the Company, as we have said, believed in active interference. Thus during the famine of 1781, the Board of Revenue decided early that it was necessary to afford "every encouragement to the importation of all kinds of provisions", and it was "therefore agreed that the collection of import duties on grain and provisions be suspended."[14] In order to prevent "any improper consumption of rice and paddy" a committee was appointed to superintend the sale and distribution of grain and to use every means to lessen the consumption. Daily sales were limited to 15 garces of paddy. Later a notice was issued "requiring of every person who may be possessed of any quantity of paddy, rice or other grain to deliver in an account of

14. Public Consultations, 19th May 1781.

it to the Committee", who were authorized to use compulsion if necessary. Further the dealers in grain had to enter into "penalty bonds not to withhold any part of what they may be possessed of from the public supply of the settlement."[15] Rice was imported on Government account and 5% of all grain imported by private traders was appropriated by Government at a fixed price.[16] In a Minute dated 4th Oct. 1782, the Government stated that owing to the increasing scarcity they felt it their duty "to use their interference in order to alleviate, as far as may be practicable, the present melancholy appearance of famine". The various restrictions were continued till 1784 when the scarcity was over. A full account of Government policy in 1781 has been given, although it does not fall within our period, in order to illustrate the later change of policy, and also because it was these principles that guided action in the case of the next two famines.

On the occasion of the scarcity of 1790-2 the Government took action at an early stage, authorized large imports from Bengal, remitted various taxes, suspended all duties on grain and provisions, and distributed grain at prime cost and even free to the poor. For sometime there was an embargo on the export of rice from Tanjore, except to the distressed areas. It was in this instance that we first hear of the employment of the poor on public works, such as tanks, roads, etc., the payment being in grain.

During the famine of 1805-7, Government, as soon as it received information regarding apprehended scarcity, sent instructions to Collectors "to take the earliest practicable measures for averting" its evil consequences. Advances to dealers for purchase of grain were recommended, and as to other measures, a good deal of discretion was allowed to them.[17] The Collector of Tanjore resorted to the purchase of grain on public account and its distribution at a fixed price. He also suggested an embargo on the exportation of grain, while the Collector of Trichinopoly actually did so, and further ordered that all people in possession of grain should bring it for sale to the market. But the higher authorities were by now converted to free trade principles, and the Board of Revenue disapproved of those measures on the ground that they were "no less impolitic than arbitrary and are such as should never be resorted

15. *Ibid*, 9th June 1781.
16. Public Despatches to England, 26th January and 4th November, 1782.
17. Letter from Government to the Board of Revenue, 2nd January 1805.

to but in case of extreme necessity."[18] The Board's views were fully endorsed by Government who were for encouraging private traders to import grain rather than to provide supplies on Government account. The latter measure was to be resorted to only if there were no other resources, and even then to be limited as far as practicable. On the representation of extreme distress from Collectors, they agreed with evident reluctance to imposing a prohibition on the export of grain from the southern districts to Ceylon.[19] Meanwhile the scarcity continued, and Collectors frequently appealed to the Board of Revenue for relief.

The Board, however, were now "convinced....of the impolicy of the measures usually resorted to on the occurrence of the calamity of dearth or famine, and that any restrictions in the freedom of the grain market, whether by enforcing the sale, limiting the prices, or other direct interference with the speculations of private grain dealers, are more calculated to aggravate than to diminish the sufferings of the people."[20] They gave their views in more detail in a letter to Government dated 1st Dec. 1806. "In seasons of dearth we conceived it for the benefit of the people that the general consumption should be regulated with exact reference to the general stock, and as it is for the interest of the grain dealer to adapt his price in a just ratio to the existing necessity or demand, so he procures the best information on this point, and that information renders him the best judge; if he sells too high he discourages consumption, makes the people frugal, and may ultimately disappoint himself; if too low, he needlessly foregoes a possible profit, may induce an improvident expenditure, and to the calamity of dearth may superadd the miseries of a famine; but this last circumstance is not likely to happen, as it is not likely he should so much disregard his individual interest. The grain dealer without contemplating the interest of the people necessarily provides for it in providing his own. For the people, by feeling the inconveniences of scarcity by this means sooner perhaps than they otherwise would, feel them ultimately less severely than they otherwise might....So it is the best policy that the grain market should be left entirely to him (dealer), that is, that it be left entirely free....The unrestrained freedom of the grain market is at the same time the best preventive of famine and the best palliative of dearth."

18. Proceedings of the Board of Revenue, 4th January 1805.
19. Letter from Government to the Board of Revenue, 5th January 1805.
20. General Reports, Vol. 12, p. 195.

Government entirely concurred with the Board on this point. Lt-Col. Munro, also, whose opinions received great weight, expressed himself similarly in a letter to the Board dated 8th Feb. 1807, and Mr. Thackeray entered into a long discussion showing that any attempt to fix or force the price of grain "always aggravates a scarcity."[21] The Court of Directors at first allowed the necessity of interference where necessary, while admitting the general principles of free trade.[22] But soon after, they changed their mind and quite approved of the new policy, laying it down as a fundamental maxim "that a sudden and unexpected interference on the part of Government in the public market generally has the effect of deranging them, sometimes in retarding the supply of the article in demand and almost always in unnecessarily increasing its price."[23]

Thus by now there was a complete change in view, but the old practice did not die out immediately, and we find the Government deprecating any interference on principle, but obliged to interfere. Considerable quantities of grain were imported on Government account to be distributed to the people, and a Grain Committee was appointed to supervise sales and regulate prices.[24] There was a large outlay on public works, and hundreds of people were fed at public expense. Finally Government granaries became overstocked and they were forced to dispose of the grain at a loss of 10%.[25]

By the time of the famine of 1811-12 the authorities were further imbued with the "true principles of political economy" and Collectors were instructed to do nothing beyond encouraging private efforts to increase the supply. The only measures admissible were an exemption of grain from duty, advances to merchants and the employment of people on public works.[26] Again on 16th November 1812, peremptory orders were issued to all Collectors for abstaining from interference in the grain trade, reiterating the principles enunciated in their proceedings of 1807. When the Collector of Nellore suggested the adoption of strong measures, to pre-

21. Thackeray's Report on Malabar, Canara and the Ceded Districts, 7th September 1807.
22. R. A. Dalyell, *op. cit.* p. 25.
23. Revenue Despatch from England, 24th April 1811.
24. Proceedings of the Board of Revenue, 19th February 1807.
25. R. A. Dalyell, *op. cit*, pp. 23-24.
26. Proceedings of the Board, 13th January and 6th February 1812.

vent merchants and head-men from monopolising grain and 'cornering' it in "a very improper manner," the Board entirely disapproved of it. They observed that "no dealer or farmer could possibly be supposed to hoard grain for the mere sake of hoarding it. Their intention.....must always be to sell whenever they could get at an adequate price; which price if there were no interference, could not be conceived, failed to adapt itself to the existing necessity or demand."[27] In order to infuse confidence among the people, sanction was given for the expenditure of small sums for ceremonies to invoke the God of Rain under the auspices of the Collectors.[28]

On the occasion of the famine of 1824, Government adhered just as closely to their principles. The Collector of Masulipatam who attempted to fix prices in his district was severely reprimanded by the Board. Sir Thomas Munro, the Governor, observed "The interference of Government on such occasions as the present is often very prejudicial, and I know of no way in which it can be safe or useful, unless in suspending all duties of grain—giving perfect freedom of its transit by sea and land." Accordingly all duties on the import and transit of grain were removed.[29] The employment of the poor on relief works was advocated and meanwhile, Collectors were asked to submit detailed reports of the state of the season, condition of the crops, extent of distress, etc.[30] Similar orders were issued in 1833. Merchants were to be persuaded to bring out grain and sell them, but force was not to be used. Large numbers were fed at Government depots; but in some parts even this expenditure was limited on the ground that it would attract crowds of lazy people and give the impression that the depression was more severe than was actually the case.[31]

Here we find men on the spot, witnessing the distress, begging for assistance and permission to adopt strong measures, while the Government was entrenched in *Laissez-faire.* The ideas of the authorities derived from European experience were unsuited to this country. *Laissez-faire* has now been discarded even in the most advanced and richest countries. In India at that time when

27. General Reports, Vol. 17, p. 119.
28. *Ibid.,* p. 117.
29. Proceedings of the Board, 15th January 1824.
30. *Ibid,* 26th January 1824.
31. R. A. Dalyell *op. cit.,* p. 33.

the means of transport were so defective that grain would be selling at famine prices in one place, while there would be a glut in another a short distance away,[32] and where the people were extremely poor, it would be absurd to expect that "the general consumption" would be "regulated with exact reference to the general stock." Marketing conditions were by no means so perfect as to enable the grain dealer to "adapt his price in a just ratio to the existing necessity or demand."

