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ECONOMIC ORGANISATION OF INDIAN VILLAGES

BY

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INTRODUCTION

BY

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BOMBAY

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FOREWORD.

Prof. Ranga's studies in the economic organisation of Indian villages constitute valuable contribution to our knowledge of the facts of rural economics. He shows a real in-sight into the conditions of rural economy actually obtaining in areas which came under his survey. The first volume of his studies throws considerable light on the family budgets of the peasants and labourers in the Circars. One of the main responsibilities of co-operators and other social workers who are engaged in the task of minimising unproductive rural indebtedness is to correctly assess the credit-worthiness of the borrowers and their repaying capacity. Without data to assess these factors, schemes for the amelioration of the indebted peasants and labourers will be faulty and speculative. The data furnished by Prof. Ranga are sure to be helpful in this task. The second volume deals with many interesting phases of our rural problems. The chapters on internal emigration, besides furnishing interesting reading about the economic conditions of British emigrants in the Nizam's Dominions, raise an important question of policy. The author's plea for the appointment of an emigrant officer in Hyderabad by the Government of India to safeguard the interests of the British settlers on the lands in the Hyderabad Dominions is well worth serious consideration. When the interests of Indian settlers in S. Africa, Brazil or Ceylon are accepted to be the legitimate concerns of the Indian Government, it is difficult to understand why the interests of emigrants nearer home should not be. The concrete proposals contained in this volume for the liquidation of prior agricultural debts and prevention of improvident borrowing by the device of a compulsory system of registration of rural loans at authorised rates

of interest are novel and deserve investigation. The evils of excessive fragmentation of holdings, absentee landlordism, defective irrigation and deterioration in cattle wealth, are carefully depicted and the remedies suggested are sensible and are well within the region of practical politics.

The chapter dealing with the place of women in our rural economy and the lessons drawn from village social life in Belgium in this respect and those dealing with famine-relief and cheap transport of food, manure and fodder, are suggestive and stimulating.

Last but not the least interesting portion of the book is that embodying a scheme of agricultural development organisations consisting of village and district agricultural panchayats and a Presidency Agricultural Development Board.

There is much in this volume which a Development Minister of the Province might usefully acquaint himself with. Prof. Ranga has placed co-operators and others interested in agricultural reform and rural re-construction under obligations to him by the publication of the results of his researches into a field of useful knowledge.

Farbat Bagh, }
3rd September 1928. }

V. RAMADAS.

INTRODUCTION.

The author in this interesting and instructive book on "Indian Economic Organisation", particularly deals with the necessity for and the advantage of emigration from the Andhra country into the Hyderabad State. It has, however, a far wider application and will certainly provoke thought which after all is the theme of every writer. India is essentially an agricultural country and 90% of the population depend on the land for their livelihood. As remarked by the writer, certain parts of the country are thickly populated while in others there are vast tracts cultivable but uncultivated and undeveloped. He rightly contends that little or no attention has been paid either by Government or by the public and the politician to the problem of internal migration; that no encouragement has been held out, to those who migrate from the Andhra province to Hyderabad, and that the disabilities such emigrants labour under are neither enquired into nor redressed. The Andras, chiefly the Kammas, Reddis and Telagas have not only a military tradition, but have always been skilled agriculturists. These people have not prospered in the Hyderabad State owing to the "inefficient and autocratic administrative machine", though their methods of cultivation are far more advanced than those of the local people. Emigrants are not only not encouraged by the village officials, but are oppressed. The author's investigation has been searching and thorough and shows that given proper help the colonisation by Andhras in Warangal District must be highly beneficial to themselves and will be of material advantage to the state as well. Ancient as the methods of these ryots are, still, they are decidedly superior to those of the Warangal ryots. They adopt deep ploughing and distribution of cattle and green manure, stocking and preservation of fodder, garden culture, fruit-growing,

etc. Some of them have realised the benefits of education and send their children to school. But what is needed is, that these emigrants require a Protector ; and the author rightly lays stress on the Government of India appointing one such officer to look after their interests. The author quotes from his statement submitted to the Royal Agricultural Commission, the elaborate suggestions made by him. They are worthy of serious and earnest study. The agricultural labourer has a long spell of unemployment during the period of non-cultivation ; and the author's suggestions about cottage industries, labour exchanges, weaving, etc., are on the right lines. Whatever political significance some people may attribute to Khaddar there can be no two opinions on its undoubted efficiency in providing food employment and clothing to the ryot and 'Satan cannot find idle hands to do mischief'.

The author's enquiry into the economic condition of the ryots of the three villages Uppalapad, Takkellapad, Kakumanu—is thorough and in the collection of materials he has taken considerable pains and interest. The statistics he has quoted after so much trouble appear to be accurate. They throw considerable light on the indebtedness of ryots, fragmentation of holdings borrowing on usurious rates of interest, standard of living wages, drinking, education, extravagance in dress, marriages etc. In this brief note, I must necessarily confine myself to a general summary of the author's observations. The general reader will be amply compensated by a careful study of the book and will find in it much food for thought.

'The system of labour exchanges' is certainly a remedy for unemployment. There have always been migrations of workers from dry villages to those under irrigation but the author correctly says, that these movements have not been methodical and that Government ought to make one of its officers responsible for the initiation and working of these migrations. England, France, Sweden,

and Norway have organised such exchanges. The Labour Commissioner and the Development Department in Madras must take up this question seriously.

Dairy Farming has been little developed, and the author deplotes the decline in the quality of the cattle in the villages surveyed by him. His suggestion for a cattle insurance scheme is sound.

'Back to the land' is one of the solutions for the middle class unemployment. The author suggested to the Royal Agricultural Commission, the levy of a penalty or punitive tax on absentee landlords to persuade them to take to cultivation. His view may be novel but certainly merits consideration.

The present method of the constitution of village panchayats does not commend itself to the author as he says it lends to factions; and he suggests 'election by lottery'—the latter was in the ancient South Indian Constitution.—How far this will be acceptable to the democratically inclined Public, it is not difficult to say. Parties are the necessary concomitants of democratic elections and the evils will disappear with time and the education of the electorate. The suggestion to create District Federations of Agricultural Panchayats for the purpose of agricultural development, Co-operative organisation, dissemination of information of produce, and prospects, sericulture, etc., is excellent.

As the author says, the facilities for transport of agricultural products are still poor. He rightly urges the development of roads and canals and the construction of new ones. Canal transport needs immediate attention.

On the question of fragmentation and consolidation of holdings, the author is not satisfied with the co-operative efforts made in the Punjab. His suggestions on the lines of those in vogue in Norway and Sweden are interesting.

It is a lamentable state of affairs that certain classes of women have not taken to development of

ottage industries. The author refers to Kamma women; but the evil is to be found much more among other classes, particularly Brahmins.

The question of improvement of irrigation is the most important of all questions facing the Government. It depends on the finances of the country. Large schemes must necessarily be undertaken by the Government ; but where ryots are prepared to undertake the financial responsibility for starting the scheme, the author wishes the Government to provide them with water. His detailed suggestions are worth considering.

The mass of statistics regarding village budgets furnished in the final chapters of the book is interesting reading.

The book closes with a re-print of the colonisation rules of H. E. H. the Nizam. In any scheme of land assignment the capitalist and the middleman must be eliminated and no assignment of large areas for cultivation should ever be made. The author notes that the Madras Government has not taken measures to secure plots for the aboriginal tribes ; and I may add for the *bona fide* landless cultivators in congested Districts.

The author deserves to be congratulated on the care, interest and energy shown in the collection of materials and compilation of the book, containing suggestions for the material advancement of the agriculturists. It is hoped that his next volume will be as interesting as the one I have just perused. To him it is obviously a labour of love. To the public it is a mine of useful information and though his survey is limited to a few villages, the observations and suggestions are applicable to other parts of India.

A. V. RAMALINGA AIYAR.

PREFACE.

I very much hoped in vain to be able to publish this volume long before the Report of the Royal Commission on Agriculture was placed before the public. Anyhow, I am not sorry, because, I am convinced that there is a great need for such intensive studies as I propose to place before the public in this series, in order to enable it to get hold of actual facts and to think out for oneself, a detailed policy of rural economic development. Moreover, all that the evidence gathered and the report published by the commission can do, is to centre the attention of the public upon certain problems of rural economics and we cannot get away from the fact that, however authoritative may be the results of the labours of such a commission, they are neither more nor less than dignified generalisations which need many qualifications. Such intensive studies as these are absolutely necessary at least as correctives to the politico-economic generalisations and impressions of such commissions. I admit that an intensive survey, made without any relation to the results already achieved in that direction elsewhere, is not very useful but a survey made on scientific lines and properly related to and balanced with other similar surveys is as much needed now as ever. In fact, in spite of the commission, we know miserably little about the rural economic organisation of our country and as long as there is so much ignorance there exists a great need for such surveys. This is the fruit of my work in the study of Rural Economic science, after I had left Oxford in 1926 July. Except for Chapters 5 and 6, Part II of this volume was completed in 1927 August. I was able to write the first part in 1927 May. But owing to some difficulties, this volume could not be printed much earlier. This delay has been, however,

utilised in correcting certain portions, adding a few more details and presenting the volume in a much more complete form than could have been possible in 1927.