It will be seen that distress became more severe as Government interference was withdrawn. In 1791, about 1200 died in Vizagapatam where the famine was very severe.[33] During 1805-07, 15,000 people had to be fed in one month at Madras, besides large numbers in other districts; yet the loss of life in Madras alone amounted to 20,334. In subsequent famines, the expenditure on relief mounted up rapidly, but the mortality and general loss showed no reduction. On the contrary, the decline in population, stock and revenue, was never so great as on the occasion of the Guntoor famine, though its rigours were confined to a few districts. Twenty years later, the Public Works Commission declared that Guntoor had not yet recovered from its effects, and the total loss was estimated at more than 2 crores of rupees. According to their lights the Government certainly did their best to alleviate distress, but they would have been more successful if they had adhered less strictly to the "true principles of political economy."

32. See Chapter on Prices.
33. R. A. Dalyell, *op. cit.*, p. 17.

CHAPTER XIX

CONCLUSION

We have now completed our survey. It remains to pick up the various threads and determine how far the Presidency as a whole changed during the period. The general condition at the beginning of the period was, as we have seen, one of great confusion and insecurity. In this respect there was a remarkable improvement, for the first benefit conferred by the new administration was peace and tranquillity. All the turbulent elements such as Poligars and other refractory chiefs and zamindars were put down with a firm hand, and their armed retainers disbanded. Disturbances did indeed occur occasionally, and we hear that even in 1816 Malabar was subject to the depredations of their camp followers.[1] But gradually the strong arm of law and justice extended everywhere and the Presidency, unlike other parts of India where wars and turmoils continued long afterwards, enjoyed an unbroken spell of peace and security. At the same time, the people were freed from the unlimited exactions of renters and zamindars. Certain items of revenue continued, indeed, to be farmed out for several years, but there was an efficient system of control from the centre, and the door to oppression was by no means so wide as before.

The country was thus free to enjoy the benefits of progress, which is apparent in some directions. To begin with, there was a certain extension of cultivation. The Presidency was no longer in the desolate state described in the early reports. In a number of districts there was a considerable increase in the area under cultivation; and commercial crops in particular, such as indigo, cotton and sugar-cane grew steadily in importance. But the extension was incommensurate with the resources of the country, and much cultivable land still lay waste. We have already noted that at the end of the period only ⅕ of the total cultivable land was under the plough. To some extent, this was due to the lack of irrigation facilities. In the earlier part of the century no effective

1. General Reports of the Board of Revenue, Vol. 23, p. 14.

measures were taken to arrest the decay which was spreading rapidly in the old irrigation works, and new constructions were not contemplated at all by the Government. Later, this was compensated by an active irrigation policy which was eminently successful, and in the districts concerned productive of remarkable benefits. But of this we see only the beginnings in our period.

Another factor was the incidence of the land revenue, which, coupled with the fall of prices, pressed heavily on the agriculturists. The result was an increase of indebtedness, and the growth of pauper ryots. As early as 1795, Munro stated that it was extremely simple and easy to set up as a ryot. "A man has only to furnish himself with a couple of bullocks, a plough hardly costs a sixpence." Land was to be had for the asking and was indeed forced on the ryots, who were therefore more concerned with the right to relinquish land than to acquire it. At the opening of the century, land had no sale value, not only in Canara, but in other districts as well.[2] The only exception was Tanjore, which enjoyed the advantages of a comparatively efficient system of irrigation. During the course of the half-century, increased security, as well as the growing demand for land owing to the pressure of the population, conferred some value upon it, especially after the decline of the handicrafts. But the improvement was not general, and in some districts there was a certain fall in the value, as we have seen.

The increase of cultivation was further set off by the growth of population which rose from about 9½ millions at the commencement of the century to more than 22 millions in 1851-52. The extension of grain cultivation was inadequate to meet the needs of the Presidency, and it required to be supplemented by increasing imports of Arakkan rice. Agricultural production was also handicapped by lack of improvement in cultivation methods. While revolutionary changes in agricultural technique occurred in the West, conditions here were almost static.

Trade which had been in a dislocated condition revived gradually. There was a great improvement both in internal and external commerce, but it was still far short of the country's potential capacity. It was clogged and retarded by various duties,

2. Report of Mr. Hodgeson to the Board of Revenue, 10th September, 1807.

currency and exchange difficulties, a multiplicity of weights and measures, and above all, inadequate facilities of transport. It was only in 1844 that the inland customs duties were abolished. The beneficial results of the measure were indeed apparent soon after, but the full effects were experienced only in the second half of the century. The Currency Act of 1835 again demonetized several local currencies, but a number of them still remained in circulation at the end of the period, and it was only gradually that the Company's rupee became the sole circulating medium. Weights and measures continued to be a source of great confusion till the close of the half-century. In regard to communications, there was indeed some improvement, but it was limited, and it is to this factor that we must attribute much of the lack of progress, both in agriculture and trade.

As against these aspects of economic life where improvement is perceptible to a greater or lesser extent, we have the break up of the village community, the weakening of village solidarity and co-operation, and above all, the decline of the handicrafts which is the most significant feature of this period. There was intense distress in the industrial areas. The workers who were thrown out of employment fell back upon the land and increased the pressure on it, while the loss of the export trade in textiles and the consequent diminution in the supply of money brought about a severe agricultural depression. Self-sufficiency which had been the keynote of the economic structure disappeared, and the prominence given to the cultivation of raw products resulted in an unbalanced internal economy. These causes retarded the improvement in general condition which might otherwise have taken place after the advent of peace and settled government. The period may be termed the age of transition when the old order was decaying and the new one had yet to be established. It was only in the second half of the century that the means of communication and irrigation developed remarkably and a reduction was effected in the assessment. Government took active interest in the improvement of crops and inaugurated the Agricultural Department, and there was a rapid growth of the exports of commercial crops to compensate for the decline of the textile exports. Then the forces of progress were given free play and the country embarked on a period of prosperity.

APPENDICES

APPENDIX I

1. కరణముల ననుసరింపక
విరసంబున దిన్నతిండి వికటించుఁగదా ।
యిరుసున గందెన బెట్టక
పరమేశ్వరు బండియైన బాఱదు సుమతీ.

2. పారుగున బగవాఁడుండిన
నిరవొందగ వ్రాతకాఁడు లేలికయైనన్
ధరగాపుకొండె యైనను
గరణాలకు బ్రతుకులేదు గదరా సుమతీ

3. కరణము సాద్రెయున్నను
గరిమదముడిగినను బాము గఱవకయున్నన్
ధరలేలు మాట కున్నను
గర మరుదుగ లెక్కగొనరు గదరా సుమతీ.

—*Sumati Satakamu*, Verses 30, 81 and 35.

1. Even the vehicle of God requires that its wheels should be oiled; similarly ryots cannot enjoy what is their own unless the Karnum is propitiated.

2. The Karnum will have no livelihood if an enemy is in his neighbourhood, if the ruler is good at accounts (*i.e.*, can check the Karnum's returns) or if the ryots complain against him to the authorities.

3. A Karnum who is soft-hearted, an elephant that has lost its vigour, a snake that does not bite and a scorpion that does not sting, will be regarded with contempt.

APPENDIX II

Specimen Deed of Sale in Joint Villages at the beginning of the nineteenth century.

I, A. B. of the village of C. containing twenty-eight shares, do hereby execute to D. E. of the same village, this deed of sale; that is to say, having sold to you, in this village, one share of my own six shares therein, I do hereby execute to you this deed of the full and absolute sale thereof; and you having further paid, and I having actually received, one hundred chuckrums, duly shroffed, in full value thereof, you are accordingly, to the extent of the share now transferred and sold to you, fully to possess and enjoy all nunjah, punjah, islands, water, stone, topes, jungles, riches, treasure, and every well which sinks beneath, of every tree that rises above, the earth; with every general benefit, of every sort, from father to son, through every generation, as long as the waters of the Cauvery flow, vegetation lasts, or until the end of the time; with the fullest liberty, likewise, of alienation by gift, bequest, sale or otherwise; and may you enjoy all prosperity therewith. This, with my fullest approbation, I do hereby execute to D. E. this deed of sale, which is written by Permael Pillay, village conicopoly; and this requires authentication from all the other proprietors of the village.

(Signed) A. B

APPENDIX III

A common mortgage bond, dated 1772.

"On account of urgent necessities, I have borrowed fifteen current pagodas from you; for these fifteen Pagodas you are entitled to carry on the cultivation in the land, fields, manyam, backyards, groves, wells, and all the Samudaya lands whatsoever, being my master's share in the village Sirunayam in the maganam of Shozapuram and to hold it in lieu of interest and receive the share allowed by Government (Divanam). You are to enjoy the profits of one quarter of the village and be answerable for the ireo-vari, shorusummadu, alamanji. When the village is redeemed, I am to pay only the principal sum of fifteen Pagodas in the month of Vaiyasi, when the crop is off the ground. There is no claim against this, if any arise, I will come forward and have the dispute decided and the one-fourth of the village continued to you. This mortgage deed of the proprietary of a village is given by my free consent.—Poonuswamy Ayer and Venbacam Veeraragavayer are witnesses, with whose knowledge the integrity of this writing is attested by Chidambara Pillay, the Canaccu of Amur."

(Signed) Venkataraden,
Carupusami,

(Mark of) Veeraragavayer,

APPENDIX IV

Statement showing the sums disbursed by the Company in Rajahmundry District on account of the Investment from 1805-6 to 1828-9

Years.		Rs.
1805-6	..	6,26,500
1806-7	..	6,72,000
1807-8	..	8,87,257
1808-9	..	7,85,646
1809-10	..	8,77,200
1810-11	..	11,32,921
1811-12	..	9,79,862
1812-13	..	8,22,722
Average	..	8,48,013
1813-14	..	12,99,049
1814-15	..	5,19,961
1815-16	..	8,51,645
1816-17	..	10,74,470
1817-18	..	14,26,553
1818-19	..	7,87,619
1819-20	..	4,30,940
1820-21	..	6,75,674
1821-22	..	5,80,000
1822-23	..	3,54,182
Average	..	8,00,009
1823-24	..	4,96,720
1824-25	..	5,01,747
1825-26	..	4,87,180
1826-27	..	6,36,374
1827-28	..	8,60,000
1828-29	..	6,60,750
Average	..	6,07,128

Taken from Montgomery's Report on the decline of Revenue in Rajahmundry, 18th March 1844.

APPENDIX V

Imports of Piecegoods and Yarn from the United Kingdom into the Madras Presidency from 1814-15 *to* 1850-51

Years.		Piecegoods	Yarn
		Rs.	Rs.
1814-15	..	51,931	...
1815-16	..	36,055	...
1816-17	..	60,956	...
1817-18	..	1,05,011	...
1818-19	..	2,03,938	...
1819-20	..	1,16,197	...
Average		95,681	
1820-21	..	1,24,326	...
1821-22	..	3,72,596	...
1822-23	..	4,91,019	...
1823-24	..	2,16,005	...
1824-25	..	1,73,500	...
1825-26	..	2,65,052	8,829
1826-27	..	2,64,563	13,296
1827-28	..	3,08,640	17,573
1828-29	..	4,53,105	96,517
1829-30	..	2,52,762	49,110
Average		2,92,157	37,065
1830-31	..	1,51,149	40,549
1831-32	..	2,72,990	72,618
1832-33	..	4,48,901	37,485
1833-34	..	85,363	9,022
1834-35	..	1,25,870	89,424
1835-36	..	1,49,343	38,896
1836-37	..	2,54,589	3,03,234
1837-38	..	3,26,168	2,02,737
1838-39	..	3,13,422	2,97,381
1839-40	..	4,80,134	3,20,423
Average		2,60,793	1,41,177
1840-41	..	4,37,261	5,99,267
1841-42	..	6,56,135	5,31,554
1842-43	..	No figures	
1843-44	..	6,10,962	5,22,930
1844-45	..	8,36,815	11,78,648
1845-46	..	4,64,609	7,55,464
1846-47	..	6,56,656	9,53,477
1847-48	..	7,32,974	5,17,067
1848-49	..	3,44,952	3,75,250
1849-50	..	6,70,800	6,47,173
1850-51	..	10,39,563	7,53,601
Average		6,45,073	6,83,443

Compiled from Annual Reports on External Commerce.

APPENDIX VI

Exports of Piecegoods on Private Account from the Madras Presidency 1820-21 *to* 1850-51

Years.	Exports to the United Kingdom	Total Exports
	Rs.	Rs.
1820-21 ..	16,81,551	44,65,108
1821-22 ..	...	92,96,653
1822-23 ..	...	61,20,343
1823-24 ..	16,80,992	71,29,992
1824-25 ..	25,03,329	68,60,551
1825-26 ..	25,55,859	67,51,245
1826-27 ..	16,49,110	61,95,663
1827-28 ..	15,68,546	67,05,778
1828-29 ..	17,18,723	70,59,366
1829-30 ..	15,57,431	70,72,551
1830-31 ..	7,83,512	55,69,362
1831-32 ..	14,67,060	63,84,089
1832-33 ..	12,89,816	62,04,422
1833-34 ..	9,09,951	61,45,739
1834-35 ..	14,82,945	74,37,254
1835-36 ..	16,19,769	67,69,612
1836-37 ..	19,57,567	72,68,399
1837-38 ..	12,81,707	70,50,631
1838-39 ..	13,56,504	59,24,003
1839-40 ..	18,00,931	55,55,140
1840-41 ..	8,08,205	56,39,067
1841-42 ..	5,56,331	47,75,953
1842-43 ..	No figures	
1843-44 ..	3,51,052	34,73,062
1844-45 ..	4,12,031	38,41,932
1845-46 ..	9,06,395	39,26,438
1846-47 ..	9,77,919	42,86,921
1847-48 ..	5,81,571	37,36,055
1848-49 ..	3,48,903	28,43,425
1849-50 ..	3,61,089	30,97,558
1850-51 ..	4,59,475	29,42,874

Compiled from Annual Reports on External Commerce.

APPENDIX VII

Quinquennial Statement of Private Exports of Cotton Piece-goods from the Madras Presidency to different places from 1825 to 1851

Countries	1825-26	1830-31	1835-36	1840-41	1845-46	1850-51
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
United Kingdom ..	25,55,859	7,83,512	16,19,767	8,08,205	9,06,395	4,59,475
Mediterranean Ports ..	3,36,059	nil	nil	nil	nil	nil
America ..	1,19,334	27,085	1,18,453	nil	210	540
France ..	2,480	6,728	41,812	6,883	nil	2,460
Bengal ..	2,60,456	1,49,209	1,55,081	5,49,521	3,13,409	5,50,155
Bombay ..	8,14,637	16,50,126	16,47,208	14,22,658	7,50,140	6,39,259
Cape of Good Hope ..	75,764	315	40	4,620	270	87
China ..	2,635	274	17,626	100	534	118
French Indian Ports ..	212	18,953	67,215	72,543	3,11,131	36,643
Ceylon ..	3,58,384	8,21,766	9,84,716	10,17,207	7,59,673	6,65,038
Goa ..	28,999	32,478	4,625	354	770	341
Persia ..	2,80,910	6,89,644	3,98,273	49,919	3,769	31,726
Arabia ..	3,13,167	3,02,918	3,04,023	2,64,189	81,866	31,726
Malacca ..	10,50,490	6,48,287	11,87,900	11,83,147	6,96,460	4,70,897
Manilla ..	1,48,742	2,16,067	28,552	39,296	1,646	nil
Mauritius ..	38,608	28,536	110	444	24,667	18,205
Maldives ..	1,973	1,495	1,265	6,414	2,058	2,037
Pegue ..	2,35,206	1,07,226	nil	2,05,831	61,436	62,540
West Coast of - - Sumatra ..	1,07,453	43,443	23,410	nil	2,891	98
Total Exports to all countries ..	67,51,245	55,69,362	67,69,612	56,39,609	29,26,438	29,42,874

Compiled from the Annual Reports on External Commerce.