The method of enquiry followed is just the same as that which was adopted for the purposes of my first volume. Since I was able to devote much attention to 'Farm Costs' in that volume. I thought it better to concentrate my attention on other aspects of 'Rural Economic Science', hence, the non-appearance of a chapter on 'Farm-Costs'. I think I have successfully demonstrated in the first volume the value of separate enquiries into the 'Farm Costs' and 'standard of living' of different classes of agricultural masses. I have taken those methods of work for granted and I have, therefore presented here, the results of my enquiry in a more general form than was possible in the first volume.

I attach very much more value to the first part of this volume than to the second, because I have been able to study an aspect of Rural Economics, which has almost escaped the attention of our economists. I believe that there is a great scope for agricultural development, if a policy of internal immigration, on the lines suggested in this volume, is adopted by the Government.

I am glad to note that Prof. P. J. Thomas, Ph. D. (London) has also realised the importance of research into agricultural economics. Although it is two years since I put forward, in my first volume, the plea that the State should organise research into agricultural economics, nothing in that direction has so far been done by the Provincial Governments in India. It is much to be deplored that even the Royal Commission on Agriculture has failed to notice the importance of this work, inspite of the fact that my enquiry into "Farm Costs" has shown the great importance and usefulness of such work. It is indeed surprising to find in India writers in economics neglecting to take stock of all that has already been achieved, before they formulate their own theories. I have been able to conduct a systematic

enquiry into the economic conditions of Guntur, Coimbatore, Salem and Nilgiris Districts on behalf of the Government of Madras and I hope that the reports submitted to the Government will soon be published.

Lastly, I like to draw the attention of the public to the difficulties of ryots of such places as Uppalapadu and Takkellapadu, whose lands do not properly fall into the famine zones, and are, therefore, not served either by major or minor irrigation works. Unless some such policy as is outlined here, is followed by Government, I am afraid there is not much chance for such unfortunate ryots to make a decent living.

I have tried my best to make use of some of the suggestions made in the review of the "Hindu" upon my first volume. Owing to the prohibitive cost of a map, I have chosen not to add one to this volume also. Mr. J. Sambayya, B.A., has kindly prepared the index and Errata. I must take this opportunity to express my feelings of gratitude to my friend of Oxford days, Mr. L.V.B. Chowdary, B.A. (Oxon), Bar-at-Law, who has assisted me greatly with his criticism and advice, while this book was receiving its final form. Mr. U. Krishnayya, B.A., has helped me in preparing the first part for the Press. Mr. G. V. Subbayya, a student of the Pachaiyappa's has helped me by accompanying me on my visits of investigation. I must finally thank Hon. Mr. V. Ramdoss Pantulu for having given me the Foreword and Diwan Bahadur. A. V. Ramalinga Aiyar, B.A., B.E., who has kindly contributed the introduction.

This book is dedicated to Dr. Gilbert Slater, D. SC. (Lon.) M.A. (Cantab.), Lecturer, London School of Economics, who gave me the first lessons in research and to Mr. V. Ramakrishna, M.A., (Hons.), B. SC. (Edin), I.C.S., the Dewan of Jeypore, who infused into me a part of his own unbounded enthusiasm for the schemes of economic development of India, and who guided me in my studies during the first year of my stay at Oxford.

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DEDICATED
TO
DR. GILBERT SLATER
V. RAMAKRISHNA

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Economic Organisation

OF

Indian Villages

(VOLUME II)

INTERNAL IMMIGRATION

CHAPTER I.

Introduction.—The object of the author in writing this part of the book, with special reference to the Hyderabad State is purely economic and it has nothing to do with politics. The author is not interested in criticising the H. E. H. the Nizam of Hyderabad or his politics. And though many people have already indulged in wild attacks on him and his administration,* the writer fears that they have done more harm than good, in that they could not persuade that ruler to better his administration. The present writer sincerely feels that the Hyderabad State and the Andhra country stand to gain immensely by Andhra immigration into the State and he will feel more than satisfied if his report can persuade the authorities to take the needed steps to further this beneficial immigration.

“They have a fair passage, and gain their new country : each takes his allotted place there, and works in it in his own way. Each acts irrespectively of the rest, takes care of number one, with a kind word and deed for his neighbour, but still as fully understanding that he must depend for his own welfare on himself. Pass a few years, and a town has risen on the desert beach, and houses of business are extending their connexions and

* St. Nihal Singh's articles in the “Hindu”, 1924—5. The publication of the ‘Swaraj’ on the H. E. H. the Nizam's Administration.

influence up the country." "His country and his government have the gain ; but it is he who is the instrument of it, and not political organisation, centralisation, systematic plans, authoritative acts."—Cardinal Newman.

Andhras can boast of glorious age-long tradition of colonising other parts of India. Most of the sturdy, brave and pushful soldiers of the Vizianagar Emperors who accompanied the latter on their invasions to the South preferred to settle down in the Southern Tamil Districts such as. Madura, Tinnevely, Salem, Chinglepet and Tanjore and busied themselves with bringing the recalcitrant local chiefs into submission to the Emperor, collecting the revenues, keeping peace and bringing waste lands under cultivation. Of the castes which played a prominent part in the Vizianagar wars in the Southern India, Kammas, Reddis and Telagas* figured as the most important. The people of these castes had not only military traditions but also equally noble traditions of cultivating land in the most skilful manner. Hence we find that the best land, *i.e.*, black cotton soil of these Southern Districts is now owned mostly by Kammas, Reddis and Telagas, the Telugu immigrants.

Andhras of the Ceded Districts and other dry parts have still got the same daring, enterprising and colonising spirit and habits with them and hence we find so many of their immigrants in the remotest parts of the Jeypore Agency and the H. E. H. The Nizam's Dominions, occupied almost everywhere with agriculture. The Andhra ryot is anxious to find out where there is plenty of land to be had cheaply and he is always on the lookout to be the first to seize upon land, if he can secure it either by applying or by paying for it within reasonable limits. The thirst for land of an Andhra ryot is insatiable and his keenness to jump at even a flimsy opportunity of securing cheap but fertile land is simply wonderful and commands our respect and admiration.

* Krishna Rava Viziam.

The human heart is everywhere the same and it always craves after something new, something adventurous, something glorious and yet very dangerous and risky. Well may George Louis Stevenson say. "The fame of other lands had reached them; the name of the eternal city rang in their ears; they were not colonists but pilgrims; they travelled towards wine and gold and 'sunshine' but their hearts were set on something higher. That divine unrest, that old stinging trouble of humanity that makes all high achievements and all miserable failure, the same that spread wings with Icarus, the same that sent Columbus into the desolate Atlantic, inspired and supported these barbarians on their perilous march."—Will O' The Mill.

The spirit of adventure and the habits of colonising other lands are present among the Andhra ryots but one wonders whether they are sufficiently strong as to further the needed colonisation of the under-developed and undeveloped lands of the Agencies and the Nizam's Dominions. It is because that the response of the Andhra ryots to the call of the undeveloped lands is unsatisfactory and is bound to be so as long as the existing '*laissez faire*' policy of the Government of India prevails that we cannot afford to look upon the activities of Government with as much contempt as Cardinal Newman did.

But unfortunately neither the Indian public nor the Indian Economists have noticed the great importance of and necessity for internal migration of ryots from congested parts of the country to the under-developed and undeveloped parts. Though the present writer gave a prominent place to this aspect of rural economics in the first volume, not even one Indian reviewer of his book has taken as prominent a notice of this question as it deserves. The Press and the public of India are so much enamoured of the South African Indian problem and the Indian Ambassador to Australia and the presents made by the Indian Representative to the Australian Prime Minister that they have failed to appreciate the urgency of this

problem of internal migration of ryots and workers. Not only did the Madras Legislative Council fail to recognise the urgency of this problem but also the Assembly has failed to take notice of the many serious disabilities under which more than two million Andhra and Mahratta immigrants into the Nizam's Dominions alone have been suffering for a long time. It is no exaggeration to say that these unfortunate immigrants are able to earn after all not much more than many emigrants and are subject to the same social disabilities as the latter, if not worse. This apathy of the Indian public to realise that the British immigrants into the Native States suffer from many serious political and social disabilities becomes glaring in its injustice when contrasted with the policy of the Government of India towards Emigration. Though there are only about half a million British emigrants in different parts of British Empire, the Emigration Act of 1922 was passed, which proclaimed that "assisted emigration of unskilled labour to be unlawful except for such countries and on such terms and conditions as may be specified by the Governor General in Council."* A Standing Emigration Committee was set up to advise Government on all major emigration questions. When the Government of British Guiana approached the Government of India for permission to recruit emigrants from India, the latter sent a Deputation charged with the following terms of reference :—

1. "The progress made in providing suitable land for prospective settlers and existing immigrants.
2. "The steps taken to supply them with materials and skilled assistance to put up residential accommodation and with loans for agricultural development and the measures instituted for improving the sanitary conditions, in respect especially of drainage and water supply.

*India in 1925-26, p. 229.

3. "What improvements, if any, have taken place in the political and economic status of the resident Indian community since the earlier Indian deputation* visited the colony in 1922?"

Not only is a similar Standing Committee needed to advise Government on all major immigration questions but also similar deputations shall be sent to each of the most important Native States to enquire into the political and economic conditions of British Indian Immigrants. But just because this problem exists under our *own* very nose, we behave just like the Magistrate in 'Oliver Twist' who looked all over his desk for it, without finding it, as the inkstand chanced to be immediately under his nose.