APPENDIX VIII

External Commerce by Sea of the Madras Presidency from 1802 to 1851 Private Trade

Years	Imports of Merchandise	Imports of Treasure	Exports & re-exports of Merchandise	Exports of Treasure
	Rs.	Rs.	Rs.	Rs.
1802	85,78,468	64.85,138	53,13,916	17,18,207
1803	99,97,025	58.49,572	62.67,822	7,15,335
1804	86,96,288	38,37,141	59,35,532	1,30,660
1805	91,84,946	52,44.377	48,98,814	1,06,992
1806	69,83.887	22,45,165	40,97,557	89,024
1807	1,47,43,230	46,08.235	29,00.943	1,92,641
1808	74,11,448	13.30,541	36,83,878	10,400
1809	74,72,266	44,79,561	35,92,148	21,590
1810	91,36,686	22,17,588	47,33,737	3,98,565
1811	82,10,844	15,87,209	65,69,781	2,42,882
Average	90,41,509	37,88,453	47,99,413	3,62,630
1811–12	1,20,39.679	41,76.029	1,28,69,049	3,18,577
1813–14	95,23,654	32.87,449	99,28,636	6,71,109
1814–15	80,57,534	23,71,345	1,28,42,132	4,07,201
1815–16	86,70,779	21,84,771	1,17,95,326	8,59,422
1816–17	71,72,955	30,58,187	1,13,63,752	6,91,514
1817–18	93,62,145	30,50.235	1,16,58.096	4,98,660
1818–19	80,38,661	38,97.643	1,19,60,747	3,83,070
1819–20	67,46,527	40,24,265	1,16,41,776	5,29,927
1820–21	66,78,395	43,69,643	1,16,68,689	1,51,486
Average	84,76,703	33,79,952	117,47,578	5,01,196
1821–22	92,69,197	40,05,731	1,67,11,366	2,77,128
1822–23	89,38,646	42,80,641	1,33,07,663	2,72,596
1823–24	1,14,01,898	29,98,102	1,44,03,341	8,24,017
1824–25	94,44,022	44,90,424	1,58,09,960	4,42,211
1825–26	92,66,872	37,05,852	1,58,62,951	5,38.403
1826–27	81,68,997	32,74,410	1,35,01,308	8,97,913
1827–28	93,91,228	36,28,467	1,40,64,835	10,12,726
1828–29	91,43,113	26,31,476	1,44,93,279	9,91,109
1829–30	93,70,857	22,39,768	1,47,45,593	12,65,006
1830–31	83,88,647	20,39,237	1,25,56.383	7,85,028
Average	93,18,348	33,29,411	1,45,45,668	7,30,614

Compiled from the Annual Reports on External Commerce

APPENDIX VIII (*Continued*)

Years	Imports of Merchandise	Imports of Treasure	Exports & re-exports of Merchandise	Exports of Treasure
	Rs.	Rs.	Rs.	Rs.
1831-32	73,03,697	26,33,040	1,37,10,820	17,79,863
1832-33	92,16,328	25,43,565	1,39,36,741	26,92,592
1833-34	99,70,401	26,75,936	1,37,44,033	23,67,401
1834-35	95,40,434	33,42,091	1,66,42,636	11,05,640
1835-36	88,20,627	32,65,363	1,91,25,390	6,08,562
1836-37	1,04,31,885	33,28,525	2,20,96,709	8,49,211
1837-38	98,36,671	25,35,126	1,62,88,725	17,25,662
1838-39	1,01,07,442	35,28,785	1,89,58,764	15,66,459
1839-40	1,02,52,231	27,88,340	1,99,59,668	11,10,364
1840-41	1,11,27,971	30,33,845	1,98,61,641	10,07,935
Average	96,60,769	29,67,362	174,32,513	14,81,369
1841-42	1,03,42,800	28,88,803	2,25,38,682	3,34,783
1842-43	93,66,065*	28,68,744	2,26,99,141*	2,82,161
1843-44	97,29,717	49,08,323	2,22,60,000	18,33,812
1844-45	1,39,40,269	65,43,643	2,67,88,834	7,42,642
1845-46	1,20,82,525	66,01,711	2,40,45,029	9,06,753
1846-47	1,24,01,916	49,60,828	2,40,68,867	31,29,998
1847-48	1,19,16,806	37,16,858	2,11,46,838	35,52,343
1848-49	1,22,48,195	27,16,132	2,04,15,374	22,38,403
1849-50	1,21,56,305	42,36,514	2,36,38,359	9,10,427
1850-51	1,30,38,609	60,42,437	2,61,22,274	11,97,691
Average	117,22,321	45,48,399	2,33,72,340	15,12,901

*Including the Company's Trade.

APPENDIX IX

Statement of the Imports and Exports of Bullion on Private and Public account from 1819-20 *to* 1850-51.

Years.	Private account		Company's account		Total		Excess or Deficit of Total Imports over Exports
	Imports	Exports	Imports	Exports	Imports	Exports	
1819-20	40,24,265	5,29,927	38,04,756	30,60,139	78,29,021	36,90,066	+ 41,38,955
1820-21	43,69,643	1,51,486	nil	25,76,705	43,69,643	27,28,191	+ 16,41,452
1821-22	40,05,731	2,77,128	nil	48,50,000	40,05,731	51,27,222	— 11,21,491
1822-23	42,80,641	2,72,596	nil	27,00,000	42,80,641	29,72,596	+ 13,08,045
1823-24	29,98,102	8,24,017	41,91,606	73,78,643	84,56,782	84,41,771	+ 15,011
1824-25	44,90,424	4,42,211	23,31,021	79,76,614	68,21,445	84,18,825	— 15,97,380
1825-26	37,05,852	5,38,403	28,106	1,24,33,839	37,33,958	1,29,72,242	— 92,38,284
1826-27	32,74,410	8,97,913	11,20,666	50,05,001	43,95,076	59,02,914	— 15,07,838
1827-28	36,28,467	10,12,726	nil	44,66,376	37,27,185	54,79,102	— 17,51,917
1828-29	26,31,476	9,91,109	nil	47,69,000	26,31,476	57,60,109	— 31,38,633
1829-30	22,39,768	12,65,006	nil	83,39,000	22,39,768	99,04,006	— 76,64,238
1830-31	20,39,237	7,85,028	nil	21,20,000	20,39,237	33,55,028	— 13,15,791

1831-32	26,33,040	17,79,863	nil	67,97,933	26,33,040	85,77,796	— 59,44,756
1832-33	25,43,565	26,92,592	1,43,084	31,88,628	26,86,649	58,81,220	— 31,94,571
1833-34	26,75,936	23,67,401	35,12,920	29,55,000	61,88,856	53,22,401	+ 8,66,455
1834-35	33,42,091	11,05,640	nil	17,60,002	33,42,091	28,65,642	+ 4,76,449
1835-36	32,65,363	6,08,562	1,57,707	60,44,646	34,23,070	66,53,208	— 32,30,138
1836-37	33,28,525	8,49,211	12,35,000	48,97,694	45,63,525	57,46,898	— 11,83,373
1837-38	25,35,126	17,25,662	26,16,500	39,07,639	51,51,626	56,33,301	— 4,81,675
1838-39	35,28,785	15,66,459	6,52,000	48,74,461	41,80,785	64,40,920	— 22,60,135
1839-40	27,88,340	11,10,364	5,66,250	91,97,346	33,54,590	1,03,07,711	— 69,53,121
1840-41	30,32,845	10,07,935	10,00,000	95,39,250	40,32,845	1,05,41,605	— 65,08,760
1841-42	28,88,803	3,34,783	nil	83,50,000	28,88,803	86,83,339	— 57,94,536
1842-43	28,68,744	2,82,161	nil	71,19,000	28,68,744	74,01,161	— 45,32,417
1843-44	49,08,323	18,33,812	9,00,000	27,49,007	58,08,328	45,82,816	+ 12,25,512
1844-45	65,43,643	7,42,642	nil	70,40,259	65,43,643	77,82,901	— 12,39,258
1845-46	66,01,711	9,06,755	nil	32,80,000	66,01,711	41,86,753	+ 24,14,958
1846-47	49,60,828	31,29,998	nil	29,30,100	49,60,828	60,60,098	— 10,99,270
1847-48	37,16,858	35,52,343	nil	71,00,000	37,00,280	1,06,52,343	— 69,52,063
1848-49	27,16,132	22,38,403	nil	77,00,003	26,74,852	99,39,403	— 72,64,551
1849-50	42,36,514	9,10,427	nil	59,70,000	42,36,514	68,79,637	— 26,43,123
1850-51	60,42,437	11,97,691	nil	33,00,000	60,42,437	44,97,191	+ 15,44,746

Compiled from External Commerce Reports.

APPENDIX X

Coasting Trade of the Madras Presidency from 1802 *to* 1850

Years.	Imports	Exports	Total
	Rs.	Rs.	Rs.
1802	70,15,358	62,42,652	1,32,58,010
1803	84,00,653	72,06,013	1,56,06,666
1804	55,00,936	44,78,860	99,79,446
1805	73,80,467	48,66,192	12,24,66,659
1806	52,38,202	48,33,435	1,00,71,637
Complete Figures not available between 1806 and 1820.			
1820-21	75,45,089	82,61,920	1,58,07,009
1821-22	50,98,331	54,08,905	1,05,07,236
1822-23	——	——	——
1823-24	64,29,369	76,94,182	1,41,23,551
1824-25	82,04,189	90,68,158	1,72,72,347
1825-26	57,31,793	62,74,008	1,20,05,801
1826-27	66,24,912	63,96,510	1,30,21,422
1827-28	59,38,527	60,81,485	1,20,20,012
1828-29	55,22,200	59,81,206	1,15,03,406
1829-30	58,95,789	61,49,584	1,20,45,373
1830-31	69,16,186	57,71,903	1,26,88,089
1831-32	46,20,280	49,28,687	95,48,967
1832-33	61,54,157	67,34,615	1,28,88,772
1833-34	74,20,277	78,47,033	1,52,67,310
1834-35	47,07,762	51,49,768	98,57,530
1835-36	59,95,720	64,35,774	1,24,31,494
1836-37	55,55,524	68,55,064	1,24,10,588
1837-38	36,97,788	47,92,054	84,89,842
1838-39	58,72,329	69,02,030	1,27,74,359
1839-40	51,81,957	62,29,284	1,14,11,241
1840-41	42,32,652	49,27,122	91,59,774
1841-42	45,60,526	52,42,563	98,03,089
1843-44	38,32,372	52,93,476	91,25,848
1844-45	48,50,134	61,10,164	1,09,60,298
1845-46	43,53,598	59,85,436	1,03,39,034
1846-47	68,42,584	78,00,135	1,46,42,719
1847-48	93,19,623	67,37,745	1,60,57,368
1848-49	1,14,69,277	87,33,430	2,02,03,207
1849-50	1,02,59,375	89,97,164	1,92,56,539

Compiled from Annual Reports on External Commerce.

APPENDIX XI

Land Frontier Trade of the Madras Presidency from 1811-12 to 1850-51

Years	Imports	Exports
	Rs.	Rs.
1811-12	46,45,349	79,19,700
1815-16	62,33,591	47,14,082
1816-17	62,50,228	47,33,877
1817-18	57,45,113	50,31,461
1818-19	56,63,714	59,47,566
1819-20	62,05,430	58,63,791
1820-21	65,69,348	50,68,743
1821-22	67,30,847	50,96,896
1822-23	75,82,714	50,19,361
1823-24	68,81,877	49,54,963
1824-25	81,09,412	52,20,838
1825-26	66,45,863	59,21,651
1826-27	72,89,748	54,40,021
1827-28	3,03,11,172*	55,44,415
1828-29	79,08,913	47,77,025
1829-30	76,83,631	56,94,946
1830-31	62,73,426	45,44,888
1831-32	61,06,122	44,97,096
1832-33	58,79,207	45,31,263
1833-34	50,06,518	39,00,289
1834-35	52,80,181	42,86,374
1835-36	66,35,062	41,11,675
1836-37	73,77,456	44,06,640
1837-38	64,39,266	47,98,669
1838-39	62,85,051	59,45,284
1839-40	61,85,526	62,62,670
1840-41	84,74,422	62,52,127
1841-42	92,17,415	64,92,161
1842-43	93,05,618	62,45,734
1843-44	1,03,04,676	64,55,402
1844-45	44,49,768†	49,99,177
1845-46	12,19,627†	44,23,764
1846-47	13,19,533	30,50,321
1847-48	14,81,919	29,74,402
1848-49	13,52,688	32,16,176
1849-50	14,36,583	38,04,330
1850-51	15,50,550	39,29,681

Compiled from the Annual Reports on External Commerce.

*Including Company's Treasure to the value of Rs. 2,30,66,200.

†The great fall in the figures is due to the abolition of the Transit Duties in 1844.

APPENDIX XII

Quinquennial Statement of the Exports of Staple Articles from the Presidency

Years.	Cotton	Indigo	Picegoods	Sugar	Grain
	Rs.	Rs.	Rs.	Rs.	Rs.
1811-12	1,67,806	28,712	27,99,654	9,450	19,28,767
1820-21	3,75,707	2,30,616	61,75,174	10,408	About 20 lakhs
1825-26	11,89,894	6,13,923	67,51,245	30,443	35,11,572
1830-31	7,72,001	6,61,490	55,69,362	45,864	17,61,978
1835-36	42,85,896	9,33,103	67,69,612	1,00,906	26,98,350
1840-41	40,54,811	16,59,289	56,39,067	1,12,171	34,52,740
1845-46	36,04,738	25,73,846	39,26,438	15,26,899	58,96,009
1850-51	58,22,790	25,82,162	29,42,874	20,98,387	48,08,447

Compiled from Annual Reports on External Commerce.
Upto 1820-21 figures are incomplete.

LIST OF REFERENCES

A. *Manuscript Records*:

1. Public Consultations.
2. Public Despatches to England.
3. Public Despatches from England.
4. Revenue Consultations.
5. Revenue Despatches to England.
6. Revenue Despatches from England.
7. Proceedings of the Board of Revenue. (The Reports of the various Collectors are found here).
8. Col. Fullarton's letter to the Court of Directors, 7th January 1785.
9. Reports of the Circuit Committee, 1788.
10. Settlement Reports.
11. B. Heyne's Botanical and other reports, Public Sundries, Vol. 60.
12. Reports on External Commerce, 1802-1851.
13. Proceedings of the Madras Government Bank, 1805-7 Secret Sundries, Vol. 16.
14. Official Diary of the Superintendent of Tank Repairs and Water Courses, 1805-12.
15. Sea Customs Proceedings of the Board of Revenue from 1806.
16. Statement of the Prices of food grains in the Madras Presidency, 1808-1825—Miscellaneous volumes of the Board of Revenue, 24.
17. Report of the Madras Customs Committee, 27th January 1836.
18. Report from the Mint Master, 11th April 1851.
19. Report from the Mint Committee to Government, 7th August 1851.
20. Supplementary Report from the Mint Master, 16th Decem-

B. *Printed Works, Published and Unpublished:*

1. General Reports of the Board of Revenue sent to the Court of Directors from 1787 to 1836.
2. First, Second and Third Reports of the Select Committee appointed by the Court of Directors of the East India Company to take into consideration the export trade from Great Britain to the East Indies. London, 1793.
3. Report from the Select Committee of the Court of Directors of the East India Company upon the subject of the cotton manufactures of this country. London, 1793.
4. Papers respecting the negotiation for a renewal of the East India Company's exclusive trade. London, 1793.
5. Baramahal Records, 1799.
6. Fra Paolino da san Bartolomeo—A Voyage to the East Indies. London, 1800.
7. Tennant—Indian Recreations, 1803.
8. F. Buchanan—Journey from Madras through the Countries of Mysore, Canara and Malabar, 1807.
9. Wilks—Historical Sketches of the South of India, 1810.
10. Fifth Report from the Select Committee on the affairs of the East India Company. London, 1812.
11. Papers relating to the village panchayat and other judicial systems of administration, 1812-1816. Madras, 1916.
12. W. Milburn—Oriental Commerce. London, 1813. 2nd Ed. 1825.
13. Report from the Select Committee of the House of Commons on the Affairs of the East India Company. London, 1813.
14. B. Heyne—Tracts on India with journals of tours in the Peninsula and account of Sumatra. 1814.
15. F. W. Ellis—Papers relating to Mirasi Right. Madras, 1814.
16. W. Hamilton—Description of Hindoostan and the adjacent countries—1820.
17. J. A. Dubois—Hindu manners, customs and ceremonies (1823). Translated by H. H. Beauchamp. Oxford 1897.
18. Report on Sugar Trade, London, 1822.

19. Slavery in India, 1828. (A Report of the conditions of agricultural serfdom in South India).

20. Elijah Hoole—Personal Narrative of a Mission to the South of India. London, 1829.

21. A Collection of papers relating to the value of land in the early years of the nineteenth century. Madras, 1916.

22. Slavery in India, 1828.

23. Report from the Select Committee of the House of Commons on East India Trade, 1830.

24. Victor Jaquemont—Etat Politique et social de l'Inde du sud en 1832. Paris, 1931.

25. A.D. Campbell—On the state of slavery in Southern India, Madras Journal of Literature and Science, Vol. I, 1833-4.

26. East India Company—Papers on Cotton, Silk and Indigo, 1790-1828. 1836.

27. An account of the village of Puduvayal in the Province of Ramnad—Journal of the Royal Asiatic Society, 1836.

28. Report on Slavery in India, 1838.

29. J. M. Heath—On the cultivation of Cotton in India, Journal of the Royal Asiatic Society, 1838.

30. Report on Slavery, 1840.

31. W. Adam—Law and Custom of slavery in British India, 1840.

32. J. F. Royle—Productive Resources of India, 1840.

33. Report from the Select Committee on East India Produce. 1840.

34. First Report from the Select Committee on Sugar and Coffee Planting, 1848.

35. Thornton—Gazetteer of India, 1854.

36. Ward and Conner—A Descriptive Memoir of Malabar, 1849.

37. Report of the Public Works Commission, 1852.

38. Bourdillon—Report on the Madras Ryot, 1853.

39. Lt.-Col. A. Cotton—Public Works in India, 1854.

40. Pharoah & Co.—A Gazetteer of Southern India with the Tensserim Provinces and Singapore. Madras, 1855.

41. E. Balfour—Report on iron and coal in the Madras Presidency. Madras, 1855.

42. J. F. Royle—Review of the measures which have been adopted in India for the improved culture of cotton. London, 1857.