What we need is an immediate recognition of the great importance of this problem of Internal Migration. I propose to study the economic organisation of a village in the Palancha taluk of Warangal District of the H. E. H. the Nizam's Dominions. I hope to discuss the problems of economic development of the Jeypore Agency in the third volume, in addition to supplying more details about land, available for colonisation in the the Nizam's Dominions and other parts of Southern India.

*India in 1925-26, p. 234.

it costs at least Rs. 25 to take an immigrant worker and his wife and children and another Rs. 175 to maintain him for an year.

Koyas.—Koyas are a hill-tribe, speaking both Telugu and a dialect called 'Koya'. They are expert wood cutters and there is a local proverb which goes to say that a tree trembles at their sight. These Koyas have a leader for every hundred gudems or hamlets and Tirumala is the leader at Nellipaka centre. Among these people, adultery is punished by a heavy fine of Rs. 50 to be paid up by the guilty man. If a man belonging to another caste misconducts himself with a Koya woman, he will be severely beaten by the Koyas and the woman will be ex-communicated. Even the leader of the Koyas is subject to the same conventions and penalties.

A Koya guilty of theft is not only tried and punished by an established court of law but also by his community court. Hence cases of theft are very rare in this part of the country and the pilgrims from Guntur and Krishna Districts to Bhadrachalam marvel at the honesty of these people*

But Koyas are neither industrious nor thrifty. Most of them are unambitious and are supremely contented with their miserable lot. They have a poor idea of money-economy and so are unwilling to pay a tax or price or rent in terms of money. They are so immensely pleased and excited at the sight of money that they rarely grumble at the insufficiency of remuneration for their labour, though in practice it is ever so. They do not cultivate more than what they think is needed for their annual maintenance. And so they are often obliged to borrow cereals from ryots at 50%^o or 75%^o interest in summer and also in the transplantation season when labour must be paid. They pay away their debts not in money but in kind. They are irremediably addicted to

‡ See also Thurston's "Castes and Tribes of Southern India."

* But these so called civilised people are the worst offenders in not helping law to be enforced in their own Districts.

speaks much of the unhealthy condition of most parts of the country-side in this State that the population should increase by about 10 percent between 1891 and 1922, while the population of so unhealthy a part as the Agency has actually increased by 14·4 per cent.

People.—The Andhra cultivating castes of the Hyderabad State are Telagas numbering (462,188 in 1921), Kapus (747,849), Baliyas (33,364), Mutrasi (237,662) and Velamas (36,456), numbering in all about 1,520,000 or 1/8 of the total population of the State. Madigas and Malas who are the Andhra agricultural workers number 1,045,051 or 1/12 of the total population of the State. So the Andhra agricultural classes of the Hyderabad State form 5/24 of the total population of the State. In addition to these people, there are more than 200,000 Gollas, who are the Andhra shepherds of the State. The Andhra admixture in the population of the Warangal District is much more pronounced than in the State at large. Baliyas in this District number, 14,167; Kapus 284,294; Telagas 157,245; Velamas 22,426; Madigas 224,793; Malas 159,454 and Gollas 185,213, making a total of 1,047,492 or a little less than half of the population of the whole district. The Mahomedans in this district number only 133,050. Since there are no Marathas (who number 1,407,200 in the State) in this District and since the Lingayats who in the State number 687,539 are not directly interested in agriculture, it is not improper to assume that agriculture is practically in the hands of Andhras alone. It is very difficult to guess how many of these Andhra agriculturists have gone at some date or other from any of the Districts in the British territory. This District was at one time ruled over by the Andhras of Kakatiya dynasty*; hence such a great population of Andhras. But it is certain that many of these Andhra agriculturists can claim to have migrated from one or

* It is interesting to notice in this connection that Kammas, Reddis as well as Telagas claim to be the descendants of these famous Kakativas.

the other southern districts at some time or other. We are much interested in the question of how many ryots of what castes have gone to what parts of this District in the last decade.

Andhra Immigrants.—As we have observed in the first part of “Economic Organisation of Indian Villages,” Messrs. K. Narahari and K. Chandramouli, who are the agricultural graduates of the St. Andrews University have been gathering information about lands available for colonisation, so that they can help people desirous of migrating with necessary information. But unfortunately very little help can be gained from Government reports as most of them are based on incorrect and insufficient data. So we have to depend, for what little information we get, upon people who had toured through the State for finding suitable lands for colonisation.

There were two lists of “Areas available for colonisation, published in 1922 and 1923 by the Development Department of H. E. H. Nizam’s Government, and we gather from these reports that 10,20,099 acres are available for colonisation and that out of this area only 5,89,041 acres are cultivable land. In the Warangal District alone, there are 1,91,593 acres of land available for colonisation, out of which 1,57,293 acres are cultivable. Thus only 57·7 per cent of the total unoccupied land in the State is cultivable, as against 82·2 per cent of the Warangal District. Since there is a great preponderance of Andhras in this District and a large part of the uncultivated land is available for cultivation and most of the new immigrants are going to this District, it is much more important for Andhras to study the conditions existing in it than in other Districts of this State.

Poloncha Taluqa.—In 49 villages of this Taluqa, there are 63,840 acres of uncultivated land, out of which 59,343 acres are cultivable. There are 14 unrepaired kuntas* in 12 villages and one of these villages, (Ishvaraopet)

* ‘Kunta’ is a small pool of water.

which belongs to the Sanivarapupettah Zamindar has 16,610 acres of uncultivated land, out of which 15,515 acres are cultivable. There are 8 tanks in 5 villages and one of these tanks is unrepared. In addition to these there are 10 kuntas which are in some sort of working order. As many as sixteen villages have neither tanks nor kuntas and are entirely dependent upon rainfall for their cultivation and water supply. Ishvaraopet is only 50 miles from the Ellore Railway Station, forty-three villages have no other means of transport than a kutchia Road and five villages are within a distance of 16 to 24 miles from village road and one village is about 60 miles from a village road. Singareni Railway Station is only 45 miles from Poloncha and Kottagudem about 10 miles.

Accounts of Visitors.—Five ryots of Donepudi in Tenali Taluk have gone to the Warangal District in search of lands. They found a big piece of land, measuring about 300 acres and they almost settled its price. Then they imagined that they had already got possession of the land and so began to bargain with the people of Lingannapettah in Madira Taluk of Warangal District about the rents to be paid to them, the would-be land lords, in case that land were to be leased out to the local ryots. They demanded such high rents that the local ryots got frightened of the advent of these new exacting landlords. When they returned to that village with money necessary to effect the sale, they found to their surprise that the land had already been bought by the local ryots who preferred to pay a bit higher price and get the land to renting it from these foreign landlords.

Padala Venkata Subbayya of Mantenawari Palem in the Repalle Taluk went to the Warangal District, made arrangements to buy a large piece of fertile land in a village but returned as he was very much afraid of the red-tapism of the officers.

According to Venkata Subbayya, there is as much as 8,000 acres of land available for colonisation in Maddulapalle. There are two tanks under repairs which

can irrigate 1,000 acres if only they are repaired and kept in proper order. Even the non-irrigable land is very fertile.

In Ponnekal, Kondayagudem, Kommenepalle, there are found many scores of ancient wells in ruins which fact suggests that much of this land must once have been very intensively cultivated. There are also a few old tanks in repairs in these lands. There is an old anicut in ruins, which was constructed by one of the Hindu Rajahs, and Subbayya says that if it is repaired at a cost of Rs. 10,000 it can enable us to bring much land under irrigation.

There is another Muneru anicut, constructed about 200 years ago. If it is repaired, at least 10,000 acres of land can be brought under irrigation. This Muneru is a rivulet of the Krishna. The Muneru anicut is only six miles from Kambhammettu Railway Station. All the above mentioned villages excepting Kommenepalle visited by Subbayya are in Kambhammettu Taluk and are in the Khalsa or the State. Kommenepalle is under a Sub-Jaghiridar who controls it for his superior, the Jaghiridar.

All these villages are free from malaria. There is available a good supply of drinking water. There are no hills in this neighbourhood and the country is quite suitable for colonisation. Dry land can be had at Rs. 10 per acre and wet land at Rs. 25 to Rs. 50. Some dry land can be had for the mere asking.

The local ryots are not aware of our advanced methods of cultivation. For instance they want 16 Madras measures of paddy seed to broadcast in an acre whereas Guntur ryots find 8 Madras measures sufficient to transplant an acre of land. These ryots do not know the proper methods of squaring the fields. In spite of their backward methods of agriculture their land yields nearly as much as the land in Guntur and Krishna Districts. This may be due to the fact that there is a plentiful and free supply of dry leaves and other manure and a regular supply of water from the tanks.

Garla Zaghr.—It is a malarial tract and drinking water is supplied to all the villages in this Zaghir by the Bayyaram Tank. Subbayya complains that the Amin Saheb is all powerful in these parts and that ryots and others are obliged to supply him all kinds of provisions. That is why this big ryot of Mantenavaripalem has decided not to go to the Hyderabad State.

N. Rangayya of Chilumuru, and K. Gopala Krishnayya of Chavali in Tenali Taluk have also toured through the Yellandu and Poloncha Taluks of Warangal District, but they also complain that the chief obstacle in the way of colonising those parts is the corrupt and autocratic administrative machine.