43. Report on the direct and indirect effects of the Godavari and Krishna anicuts in Rajahmundry, Masulipatam and Guntoor, 1858.

44. J. T. Wheeler—Handbook to Cotton cultivation in the Madras Presidency. Madras, 1862.

45. J. Short—A Handbook to Coffee Planting in India. Madras, 1864.

46. R. A. Dalyell—Memorandum on the Madras Famine of 1866.

47. Correspondence relating to the revision of the village revenue establishments of the Madras Presidency. Madras, 1867.

48. J. H. Nelson—Manual of the Madura District, 1868.

49. D. F. Carmichael—Manual of the Vizagapatam District, 1869.

50. Replies to a Questionnaire regarding Kudimaramut, 1869.

51. J. Kelsall—Manual of the Bellary District, 1872.

52. J. A. C. Boswell—Manual of the Nellore District, 1873.

53. J. Short—Report on the indigenous breeds of cattle in the Madras Presidency. 1874.

54. Annual Reports from the Superintendent of Government Farms. Madras, 1874-77.

55. J. D. B. Gribble—Manual of the Cuddapah District, 1875.

56. Report of the Deccan Ryots Commission. Bombay, 1876.

57. J. H. Garston—Manual of the South Arcot District, 1878.

58. Robertson—Report of a tour in Coimbatore, Madras, 1878.

59. Lewis Moore—Manual of the Trichinopoly District, 1878.

60. H. Morris—Manual of the Godavari District, 1878.

61. Benson—Report of a tour in Trichinopoly. Madras, 1879.

62. A. J. Stuart—Manual of the Tinnevelly District, 1879.

63. C. S. Crole—Manual of the Chingleput District, 1879.

64. Statements showing the growth of and changes in the revenue of the Madras Presidency since 1800.

65. A. F. Cox—Manual of the North Arcot District, 1881.

66. T. J. Maltby—Manual of the Ganjam District, 1882.

67. H. Le Fanu—Manual of the Salem District, 1883.

68. Macleane—Mannual of Administration. Madras, 1885.

69. Sir A. J. Arbuthnot—Sir Thomas Munro—Selections from Minutes and other official writings. 1886.

70. M. Gopala Krishna Chetty—Kurnool District Manual, 1886.

71. F. A. Nicholson—Manual of the Coimbatore District, 1887.

72. An Account of the Kurnool District, 1889.

73. G. Watt—A Dictionary of the Economic Products of India, 1890.

74. G. Watt—Pamphlet on Indigo. 1890.

75. Report of the Agricultural Commission, 1888.

76. Sir George Birdwood—Industrial Arts of India. 1889.

77. T. H. Holland—Preliminary Report on the iron ores and iron industries of the Salem District. 1892.

78. Baden-Powell—Land Systems of British India. Oxford, 1892.

79. Srinivasa Raghavaiyangar—Memorandum on the Progress of the Madras Presidency for the last forty years. Madras, 1893.

80. Voelcker—Report on the Improvements of Indian Agriculture. Calcutta, 1893.

81. A. O. Hume—Agricultural Reform in India, 1899.

82. Report of the Irrigation Commission, 1901-03.

83. Proceedings of the Madras Legislative Council, 1905-08 *re* Madras Estate Land Bill.

84. Logan—Manual of the Malabar District, 1906.

85. Madras Takkavi Manual, 1912.

86. C. J. Hamilton—Trade relations between India and England, 1600-1896. Calcutta, 1919.

87. J. N. Samaddar—Lectures on the economic condition of ancient India. Calcutta, 1922.

88. Dodwell—The Madras Weavers under the Company—Indian Historical Records Commission, 1922.

89. M. P. Lohana—Outlines of the Economic History of India, 1922.

90. Cambridge History of India. 1933.

INDEX

Act V of 1843, 179, 261, 275.
Adam, W., 270, 286.
Adoni, 99, 165, 170, 198.
Age of Manu, 29.
Agnew, 125, 126.
Agricultural Department, 65, 252, 294.
Agriculture, 8, 9, 53, 66, 133, 180, 249.
America, 94, 96, 176, 178, 204.
American Colonies, 78, 90.
American Cotton, 97, 99, 100.
Amritmahal, 102, 103.
Anantapur, 26.
Anderson, Dr., 96.
Andhra, 34, 35.
Andioor, 105.
Angadipuram, 197.
Anjengo, 224.
Ankola, 9.
Arabia, 177, 186, 204, 205, 207, 254.
Arakkan, 240, 293.
Arcot, 8, 42.
Arni, 14, 170, 198.
Arudicarei, 30, 32.
Asiatic Bank, 193.
Avenashi, 104.

Baden Powell, 41, 46.
Bailuru, 195.
Balfour, E., 152, 155, 160, 161.
Bangalore, 165, 190, 194, 198, 221.
Bapatla, 116.
Barabaloti, 16.
Baramahal, 42, 84, 259, 261.
Barber, 274.
Barlow, 247.
Barwa, 199.
Batavia, 82, 203, 204, 205, 212.
Bayley, W., 30, 31, 32.
Beatson, Major, 128, 132.
Bednore, 199.
Belgium, 54.
Bellary, 3, 44, 45, 51, 57, 64, 71, 76, 80, 88, 89, 91, 98, 105, 115, 165, 179, 180, 194, 214, 220, 227, 231, 239, 241, 243, 263, 274.
Bengal, 28, 42, 50, 67, 76, 77, 78, 79, 81, 82, 85, 86, 203, 204, 205, 207, 213, 214, 215, 236, 287.
Berhampore, 176.
Bezwada, 199.
Bimlipatam, 199.
Birdwood, Sir George, 12.
Birmingham, 166.
Board of Revenue, 5, 10, 13, 18, 21, 29, 30, 35, 37, 42, 43, 46, 48, 50, 57, 62, 64, 67, 76, 79, 85, 87, 100, 122, 136, 143, 144, 148, 174, 179, 180, 218, 237, 249, 251, 252, 256, 263, 273, 286, 287, 288.
Board of Trade, 99, 168, 170, 174, 201.
Bombay, 3, 50, 82, 176, 186, 188, 189, 191, 204, 206, 207, 236, 244, 254.
Bourbon, 179, 205, 251.
Bourbon Cotton, 96, 97, 98, 101.
Bourdillon, 264, 265, 268, 280, 282.
Brazil, 96.
Buchanan, Francis, 10, 14, 52, 53, 55, 57, 60, 66, 69, 72, 83, 104, 106, 108, 111, 116, 119, 121, 136, 147, 151, 153, 155, 159, 160, 165, 186, 191, 216, 256, 259, 260, 261, 267, 268, 271, 272, 273, 276, 279, 281.
Bundelkhund, 244.
Bunder, 138.
Bunderlanka, 199.
Buntwal, 198, 199.
Burma, 179, 187.

Cadeem, 35.
Calcutta, 186, 221, 223.
Caldwell, Col., 129.
Calicut, 171, 191.
Campbell, 50, 85, 86, 101, 111, 155, 159, 262.
Canara, 3, 6, 9, 12, 17, 34, 38, 42, 48, 51, 58, 60, 66, 67, 68, 69, 81, 100, 106, 108, 109, 113, 151, 186, 188, 191, 198, 199, 201, 214, 216, 219, 221, 226, 242, 254, 259, 262, 263, 267, 271, 273, 276, 284, 293.
Candhully, 198.

Caniyatchi, 31, 34, 35.
Cape Comorin, 62, 154.
Carangooly, 196, 197.
Carnatic, 3, 6, 68, 77, 195, 216, 226, 283, 285.
Carnatic Bank, 193.
Carnatic, Nawab of the, 3, 4.
Causy Chetty, 24.
Cauveripak, 116, 119.
Cauvery Coleroon Anicut, 119, 128, 129, 130.
Cauverypuram, 198.
Ceded Districts, 3, 5, 7, 8, 15, 18, 35, 42, 43, 44, 49, 50, 69, 88, 89, 90, 97, 98, 99, 143, 150, 169, 170, 174, 186, 187, 191, 201, 214, 253, 260, 284.
Ceylon, 205, 206, 207, 288.
Chaplin, 44.
Chembrumbakum, 116.
Cherical, 121.
Chicabalicaray, 155.
Chicacole, 14, 164, 176.
China, 82, 90, 98, 202, 204, 205, 206, 211, 236, 282.
Chingleput (Jaghire), 3, 4, 7, 13, 15, 19, 30, 32, 41, 46, 52, 64, 66, 71, 76, 81, 82, 83, 116, 119, 132, 160, 167, 170, 185, 186, 196, 216, 219, 227, 241, 252, 257, 262, 273, 279, 283, 284.
Chinnamalai, 151.
Chinnamanaikkanpalayam, 165.
Chittoor, 226.
Cholas, 119.
Choughat, 191.
Circuit Committee, Report of the, 7, 42.
Cocanada, 138, 199, 241.
Cochin, 106, 171, 188, 191, 222, 223, 224.
Cochrane's Canal, 224.
Cockburn, 278.
Coimbatore, 3, 6, 8, 18, 24, 40, 42, 47, 55, 56, 57, 60, 66, 70, 71, 73, 82, 83, 88, 89, 91, 96, 98, 100, 101, 102, 104, 105, 106, 107, 110, 111, 112, 117, 121, 150, 151, 157, 160, 165, 179, 186, 188, 191, 196, 197, 201, 214, 224, 254, 258, 259, 260, 261, 264, 266, 272, 273.
Colangodu, 151.
Colombo, 223.
Conjeevaram, 119, 197.
Coompta, 199.
Coorg, 214, 215.
Corniga, 221, 223.
Cotamranze Venkataramiah, 280.
Cotton, A. T., 87, 114, 199, 227.
Cotton, C. R., 241, 268.
Cotton, Lt.-Col., 113, 127, 128, 12[illegible] 130, 132.
Court of Directors, 7, 44, 46, 79, 8[illegible] 86, 87, 96, 97, 145, 157, 168, 20[illegible] 218, 219, 234, 235, 236, 274, 289.
Covelong, 224.
Cuddalore, 78, 165, 201.
Cuddapah, 3, 30, 35, 43, 44, 45, 5[illegible] 51, 57, 63, 76, 77, 80, 81, 82, 83, 8[illegible] 88, 89, 91, 92, 105, 115, 116, 117, 12[illegible] 126, 136, 214, 220, 227, 242, 248, 26[illegible] 264, 274.
Cullen, Col., 76, 78, 79.
Cumbum, 116.
Cunningherry, 116.
Currency, Act of 1835, 238, 294.
Cutch, 188, 191.

Dalzell, 136, 248, 249, 262.
Damdupat, 138.
Deccan, 187.
Devipatam, 224.
Dharapuram, 112, 191.
Dindigul, 3, 32, 42, 69, 85, 88, 89, 11[illegible] 191, 227, 258, 267, 283.
Dodwell, 164, 172.
Dubois, 136, 140, 148, 149, 166, 25[illegible] 262, 264, 268, 279.
Dutch, 76, 168.
Dykes, 54.

East India Company, 3, 12, 75, 85, 9[illegible] 95, 121, 150, 168, 171, 206, 208, 21[illegible] 222, 247.
Egypt, 96.
Egyptian Cotton, 99.
Ellenborough, 54.
Ellis, 16, 30, 31, 32 34, 47.
England, 22, 34, 66, 78, 79, 85, 87, 9[illegible] 97, 98, 101, 147, 150, 156, 157, 15[illegible] 160, 161, 163, 171, 174, 176, 182, 19[illegible] 199, 206, 208, 209, 210, 211, 222, 23[illegible] 236, 244, 251, 255, 269, 277, 279, 28[illegible]

see United Kingdom and Great Britain.
Europe, 76, 80, 96, 99, 146, 164, 166, 170, 180, 195, 196, 202, 206, 211, 237, 282.

Fallowing, 60, 84.
Finance, Committee of, 93.
Finnie, 95, 96, 101.
Fisher, 73, 82.
Forbes, G. S., 47.
Forbes Watson, 238
France, 204, 205.
Frasor, 13, 125.
Fullarton, 8, 62, 67, 105, 147, 150.

Ganjam, 6, 35, 56, 62, 63, 65, 67, 71, 76, 81, 82, 83, 85, 86, 88, 89, 91, 94, 100, 160, 164, 177, 178, 190, 201, 205, 226, 242, 274, 280, 283.
Gairsappa, 9.
Georgia, 99.
Germany, 54.
Goa, 203, 254.
Godavari, 35, 59, 63, 68, 114, 115, 125, 128, 130, 131, 221, 241.
Gooty, 198.
Government Bank, 200.
Governor-General, 7, 10, 54.
Graeme, 44.
Grama Kurch, 20.
Grand Anicut, 118.
Grant, James, 7, 147, 176, 221, 233, 278.
Great Britain, 146, 177, 205, 207, 209, 212.
Gubi, 195.
Gudur, 165.
Gujerat, 106.
Guntur, 62, 63, 71, 89, 94, 104, 105, 110, 112, 116, 117, 127, 148, 150, 164, 185, 196, 199, 200, 201, 213, 214, 219, 220, 227, 232, 233, 242, 254, 268, 274, 281, 282, 291.
Guntur Famine, 285, 291.

Haiga, 108.
Hamilton, 185, 195.
Harris, 33, 39, 54, 260, 264.
Heath, J. M., 97, 98, 151, 152, 155, 156, 158, 159.
Hepburn, J., 13, 19.
Heyne, B., 68, 69, 72, 77, 147, 148, 149, 151, 152, 155, 159, 160, 170, 189, 190, 198, 250.
Himalayas, 154.
Hodgeson, 10, 16, 19, 30, 197, 248.
Honewar, 9, 224.
Hoole Elijah, 165, 265.
Horsley, Capt., 127, 128.
Howlett Duty, 254.
Hughes, 96, 97.
Hume, A. O., 134.
Hunsoor, 103.
Hyderabad, 199, 195, 198, 213, 214, 215, 218, 220.
Hyderabad, Nizam of, 3.
Hyder Ali, 3, 4, 9, 121, 135, 138, 259, 283.
Hyder Charles, 272.
Hyder Kalabam, 4.

India, 99, 100, 146, 149, 150, 152, 163, 205, 208, 210, 212, 213, 222, 223, 225, 237, 275, 279, 292.
Indian Iron and Steel Company, 158, 160.
Ingeram, 181.
Inland Transit Duties, 161, 178, 252.
Investment, 10, 97, 164, 165, 168, 171, 173, 174, 176, 177, 179, 181, 233, 262.

Jenmi, 48.
Jenmkar, 36, 37, 48.
Juggiahpetta, 198.

Kanam, Kanam pattam, 37, 38, 47, 48, 65.
Kangyam, 104, 105, 107.
Kanjamalai, 151.
Kareiyidu, 30.
Kathiawar, 244.
Kavali, 165.
Kellamangalam, 83.
Kindersley, 130.
Kistna, 63, 68, 76, 111, 119, 128, 132, 198.
Kollegal, 104, 121.
Kollengode, 191.
Krishna Deva Raya, 119.
Kudimaramut, 124, 125, 126, 127.

Kumeri, 60.
Kundapur, 9.
Kurnool, 3, 56, 58, 59, 60, 70, 111, 119, 214, 221.

Lancashire, 63, 90, 96.
Land Revenue, 5, 241.
Laissez Faire, 86, 198, 290.
Lees, D., 101.
Logan, 275.
Loom tax, 170.
Lyons, 166.

Macleane, 76.
Macleod, 6, 42, 54, 69, 177, 268.
Maddepollam, 181.
Madras, 103, 108, 157, 164, 165, 168, 181, 186, 187, 191, 192, 193, 194, 195, 197, 198, 201, 203, 205, 206, 211, 212, 218, 219, 220, 223, 227, 234, 235, 236, 253, 264, 283, 284, 285, 291.
Madras Bank, 193.
Madras Presidency, 3, 12, 13, 50, 57, 64, 76, 77, 78, 85, 86, 87, 113, 129, 160, 177, 179, 187, 189.
Madura, 3, 14, 15, 19, 39, 42, 60, 71, 73, 74, 82, 83, 84, 88, 105, 108, 109, 115, 116, 119, 125, 127, 163, 165, 170, 181, 191, 219, 220, 224, 226, 242, 254, 260, 271, 272, 273, 274, 275, 276, 279, 280, 281, 292.
Madurantakam, 197.
Mahon, 158, 159.
Malabar, 3, 6, 9, 10, 12, 15, 34, 36, 38, 39, 42, 48, 52, 56, 64, 65, 66, 67, 68, 69, 81, 89, 97, 106, 118, 135, 140, 150, 151, 152, 156, 157, 160, 181, 186, 188, 195, 196, 197, 201, 214, 216, 268.
Malacca, 177, 181, 203, 205.
Malay Archipelago, 177, 187.
Maldives, 204.
Malta, 96.
Malthus, 280.
Manchester, 101, 166, 177.
Mangalore, 9, 100.
Manilla, 176, 177, 181, 203, 204, 207.
Masulipatam, 14, 25, 36, 56, 63, 73, 74, 81, 83, 85, 88, 89, 98, 105, 127, 131, 163, 164, 170, 173, 177, 178, 181, 190, 193, 194, 198, 214, 218, 224, 268, 273, 280, 284, 285, 290.
Mauritius, 86, 87, 96, 179, 205.
Mayo, 249.
Mellor, 45, 51, 64, 263.
Metcalfe, Sir Charles, 12.
Metcalfe, 97, 98.
Minchin, J. O., 58.
Mirasi, 30, 31, 32, 33, 34, 35, 36, 39, 47, 48, 54.
Montgomery, Robert, 179.
Moreland, 275.
Moturpha, 5, 161, 171, 178, 179, 180, 248.
Mouzawar, 28, 29.
Mulliant Tyal Coties, 139.
Munro, 6, 8, 9, 15, 18, 19, 22, 24, 42, 46, 49, 50, 62, 80, 81, 89, 90, 122, 142, 144, 146, 147, 156, 216, 242, 259, 260, 261, 267, 277, 278, 283, 290, 293.
Mustacabol, 138.
Mysore, 9, 66, 102, 104, 105, 106, 110, 112, 147, 150, 176, 186, 187, 195, 196, 198, 213, 214, 215, 217, 260.
Mysore Wars, 7.