Ever since the Motor Bus service between Singareni Collieries and Bhadrachalam has been organised, crowds of ryots have been going to Yellandu and Poloncha Taluks in search of lands from Krishna and Guntur Districts. But only a very few of them have so far decided to go and settle down in that country.

V. Nagabhushanam of Donepudi has kindly given me the following information :—

(1) *Lingannupettah.*—There is plenty of black cotton soil. There are two tanks in working order.

(2) *Annapareddipalle and Kondaretdicheruvu.*—These two places are not very far from Kambhammettu. The soil is quite ordinary but sufficiently fertile. There are no tanks in this neighbourhood.

There are plenty of local workers in these places but they do not know the proper methods of cultivation which are to be had in Guntur and Krishna Districts. There is no malaria in these parts. Land can be bought at Rs. 15 to 20 per acre.

(3) *Reddipalle in Manikota Taluk.*—There is about 60,000 acres available for colonisation in this neighbourhood. There is some land under irrigation. There is plenty of forest in this part of the country. Workers are in plenty. Land can be purchased at Rs. 15 to 30 per acre of dry land. There are some ryots, who

had gone from Guntur District in the last ten years and they are all very prosperous.

(4) *Garla and Bayyaram*.—There are many immigrants in Garla Taluk and all of them have made their fortunes by taking to agriculture.

All kinds of dry crops can be raised with advantage. The rainfall is much more heavy than in Ongole and Guntur Districts and the soil keeps moisture well. To set against all these advantages, there is the all important question of how to deal with the corrupt officers. Almost all these villages are within a distance of 15 miles from the railway.

Most of the Andhra immigrants who had gone to the Warangal District in the last ten years belong to the Reddi caste and many of these Reddis have gone from Guntur District. Kammas of Guntur, Narsaraopettah and Ongole Taluks are flocking in increasing numbers to this District.

Guntur Kammappettah.—It bodes well to the Guntur Kamma and Reddi immigrants into this country that the Kammas who had gone from Guntur Taluk should be able to construct a Pettah after their name in that important city, Warangal.

It is also a noteworthy fact that the advent of these people has already been marked by the enrichment of the city economy. Before these people had gone there, the people of Warangal had to depend for their vegetables upon potato and other vegetables which are dug out of earth and so had to experience great inconvenience. But these people brought their advanced agricultural traditions with them and so developed garden-farming in a few years and began to produce fresh and green vegetables of all kinds in sufficient quantity as to satisfy the needs of the whole city

Gollas and others who are interested in dairy farming have been buying vegetables so produced from these Kammas to market them eventually in the city.

Such land as is thus developed by these Kammas is demanded at Rs. 800 per acre whereas the ordinary land is paid only Rs. 10 per acre.

There is a Reddi in a village not far from Warangal who had gone there only five years ago. At first he got a grant of 100 acres of dry land, after bribing the local officers. Gradually he encroached upon the neighbouring forest and uncultivated land with the connivance of the interested officers. He now owns nearly 1,000 acres. He has made a fortune of it and he is anxious that many more ryots must go to this part of the country.

Education.—Most of the well-to-do immigrants have been managing to send their boys to study in the High School at Warangal. But there are not sufficient educational facilities in most parts of this District and so many of the ryots of the deltaic villages who have by this time learnt the advantages of and necessity for education are deterred from venturing upon immigration because of this deplorable lack of educational institutions in the H. E. H. Nizam's Dominions. This and the following information is given just to prove that there is much cultivable land; that there are many healthy tracts and that there are already many recent British Indian immigrants in parts of the Hyderabad State. The visits of these people are only a symptom of the great earnestness of Andhras about colonisation and their realisation of the necessity for emigration.

The account of a ryot of Enikipadu.—Our informant is a ryot of Enikipadu in Ongole taluk. He and three other ryots of the same Taluk have bought only a few weeks ago a piece of land, measuring 340 acres for Rs 2,400. They could easily have secured it for Rs. 1,800 but for the competition of some other prospective immigrants. So they paid Rs. 7 per acre. There is much uncultivated land which can be secured by applying for it and bribing heavily the local officers.

There is one immigrant family in Rimmanagudem ; two in Bayyaram near Dacharam; four in Aleru two Baliyas and two Kammas, who have gone there from Kopparti and Govindapuram, of Narsaraopettah Taluk and two from Gundampalle, near Dacharam.

In Rimmanagudem, there are yet 50 acres of unoccupied and uncultivated land; and in Dacharam 400 acres. But the immigrant ryots are unable to secure that land as the local Patels and Patwaris are opposed to them. The local people, both rich and poor, are prejudiced against the new ryots, whose methods of agriculture are strange to them and whose fearlessness and indifference to the local officers are so extravagant when compared to their own habits of submission and obeisance. So they thwart every effort made towards progress by these new immigrants and they are passively opposed to their progress and are jealous of their prosperity as Galsworthy's Devonshire farmers did.*

N. Kotayya of Daivalaravuru in Ongole Taluk applied for a grant of a portion of the unoccupied land of Rimmanagudem. He was granted that piece of land but the local Patel became jealous of his spirit of independence and somehow managed to get the grant cancelled. Kotayya took civil proceedings against the Patel who was supported in his high-handed action by most of the local ryots and went in vain as far as the Golconda Courts to secure justice. He lost through this affair as much as Rs. 500. It can be said with much fairness that a British immigrant finds it impossible in most cases to secure justice when he is opposed by the local officers and ryots.

It should be admitted at the same time that generally the British immigrants carry their much cherished

* 'A Feud' in Caravan by Galsworthy.

"Steer was the only farmer round about who grew wheat. Snip (the dog) had not liked, any more than his master that thin, spry, red-grey-bearded chap's experimental ways of farming, his habit of always being an hour, a week, or a month earlier than Bowden." P.731.

independence of spirit too far (which is, though very inadequate and unsatisfactory when compared to that of the English people, a thousand times better than that of the subjects of Hyderabad State) and so they often make it hot for the local officers and others. They have learnt in their British India how to secure justice against the unjust action of officers; how to proceed to Courts; how to deal with Government and how to fight out every question in dispute through Courts.

So they are not usually afraid of the local people, though they are soon made to realise that inspite of all their quickness and ability of going to Courts, justice is not to be had even at a high price. Yet the local officers and ryots are terribly afraid of these troublesome and independent spirited immigrants, who even take to blows if need arises. For instance, when an immigrant's petition for land was thrown aside by the Patel of Rimmanagudem, who beat one of the immigrants all the immigrants beat the Patel with the help of a few Dacharam ryots. They all escaped punishment as no proceedings were taken against them.

N. Kotayya of Daivalaravuru secured 16 acres in Dacharam and he has realised a nett savings of Rs. 3,500 from agricultural operations in the last five years. But he spent Rs. 1,500 on Courts; Rs. 500 on his marriage, Rs. 500 on jewellery and Rs. 1,000 on housing and cattle. The writer is acquainted with Kotayya from his boyhood, and can vouchsafe for his exceptional ability in agriculture. But he has involved himself in litigation—which has become inevitable to some extent—and so has not been able to extend his field of operations.

V. Krishnayya is a Kamma and has always been noted for his aversion for coolie-labour. He used to try to maintain himself with very great difficulty by hiring out his double bullock cart in Nidubrolu, Bapatla Taluk when he could have earned more by becoming an annual servant. Somehow and from somewhere the call of distant lands reached him and he went away to the

Hyderabad State. The ryots of these parts came to know of his phenomenal success only two years ago when he sent for his wife, as he needed her labour as well as her company. Now he has ten acres of dry land and during the last year he realised a nett profit of Rs. 600 from his land after maintaining himself and his cattle. He has built a nice house and a stable and bought 25 acres out of that 350 acres of Kanukunta.* He has to employ an annual servant in order to carry on his cultivation during the next year. He raised tobacco worth Rs. 300 in 4 acres, two candies of cholam worth Rs. 300 in another 4 acres, chillies, etc., worth Rs. 200 in an acre and left an acre on fallow. So he realised about Rs. 80 as gross-income per acre or Rs. 60 as nett income as against a similar income of Rs. 15 in Kakumanu and Uppalapadu.

It appears that if prospective immigrants apply for land belonging to the State or private individuals, of Kanukunta, giving some address in Hyderabad State, it will be possible to secure land. But if they go directly to that village, then it will be almost impossible to get land as the local people are afraid of them.

For every two or three villages there is a Jaghirdar who is very important in official circles. This officer takes a tip of about Rs. 200 to grant a large piece of land, while Patel demands Rs. 100 and Patwari about Rs. 30. Even land granted freely by the State costs at least Rs. 3 per acre for the immigrant. When cultivable dry land, cleared of forest and weeds, can be had for Rs. 10 per acre, Government land overgrown with forest and weeds is too dear even at Rs. 3 per acre.

Renting of land.—There are many big landlords in this District. Many of the Patels and Patwaries and most of the Jaghirdars have very big holdings and most of these people lease out their lands. If the lease-holder has his own cattle and wishes to maintain himself and

borrow from him and lend that money in his turn to Koyas at 24 to 36,° and make his living. The Patel of this village granted some land to Pakeerayya in the beginning when he was only a pauper and eventually Pakeerayya became rich through his own efforts. His son, Pattayya is now one of the most important ryots of this village. Borgham Pahad was then only a small village and there was not even one tiled building in it.

Spices, sugar jaggery and cloth were imported into this village, while castor-oil, ghee, cholam, cattle and wood were exported. Then there was a great difficulty in marketing the agricultural produce and in some years big stores of cholam were spoiled by long storage.

Prices of a candy of 400 Madras Measures.

Commodity.	20 years ago.	Now 1927.
Bengal Gram	Rs. 50	Rs. 80
Paddy	" 50	" 80
Cholam	" 50	" 80
Green Gram	" 50	" 80

These figures though not very accurate are intended to convey a general impression of variation in prices in the past 20 years.

Variation in prices.

Commodity.	20 years ago.	1926.
Two sarees of 6 yds.	Rs. 1½ to 1¼	Rs. 3 to 4
Two upper cloths	Rs. 1½ to 2	Rs. 4 to 4½
Ghee	Re. 1 per 1 Madras Measure	Rs. 3 to 4 per Madras Measure.
Cow and calf	Rs. 8	Rs. 25 to 40

At that time (1907) people had only earthen vessels for daily use but now almost all people including Koyas have brass and bronze vessels. Lakshmi Narasu, the late leader of the Koyas was a well educated person. His son Tirumala is rich and he undertakes contracts for

upon the mercy of their employer in securing the 20 acres which is promised to them. But we must recognise the fact that the local landlords will employ the immigrants in this fashion only until they have learnt the new methods of agriculture and so it is in the interests of immigrants to go in for land rather than employment.

CHAPTER III.

Nizam Nellipaka.—"Its crops were so heavy, and its hay so high, and its apples so red and its grapes so blue, and its wine so rich and its honey so sweet that it was a marvel to every one who beheld it and was commonly called the Treasure Valley"—Ruskin. "King of the Golden River."

Nizam Nellipaka is in the Poloncha Taluk of Warangal District and it belongs to the Sanivarapupettah Zamindar who in addition to this owns 82 villages, each of which has about 15 hamlets or gudems attached to it. This Zamindar has given power of attorney to the Ashvaraopettah Zamindar who seems to be very little interested in the proper development of this estate. The status of this Zamindar in the Hyderabad State is akin more to that of an Independent State in India than to that of a Zamindar in British India. These Zamindars of the State are rulers, in the true meaning of the term, of their domain, only subject to the ultimate control of H. E. H. the Nizam of Hyderabad.

However inefficient, and unjust may be the administration of such Zamindars, H. E. H. the Nizam is loathe to intercede in the matter, though he has the power to do so, in the interests of proper administration. Hence the ryots and others of these 83 villages and their hamlets which form the greater part of the Poloncha Taluk are subject to the autocratic and inefficient rule of the old Zamindar of Sanivarapupettah. It is said that

the present Zamindar has not visited his dominion in his life-time as his mother had a superstition that it was unlucky for him to do so. He lives in Ellore, a town more than 80 miles away from Poloncha Taluk and he lives upon his income.

Officers.—Parts of many of these villages belong to H. E. H. the Nizam and so both these rulers keep separate systems of administration in all those villages so shared. For instance in Nellipaka, there are two Patwaris, one for the Zamindar and another for the State. The Zamindar has a Mali (Revenue and Criminal) Patel, the State another; and both of them maintain another Police Patel. The Karkone (custom's clerk) belongs to the State's administration. There are Daruga (Ranger) and Tanikhidar (forester) to look after the administration of forests. This unnecessary multiplication of officers to perform the same functions is wasteful to the State and Zamindari and also to the ryots who may have to bribe all of them.

There are a few Revenue Inspectors, a Tahsildar, one Peshkar and a Girdawar and Gumastas to carry on the local administration, while there is a Dewan at Ellore to supervise over the whole administration. It is to be wondered how far all this machinery of administration tends towards proper development of the estate. It is impossible to bring witnesses to prove that every rumour is based on actual facts. But I venture to give an account of the following rumours with the hope that they may not be true at all. But if they are true, as the local ryots assert that they are, then it is very serious indeed and the Zamindari administration stands self-condemned.

When Mr. T. Balazeerao (now Diwan Bahadur) was the Dewan, the secrets of official corruption were discovered in an extraordinary way by the Dewan while he was on tour. Then he demanded the Mohetenad to deliver all the official records, whereupon the latter sent a telegram to the Zamindar and got the Dewan dismissed. The next Dewan, Mr. Anjaneyulu discovered that a big consignment of teakwood was floated on the Godavari by

merchants without paying for it but with the active connivance of the local officers. He reported the whole affair to the Zamindar who simply slept over the matter, as he was fond of the Mohetamad.

But what is worse is the way in which these Patels and Patwaries annoy and insult the ryots—both local and immigrant—and act most high-handedly on their own whims and fancies, almost with perfect impunity. The Patwaris are usually Brahmins and they are used to addressing Kammas and Reddis of their villages in a contemptuous manner. But when the immigrants demand that they shall be respectfully spoken to, these officers get wild and take vows of revenge. Because the immigrants are not so docile and anxious to offer bribes as the local ryots, the Patwaris try their best to thwart every effort made by the immigrants to secure land, wood, fuel, etc.

If the Police Patel and Patwari join hands in a scheme to bring some recalcitrant ryot to his knees, it is as sure as anything that such a ryot will be charged with a theft and will be imprisoned; beaten, hopelessly insulted and malignantly treated. It is very difficult for most of these poor ryots to seek a Court of law and it is almost impossible to prove the case against the guilty officers. The writer fears that there is no such a thing as a Habeas Corpus Act in the administration of justice. Again if such unhappy ryots find that a theft has been committed in their houses, the police will refuse to assist them in finding the lost property. In fact a very important Kshatriya immigrant and most of his relatives were arrested on a false charge merely because he did not care to pay undeserved homage to the Police Inspector. The bride-groom and a few others of Mohte in Poloncha Taluk were arrested only a few weeks ago (May) on the charge of attacking a head constable. It is true that both the parties received injuries but it is the police who first tried to frighten the crowd with all sorts of threats. Now it is feared that this Mohte ryot will be ruined by the burden of this litigation as surely as

the Kshatriyas. There are four immigrants in Nellipaka one of whom studied up to Matriculation, who are penalised by the Patwari and so they are unable to get a grant of the forest land.

The Patel and Patwaris collect (a) fire tax, (b) house tax, (c) Ippa flower tax from the Koyas though none of these taxes are authorised by the Zamindar. In the actual collection of taxes, these officers manage to deceive the illiterate and ignorant ryots and Koyas by collecting more than what is due. Every Koya who has a wood-cutter's knife (everyone has it) has to pay a fee of one Rupee per annum to the Patwari. Whenever superior officers visit Nellipaka or some other village, the local Patel or Patwari or Police Patel will demand of the Koyas fowls, wild game, eggs, etc., for no price.

These local officers again demand much more straw and hay than is demanded by their superiopr officers from the local ryots. If any of the ryots fails to respond to their demands he will soon be visited by the effects of official wrath. Again if a superior officer needs paddy and gets word that a particular ryot has it in store, he compels the ryot to sell it to him for a very low price. Whenever a Patel or a Patwari needs the Katchadam or a two bullock cart of any ryot, the ryot must supply it, sacrificing his own convenience.

When Chundu Krishnamma, an enterprising Kamma immigrant from Samalkota in Godavari District introduced the culture of sugar cane and began to manufacture jaggery, every officer demanded such heavy gifts of it on every occasion that he was obliged to stop the manufacture altogether. The machines used in the manufacture of jaggery are still to be seen in the Tekula Gudem of Nellipaka, a standing monument of the effects of official corruption. Such are some of the bad practices perpetrated by the officers and as long as these officers persist in such practices, not many more immigrants will be induced to go to the Hyderabad State and the existing immigrants will have to suffer immeasurable

and unimaginable wrongs at the hands of such corrupt, and inefficient officers.

Almost the same abuses have been prevalent in the administration of British Agency but the Government has at least realised that they should be put a stop to and it has begun to busy itself with redressing the wrongs of the people and stopping the official corruption.*

Agricultural Methods.—Nellipaka proper has not more than one thousand people but there are about three thousand people in the 18 Gudems in this mauza or ayacut of the village. This village and Golla Gudem are on the bank of the Godavari while the other Gudems are within a distance of five miles from the river. Of these 3,000 people, Koyas number as many as 1,800. Of the 3,000 acres of cultivated land 1,000 acres are under irrigation and the rest is under dry crops. The Zamindar gets a land revenue of Rs 2,000 from dry land, and. Rs 6,000 from the wetland, while the State gets Rs. 2,000 from its lands.

Koyas are the agricultural labourers of this part of the country and they are, by their up-bringing, primarily wood cutters. So they are not at all efficient field-workers. The Telagas who had gone to Nellipaka and the neighbouring villages about 100 years ago emigrated from the less well-developed parts of the Godavari District and so did not introduce any skilful methods of agriculture. Koyas gradually learnt the methods of culture from Telagas as best they could and the few Kammas who went to Nellipaka about 40 years ago were not able to introduce their methods of culture, if at all they had any, owing to the opposition of Telaga ryots and Koyas.