Nadum, 188, 192, 194.
Nagore, 190, 192.
Nagpur, 89, 97.
Narsapore, 221, 224.
Navigation Act, 286.
Negapatam, 190, 192.
Nellore, 3, 8, 13, 35, 42, 43, 44, 45, 51, 52, 54, 56, 58, 59, 60, 67, 68, 71, 77, 78, 80, 91, 102, 103, 104, 107, 109, 110, 111, 112, 115, 116, 120, 121, 165, 178, 190, 192, 196, 198, 201, 238, 239, 240, 274, 280, 284, 285, 289.
Newbold, Lt., 119.
New Orleans, 99, 100, 101.
Nicobar, 250.
Nicholson, 47, 54, 55, 70.
Nidy Cavil, 198.
Nilgris, 108.
North Arcot, 3, 4, 30, 32, 42, 43, 45, 50, 51, 58, 60, 71, 76, 78, 80, 82, 86, 106, 119, 125, 129, 160, 179, 194, 195 200, 201, 214, 224, 227, 239, 242, 244, 262, 273, 279, 284
Northern Circars, 3, 7, 13, 26, 35, 40, 41, 42, 46, 62, 81, 82, 83, 84, 85, 113, 115, 121, 150, 151, 165, 170, 174, 179,

201, 211, 216, 218, 224, 226, 233, 250, 263, 266, 279, 283, 284, 285.

Ongole, 105, 112.
Oopum, 88, 94.

Padiyal, 39.
Paisley, 160.
Palabhogam, 31.
Palni, 191.
Palnaud, 105, 111.
Pannaiyal, 39, 275.
Pasung Carei, 30, 32, 35.
Peddapore, 284,
Peddar, 238.
Pegu, 204.
Pelly, 45.
Periakulam, 116,
Periyar Project, 128.
Persia, 164, 177, 178, 186, 204, 205, 207.
Pharoah's Gazetteer, 47, 63, 77, 148, 150, 159, 177, 179, 264, 278, 280.
Place, 13, 15, 16, 30, 32, 34, 42, 106, 167, 169, 186, 196, 197, 248, 252, 259, 283.
Poicun, 151.
Ponany, 191.
Pondicherry, 197.
Poolatoor, 31.
Poona, 188.
Poonamalle, 218.
Poonganoor, 103.
Poracudis, 32, 33, 34, 41, 47.
Porto Novo Iron Works, 156, 157, 158, 159, 165.
Porto Novo Plough, 109.
Prince of Wales Island, 24.
Priyapattan, 198.
Punjab, 32.
Punjamahe, 9.
Pyacary, 32, 33, 34, 35, 37, 47.

Rajahmundry, 62, 63, 67, 68, 78, 82, 84, 86, 88, 89, 106, 114, 115, 127, 130, 131, 138, 160, 173, 181, 185, 187, 192, 213, 214, 226, 237, 241, 262, 274, 280.
Ramanakapetta, 151.
Ramnad, 46, 105, 165, 283.
Randall, 98.
Rapur, 165.
Rasingamangalam, 116.
Ravenshaw, 23.
Read, 33, 42.
Robertson, W. R., 57.
Robinson, W. 21.
Roxburgh, 62, 81, 82, 85, 87, 250.
Royal Asiatic Society, 190, 200.
Royle, Dr. 153.
Rundall, 127.
Russell, 273.
Ryotwari, 20, 28, 29, 42, 44, 46, 47, 48, 49.

Salem, 3, 42, 52, 63, 66, 71, 73, 74, 76, 78, 80, 81, 82, 86, 89, 96, 97, 101, 105, 106, 150, 151, 156, 157, 160, 170, 173, 179, 188, 191, 201, 214, 218, 219, 222, 242, 259, 273.
Samudayam, 30.
Samulcottah, 131.
Satyamangalam, 105.
Sea Island Cotton, 96, 98, 100.
Sendamangalam, 151.
Serah, 199.
Serfs, 33, 38, 39, 40, 48, 276.
Seringapatam, 139 191, 193.
Sheffield, 151, 159.
Shiyali, 165.
Sholingur, 253.
Short, John, 107, 108, 109.
Sidhout, 198.
Simpson, 100.
Sircy, 198, 199.
Smith, Adam, 252.
South Arcot, 3, 4, 30, 32, 43, 45, 63, 71, 76, 78, 79, 80, 82, 85, 106, 108, 109, 115, 116, 129; 132, 150, 157, 177, 201, 214, 262, 271, 272, 273, 284.
Stodart, W., 151.
Strachey, R., 110, 275.
Sumatra, 177, 203, 204, 205, 207.
Sunda, 9.
Surat, 188.
Swastiyam, 33.
Sykes, Lt. Col., 16.

Takkavi, 122, 123, 142, 143, 144, 145, 248.
Tambraparni, 114.

Tanjore, 3, 8, 10, 21, 32, 33, 39, 42; 43, 54, 60, 62, 63, 66, 67, 68, 73; 76, 89, 94, 105, 108, 109, 112, 114; 115, 116; 119, 125; 126, 127; 129; 130, 157, 186, 188, 191, 198, 201, 218, 219, 221, 224, 227, 232, 238, 241, 260, 264, 273, 275, 276, 284, 287; 293.
Teeps, 135, 138.
Temple, Sir, R., 137.
Thackeray, W., 5, 18, 36, 37, 69, 106, 216, 252, 254, 262, 289.
Thomas, 96.
Tinnevelly, 3, 32, 42, 43, 45, 50, 58, 60; 62, 67, 71, 73, 74, 78, 88, 89, 93, 94, 95, 96, 97, 98, 101, 105, 106; 108, 115, 117, 127, 132, 165; 191, 204.
Tippu Sultan, 3, 9, 10, 50, 102, 135, 147, 172, 179, 180, 193, 213.
Tiruvana Angadu, 191.
Tooni, 199.
Tranquebar, 204.
Travancore, 171, 188, 204, 215.
Travers, 103.
Trevelyan, C., 39, 113.
Trichinopoly, 3, 32, 40, 42, 43, 88, 89; 100, 106, 108, 109, 115, 117, 125; 127, 157, 191, 224, 227, 232, 239, 262, 271, 272, 273, 274, 276, 280, 287.
Tripasore, 78.
Tucker, George, 86.
Tunduvaram, 32, 34, 40.
Tungabadra, 114, 118, 131, 221.

Udayarpalayam, 115, 165.
Ullcudi, 33, 34, 40, 47, 49.
United Kingdom, 175, 204, 205, 208.

Valatoor, 191.
Varam, 33, 40, 41.
Veeranum Tank, 115.
Veesabudi, 30, 35.
Vellore, 78, 198, 226.
Venkatapalayam, 164.
Vizagapatam, 56, 69, 63, 66, 70, 71, 73, 74, 81, 83, 86, 88, 114, 223, 224, 226, 227, 242, 274, 291.
Voelcker, 53, 54, 55, 81.

Wallajahnagar, 194, 195, 197, 198, 219, 230, 253.
Warden, 140, 197, 216.
Watt, 77.
West Indies, 81, 87.
Weston, 175.
Wheeler, 90, 101.
Whitney, 99.
Wight, R., 54, 56, 61, 69, 73, 82, 92, 94, 100, 101, 210, 251.
Wilks, Col., 16, 23.
Woondy, 138.
Wynad, 3.

Yajamana Gramas, 31.

Zamindari, 20, 28, 29, 45, 48.
Zeedgars, 33.