The Telaga and Kamma ryots of old did not know the seed-drill, and the transplantation process and it was Chundu Krishnamma of Samalkot who introduced those methods into this neighbourhood. Though seed-drill was not universally adopted in all these villages, the transplantation process was adopted by every one for the

*Agency Standing Orders of the Agent to the Governor in Ganzam.

culture of paddy. Though Krishnainma showed the possibility of raising sugarcane, his experiments with the manufacture of jaggery were not commercially successful owing to the corruption of officers and so its culture has not been attempted again by any other ryot of Nellipaka or in Poloncha Taluk.

The local ryots do not know the advantages of deep ploughing and so their cholam, which is the principal dry crop, has only surface-root system, the consequence of which is the tendency for cholam plants to fall to the ground at even a weak attack of winds. Because the soil is so fertile and moisture is available in such abundance while the sunshine is most satisfactory, the plant reaches a height which surprises even the Palnad ryots and this affects the yield adversely. To prevent plants from falling, ryots tie five or ten plants into a podulu by a string entailing thus much waste of labour and the death of many plants. A Brahmin immigrant from Pedaravuru in Tenali Taluk found that his cholam plants did not show the tendency to fall and so he did not need to tie 'podulu' because he ploughed his field well and deep. Pati Pattayya a local Kamma ryot who is in very prosperous circumstances, is going to try this experiment in one of his fields and if he finds it successful, this beneficial method will find general adoption resulting in much economic gain to the village and its neighbourhood.

The ryots in this part of the country have not realised the advantages of a cattle-shed and so they pen their cattle as they do with their sheep. They are not aware of the fact that manure, when it gets dried up after exposure to sun, loses much of its manurial value. They keep their cattle in the same pens which are quite open to the sky for about a fortnight and they have to dig out the manure in those pens (for it has been grounded into earth) in order to cart it to the fields. But often they use all this manure for about an acre or two and so over-manure such land and suffer from the bad effects. The immigrants are

not in Nellipaka long enough to demonstrate the proper methods of preserving and distributing manure.

These ryots have not yet realised the benefits of hay-stocking* and preserving straw. They still follow the traditional habit of depending entirely upon forests for their cattle-food. But their cattle suffer from insufficiency of proper straw and hay in both the rainy and summer seasons.

These ryots have not developed the practice of leaving a part of their holdings under grass so that their cattle can always have proper grass supply. Only one ryot Pati Pattayya has realised the benefits of this method and his cattle, fed in his grass field, are much stronger and better looking than any other cattle in the village. Only one immigrant, a Brahmin by caste tried to stack his straw and hay but the cattle of all other ryots simply devoured all his supply of straw and hay, since no ryot realised that he was causing a loss to this Sastri as no one was expected to have private property in those materials.

New Crops.—The local ryots do not know graden-culture, though they develop nice but small orchards. But Reddi immigrants of Reddipalem in Bapatla Taluk who stay in Nagineniprolu a village which is about 2 miles from Bhadrachalam, have developed it very successfully. Vasireddi Madhavayya has introduced the culture of groundnut and some local ryots are going to take to it.

The local ryots are not very anxious to introduce new commercial crops. They have been growing only cholam, chillies, onions, coriander and rice for a very long time. Though bananas and oranges can be raised very profitably and marketted at Bhadrachalam and Borgham Pahad, and though the Reddi immigrant have shown the possibilities of such culture, none of them has ventured upon it. Groundnut is very profitable to grow and green vegetables can be produced in large quantities all round

* Even in Tolstoy's Russia, hay-stacking was generally prevalent and thrashing machinery was in use. D. vil-Chap. XIX.

the year if ryots only realise how to rear them under a well.

The soil of this and the neighbouring villages is exceptionally suited for the culture of castor and though the few plants grown here are very high in stature and productive in yield, ryots have not found out castor's commercial possibilities. Not only is there a big and growing market for castor oil but also very profitable fibre can be extracted from the plants. The Jute Mill at Ellore demands an increasing quantity of this fibre*. Big plantations of castor can be developed with profit in this neighbourhood. Tamarind trees can also be grown in larger numbers along the banks of Godavari and tamarind or alcohol and tartaric acid can be produced from its fruits†. Since the forest is at hand and much wood is yearly burnt away, the ryots will do well to use such wood for fencing their holdings and thus preserve their respective shares of straw and hay from the ravages of trespassing cattle.

Cattle.—But these people are very weak and lazy. Many immigrant workers complain that the climate is not bracing and that there is something in the soil which makes them feel enervated and weak. There may be something in this but the chief cause for the general prevalence of lazy habits is the existence of malaria and other less dangerous fevers. So both the ryots as well as koyas are unwilling to work throughout the day and they labour only either in the morning or in the afternoon of any day. The necessity for driving the cattle to the forest to feed obliges the ryots to work them only during one part of the day. Hence a pair of bullocks can cultivate only 4 or 5 acres in this region as against 20 acres in Guntur District.

* Note on the extension of cultivation of fibre plants in India. Published by the Agricultural Research Institute, Pusa.

†No. 153 Bulletin of Agricultural Research Institute, Pusa.

Until very recently ryots paid very little heed to proper methods of agriculture as they believed in the greater commercial possibilities of cattle breeding. Pati Pattayya said to me that while his cattle brought annually at least Rs. 400, he was just able to get from his lands grain enough to last him only for an year.

These ryots tend their cows only for their calves and ghee. Most of them sell their ghee to merchants of Bhadrachalam and Borgham Pahad. They drive their calves, cows and bullocks for sale to *Parnasala*, where cattle-dealers from Southern India, Central Provinces, Bombay Presidency and Baster Agency meet to buy and sell cattle. Gajula Kondayya markets some of his cattle in Kurnool, Nandyal and Markapur of Kurnool District and in a few places in Nellore District. Sometimes the Nellore and Kurnool merchants also go to this part of the country to buy cattle. A pair of ordinary bullocks cost about Rs. 100. They are of small size but are very efficient for draught purposes and have a great capacity to walk fast and pull heavy weights over hillocks. Cows of this country are also very small. There is what is called 'Rani' or Queen cow which leads the herd; prevents any one from going astray and avoids wild animals. If a ryot has a large number of cows, then he has a servant to look after the calves, and another, to look after the Cows. Almost every such ryot has his own breeding bull, but it is not chosen as carefully as it ought to be.

One of the calamitous results of the neglect of these ryots to store straw and hay in anticipation of bad seasons or bad years was the hay famine during 1924. To make matters worse, cholera broke out and worked dreadful havoc on cattle. The result was that it became impossible to bury the dead cattle and most of the villages were stinking with smell. One ryot Gajula Kondayya of Nellipaka who had 2,000 cattle lost 250 of them in that ill-fated year. The writer shuddered at the sight of big heaps of bones everywhere in the forests of Nellipaka. Ryots could not

get any medical help from the State* and had to depend entirely on their own local quack doctors and charmers.

What is much more striking is the fact that not even one has thought of marketing those big heaps of bones, for surely much money could be realised. Even the trade in hides does not seem to have been developed in this part of the country.

Labour.—Almost all the Koyas are willing to be hired as agricultural workers and there are very few workers belonging to other castes. The inefficiency and unwillingness of these Koyas to exert themselves hard are notorious facts. So the immigrants need immigrant workers to work according to the methods of cultivation prevailing in Krishna and Guntur Districts. But there are so many immigrant ryots and so few immigrant workers that no employer can feel sure that his workers to whom he advanced money and provided housing will be in his employ for even one complete year; for a promise to pay higher wages and to supply greater comforts so influences the worker that he will quit the service of his former employer for that of a new one. But the new employer will be more on his guard and binds the worker by so many agreements that in the end the worker is a little better than a vassal or an indebted Koya. Thus this insufficient response to existing demand for proper labour tends to demoralise both the employers and the employed.

Unless an immigrant ryot has at least ten immigrant workers ready to labour for him at all times he cannot persuade the Koyas to work more regularly and more intensively. For Koyas will have to realise that the seasonal work of such a ryot will soon be finished by the immigrant workers even if they do not co-operate. But

*Even in Guntur District, this disease attacked cattle and though thousands died and many more were affected, the Veterinary officers were so insufficient and inefficient that not very appreciable help was rendered to the ryots. In Machavaram in particular the dead cattle were so many that they could not be buried and the smell was so horrible.

it costs at least Rs. 25 to take an immigrant worker and his wife and children and another Rs. 175 to maintain him for an year.

Koyas.—Koyas are a hill-tribe, speaking both Telugu and a dialect called 'Koya'. They are expert wood cutters and there is a local proverb which goes to say that a tree trembles at their sight. These Koyas have a leader for every hundred gudems or hamlets and Tirumala is the leader at Nellipaka centre. [Among these people, adultery is punished by a heavy fine of Rs. 50 to be paid up by the guilty man. If a man belonging to another caste misconducts himself with a Koya woman, he will be severely beaten by the Koyas and the woman will be ex-communicated. Even the leader of the Koyas is subject to the same conventions and penalties.

A Koya guilty of theft is not only tried and punished by an established court of law but also by his community court. Hence cases of theft are very rare in this part of the country and the 'pilgrims from Guntur and Krishna Districts to Bhadrachalam marvel at the honesty of these people*

But Koyas are neither industrious nor thrifty. Most of them are unambitious and are supremely contented with their miserable lot. They have a poor idea of money-economy and so are unwilling to pay a tax or price or rent in terms of money. They are so immensely pleased and excited at the sight of money that they rarely grumble at the insufficiency of remuneration for their labour, though in practice it is ever so. They do not cultivate more than what they think is needed for their annual maintenance. And so they are often obliged to borrow cereals from ryots at 50% or 75% interest in summer and also in the transplantation season when labour must be paid. They pay away their debts not in money but in kind. They are irremediably addicted to

† See also Thurston's "Castes and Tribes of Southern India."

* But these so called civilised people are the worst offenders in not helping law to be enforced in their own Districts.

heavy drinking and have practically no idea of making a fortune for themselves. They like to enter into contracts for work with the ryots by which they are entitled for a number of years to the agricultural use and sole enjoyment of a piece of land in return for the deforestation work they do on the land. They prefer this kind of payment for their labour to any other. Though they are not efficient as agricultural workers they are experts in hunting, cattle breeding and above all deforestation. At wood cutting they are paid a rupee for every tree they fell.

Koyas live in small separate Gudems and their houses are big huts, with thatched walls. They drink water from the neighbouring rivulets and tanks and only a few get water from the Godavari. So they are subject to attacks of dysentery, typhoid and other fevers. There is a fever called by these people "Koya disease" which attacks mostly children, at least half the cases resulting in death. It is more like itch than an ordinary fever and the patients look dreadfully pale, weak and pitiable. It is a contagious disease.

Malaria.

"The disease is less a killer than a sapper of vigour—though it kills vast numbers of its victims also.*" Sir Ronald Ross says: "In warm climates, intestinal parasites, dysentery and malaria probably have a most malign influence*." No wonder that most of the Koyas are dwarfs; looking very weak and sullen. They are lazy and stupid too. We must not lose sight of a very great and serious risk when we advocate the colonisation of this part of the State, as there is the danger of spreading this deadly disease to other parts of India which are so far free from it. Its effects are so disastrous as has been exemplified by the fate of Russia in which "the absolute dissolution of Russia is taking place at an appalling rate."† In order to further colonisation, to prevent malaria from sapping the strength of the immigrants and to check its spread to

* 'History and Malaria' from New Statesman, July 12, 1924.

† *Ibid.*

other parts of India, the Government of India and that of H. E. H. the Nizam must shoulder the responsibility of fighting this disease in the same way as the Italian Government has done to the great benefit of its people.*

While furthering the colonisation of these undeveloped lands, the administrators of the Zamindari and State must not forget that they are depriving the Koyas of their sole living (*i. e.*, woodcutting and wild grown vegetables) and are forcing them to become day labourers. They must safeguard the interests of these Koyas by reserving some land for them, without conferring on them the right to transfer or sell it.

Agricultural Expenses.—The Land Revenue per acre of wet land in Nellipaka ranges from Rs. 6 to Rs. 10. For transplanting seedlings, a worker is paid one Madras Measure of paddy or corn or two annas per day and usually 18 to 20 workers are needed for transplanting an acre. A worker is given one bundle of paddy crop of 2 feet Circumference worth about 8 annas for reaping on two days and heaping on one day. Thirty workers are needed to finish in one day the reaping and heaping the paddy crop in an acre. A Koya annual servant is paid 20 Madras Measures of paddy per month with a loan of Rs. 100 at 6 per cent interest or Rs. 12 per annum with food. A boy servant is paid 10 Madras Measures of paddy per month. But the immigrant workers demand at least Rs. 60 plus food per annum.

Drink, etc.—Both men and women of cultivating classes drink rather heavily. As has been observed, Koyas drink some drink prepared out of Ippa flower. As smoking is a general habit with men and women, tobacco is grown to some extent in house yards.

Andhru immigrants into this part of the country are many in number and many more are still migrating.

Economic Development. By B. K. Sarkar. "The campaign against malaria is an eternal enterprise for the people a part of the daily national household expenditure. Public Finance has to treat it as a permanent first charge on its assets and earnings".—An Italian Minister. p. 91.

V. Madhavayya gave me the following information. There are Andhra immigrants in Chintalapudi or Chintalgudem near Warangal; in Chatroy Zamindari near Tiruvuru (especially in Annapareddipalle and Bapanapalle) Bastar state; Ashwapuram, 4 miles from Nellipaka; Nagineniprolu; Dommagudem in Bhadrachalam Taluk; Parnasala; Charla; Mannegudem and its hamlet Anjaneyapuram; and Viswanadhapalle in Warangal. In Mannegudem, Telagas from Godavari District settled down about 60 years ago. In Viswanadhapalle, Jonnalagadda Lakshminarayana, once a teacher in Tenali, has secured a grant of some land.

Immigrants into Nellipaka.—Three Kamma families came from Samalkot about 30, 15 and 12 years ago respectively. Hundred families of Ayyerukalas followed Mr. Chundu Krishnayya about 30 years ago to Nellipaka but there are only 20 families now; of the rest many went away and some perished in the village. Two families came and settled down from Dopicherla village of Nidadavole Taluk and two more came about 10 years ago from East Godavari District. Three families came from Kolavennu in Bezwada Taluk about an year ago and two more families about six months ago. Three Kamma and two Brahmin families came from Narasari- pet, Bapatla and Tenali Taluks. N. Rangayya and Sreeramulu of the Bezwada Hosier Mills have gone to Nellipaka in last April and applied for 100 acres each.

The economic condition of these immigrants.—One Chundu Krishnamma died, leaving all his property to his son-in-law, Manne Jagannadham. The latter has become very prosperous by agriculture and by selling rice manufactured in his own factory. He employs Koyas, men and women to pound paddy into rice and pays them very low wages. Then he sells his rice on credit to the Koyas who are too lazy to manufacture rice for themselves.

(2) Pati Pattayya is the most efficient and prosperous Kamma immigrant. He has the best land in the village and cultivates it efficiently. He has set apart a

portion of his land for growing grass. Annually he is making a nett profit of about Rs. 1,000. Also he is an expert in cattle breeding.

(3) Sukhavasi Veerayya of Doppalapudi in Bapatla Taluk got a grant of 100 acres on payment of Rs. 300 for the forest growth. He bought about 20 acres of wet land for about Rs. 1,500 and wasted about Rs. 500 in litigation and other unnecessary expenditure. He has been from the beginning foolish and too ambitious and so brought calamities upon himself. Instead of staying in the village where running river water was at hand, he raised his houses near the Tekulagudem on low lying ground ; drank the impure and stagnant water of the tank and caught fever. His brother-in-law and his wife and two children died and he and his two wives just managed to escape death by hurrying into the Nellipaka village. But he has become so weak and poor that many people who see him are afraid to venture into Nellipaka.

(4) V. Madhavayya is from Chebrolu in Bapatla Taluk. He comes from a respectable Kamma family and he is very intelligent and enterprising. But he is extravagant and vain as are people of his class. 'When the goddess of fortune deserts a house, she usually, leaves some of her burdens behind.'* He bought 16 acres of wet land and got a grant of 100 acres of forest land for Rs. 300. But he wasted about Rs. 1,000 in the last three years in going to and from Bezwada and Nellipaka and maintaining his family in this village. But if he is a bit more economical in his expenditure and thinks a little less of his dignity, this is just the place for such an unlucky man to regain his past glory. If Nellipaka is so famous to-day in the Krishna and Guntur Districts, it is because of Madhavayya who is never tired of praising this village before his caste people wherever he may chance to be. It is to be pitied if he fails to make his much desired fortune while others who are lured to Nellipaka may become rich by being more humble before officers, more

* The son of Rashmani by Rabindranath Tagore.

docile among the local ryots, more economical in personal expenditure and more efficient and industrious in agriculture.

5. The two Brahmins; the two Kolavennu Kammās; and the two Devabhaktuni brothers have not yet been able to get any grant of land. But they have been cultivating wet land, rented at Rs. 5 per acre from the local ryots. The Devabhaktuni brothers have been so unlucky in their dealings with the local officers that they are thinking of leaving Narsapuram, a British village on the opposite side of Nellipaka, where political and social conditions are much more congenial to these English educated young men.

6. *Gajula Kondayya*.—Kondayya is a Telaga of Podela Taluk in Nellore District. His father-in-law and his father were trading in these parts with Koyas and other hill tribes in beads, ornaments, cattle, blankets, etc. He was ten years old, when he accompanied his father sixty years ago to these parts. He sold his wares to Koyas on credit and by demanding a cow or calf for each of the blankets sold to Koyas, he gathered a herd of cattle. He made quite a fortune by marketing some of them and their calves in Parnasala and Nellore and Kurnool Districts.

He had 2,000 cattle in 1924, out of which 250 died because of the outbreak of epidemic. In the last two years, twenty of his ablest relatives have died. Though he says that this place is not suitable for human habitation, he has brought his son-in-law and his family from Nellore District and given them property. But he has invested most of his savings amounting to about Rs. 4,00,000, in Nellore and Kurnool Districts as he feels it risky to invest his money in the State where Nazarana presses so hard upon the resources of a ryot.

He says that he has spent Rs. 80,000 in clearing the forests; in constructing Gudems (Tekula and Seetayamma Palem) and in developing his lands.

Even such an important enterprising and successful ryot has to be submissive to the Patwari. Though such a ryot is respected in countries like England, the Patwari and other officers of Nellipaka look down upon him. It is one of the reasons why Kondayya does not desire to settle down in this country. If only the State and the Zamindari learn to honour such really great ryots, their estates can attract many enterprising immigrants.

Forests.—There is about 8,000 acres of forest in Nellipaka mauza. This part of the country has never been surveyed and so exact figures are not available as to the extent of forests, arable land and land available for cultivation. Though the Forest Department of the State has accepted the British practice of dividing forests into reserved and ordinary forests, the Zamindari has not yet developed a proper forest policy. Though the local officers sell about 4,000 first class trees, the Zamindar receives money for about 2,000 trees only.

The ignorance of the local officers regarding the principles of forest-preservation is responsible for the reckless deforestation of vast tracts of forest land in the Zamindari. Such deforestation must necessarily tell upon the climate, rainfall and water-supply. The State must therefore decide upon maintaining at least a minimum area of land under forest before it thinks of further colonisation.

Forests and People.—As we have already observed, Koyas are charged a 'fire-tax' for gathering fire-wood from the forest; a 'house-tax' for utilising the timber, etc., in the construction of their houses; and Ippa flower tax for extracting a drink from forest growth. Ryots have to pay Rs. 1¼ for allowing their cattle to graze in the forest; one rupee for timber used in the construction of a cart and another rupee for fuel sufficient for one family. But in the neighbouring British Forests, a ryot has to pay only 2½ annas per annum per each grazing cow or ox. Moreover the borders between the Zamindari and State forests are not clearly marked and so ryots are often

obliged to pay for both and thus experience much inconvenience. Though ryots are expected to use whatever wood they prefer in the construction of their houses, they are not allowed to do so in practice unless they give bribes to the local officers. Otherwise they can use only inferior materials. But the root cause for all this official corruption is that they are underpaid.

Nellipaka Tank.—Nellipaka tank is second in importance only to the Kambhammettu tank in the whole State. It has a very large catchment area as there are three hills around it. It is on a very high level and if by chance it breaches, people say, that Nellipaka and neighbouring villages will be washed away into the Godavari. Old people of eighty years told the writer that even their grandfathers had not known a time when this tank had gone dry. Everyone agrees that it is very deep.

In olden days ryots did not know proper methods of cultivation of paddy ; nor did they know how to properly draw water from the tank. There used to be water always in Bheemudugundam, a small tank adjacent to this big one and people used to irrigate their lands with the water taken from this gundam. But this gundam drew its supply of water through an opening in one of the banks of the main tank. When Chundu Krishnamma came to Nellipaka 30 years ago, he realised the great possibilities for bringing much more land under irrigation, if only proper regulators were constructed on that opening. So he brought one Viswabrahmin called Alle Basavayya and this engineer constructed the regulators, which have ever since been of immense service to the ryots of Nellipaka. These regulators have enabled the ryots not only to use water for irrigation but also to minimise the wastage of water. Later on two irrigation canals were dug from the regulators.

Improvements.—‘Bode’ or branch channels, with separate regulators for each have not been constructed and so no control is exercised over the wastage of water. There are no special officers to regulate the flow of water from

the tank in accordance with the real needs of ryots. When a ryot raises the door to let water out, the ryot does not realise his duty to go and close the door soon after the needed water is taken. Hence the *Rallavagu*, which has become a perennial stream from the tank ; and into which the waste water flows from the tank.

The local Revenue Inspector estimates that at least Rs. 15,000 will be needed to carry out the minimum repairs but the Zamindar is not willing to spend so much money on them. Only three years ago, the local ryots offered to repair it at their own expense if the Zamindar would only allow them to cover the money spent in instalments from the annual collections of taxes from Nelli-paka. But the Zamindar would not hear of such a scheme.*

If this tank is properly looked after; if the regulators are properly worked and if the 'bode' or channels are kept in order there is every possibility of bringing at least 8,000 more acres of land under irrigation. The Revenue Inspector suggests that land shall be granted to immigrants exempting them from the land revenue for the first 8 years on condition that they shall bring their land under irrigation in five years and carry out the needed constructions and repairs on the tank. He thinks that in that case the Zamindar will be able to get after the first 8 years an additional annual revenue of at least Rs. 48,000 at Rs. 6 per acre of wet land.

Housing.—The ryots of these villages do not usually build permanent houses. Most of them erect temporary houses which resemble huts of the Panchamas of Krishna and Guntur Districts. These houses have thatched roofs and walls made of reeds, sticks and leaves. Many of them are in the habit of changing their abode from one place to another in the village or from one gudem to another and are not therefore eager to construct strong earthen or masonry walls which a permanent house may require. Timber, bamboos and other wooden materials are so cheap and abundant that many ryots do not even take

* The State has been following this policy for a long time.

Evidence of Sir Salar Jung before Famine Commission 1898.

trouble of carrying them from their old houses to their new ones. Almost all these houses are undivided halls while a few have each a small room in addition to the hall. Even the houses of people like Bhadrappa, the Patel Pattappa and Kondappa have only one room each, with thatched roofs and earthen walls.

These people store all their belongings on the 'matchu' a plank resting on the beams and keep the daily necessities in the room. These women seem to remember exactly where any particular article is placed on this 'matchu'. During night time there will be fowls and cocks sharing this room with men and women and the nuisance of the cocks crowing early in the morning can only be imagined.

Every house has a yard of $\frac{1}{4}$ or $\frac{1}{2}$ or $\frac{3}{4}$ of an acre and ryots raise all kinds of garden crops in it except the highly profitable orange, banana and other fruit crops. Indeed many householders make a few rupees by such garden crops while they hope to gain their living by cultivation. These ryots store their grain in specially constructed granaries. We find beans growing on all bamboos, around most of the houses in the village, thus lending an exceptionally romantic appearance. Of course most people grow these beans for productive purposes.

Every house is enclosed by a hedge, built of bamboos and the village presents some similarity to the yards of bamboo dealers of the Northern Circars. The streets are very narrow, scarcely 12 ft. in width and two bullock carts cannot pass each other through them, except at the cross roads. I am told that ryots build their houses so close to each other as they are afraid of wild animals. The streets are specially made so narrow to prevent wild animals from attacking cattle and carrying them away. All these streets are mere dusty earthen tracks.

Then and now.—Kolladamma, who is 60 years old (aunt of Lade Bhadrappa, the Patel,) has given the following information :—She has been in Nellipaka for the last 35

years. As her account has been confirmed by Gajula Kondayya we can safely rely upon her statement.

Most of the cultivators of these taluks in Warangal District originally came from the Northern Circars and many of them came to Poloncha Taluk as servants of officers. They gradually took to cattle breeding and so had to roam about all these forests. About 40 years ago, there was very little cultivation in these parts and the Lambadis and Koyas lived upon wild fruit, tubers, rootstocks and wild game. They had in addition plenty of milk to drink. They used to pay for their clothes and blankets etc., with money stolen from pilgrims proceeding to Bhadrachalam.

Twenty years ago there were only five families of ryots in Nellipaka. At that time there were not as many cows as at present. Women in those days used to spin at home and Panchamas wove the cloth in their own cottages. But now most of the people wear mill-cloth and no one spins at home. There were then very few carts in the neighbourhood of Nellipaka as there were not even cart-tracks running to different villages. People ate only cholam while most people have taken to rice nowadays. Merchants of Borgham Pahad used to buy wood, green, red and black gram at Nellipaka to export them in boats to Bhadrachalam and Rajahmundry. Wood was transported from the Nellipaka forests to the Godavari in hired carts which were available only at Bhadrachalam and Dommagudem. Thirty years ago, Nellipaka was flooded by the Godavari, when only a few people survived.

At that time women wore what were called 'Jampulu' in their ears, a big-nose ring, a small-nose flower anklets, etc. A pair of Jampulu cost Rs. 10. They wore only very rough cloths.

One Ramajogayya of Bhadrachalam was then the most important money lender in this neighbourhood. He lent money to ryots of Nellipaka at 6 to 9% interest, Pakeerayya of Nellipaka who came from Ellore used to

borrow from him and lend that money in his turn to Koyas at 24 to 36% and make his living. The Patel of this village granted some land to Pakeerayya in the beginning when he was only a pauper and eventually Pakeerayya became rich through his own efforts. His son, Pattayya is now one of the most important ryots of this village. Borgham Pahad was then only a small village and there was not even one tiled building in it.

Spices, sugar jaggery and cloth were imported into this village, while castor-oil, ghee, cholam, cattle and wood were exported. Then there was a great difficulty in marketing the agricultural produce and in some years big stores of cholam were spoiled by long storage.

Prices of a candy of 400 Madras Measures.

Commodity.	20 years ago.	Now 1927.
Bengal Gram	Rs. 50	Rs. 80
Paddy	" 50	" 80
Cholam	" 50	" 80
Green Gram	" 50	" 80

These figures though not very accurate are intended to convey a general impression of variation in prices in the past 20 years.

Variation in prices.

Commodity.	20 years ago.	1926.
Two sarees of 6 yds.	Rs. $1\frac{1}{2}$ to $1\frac{3}{4}$	Rs. 3 to 4
Two upper cloths	Rs. $1\frac{1}{2}$ to 2	Rs. 4 to $4\frac{1}{2}$
Ghee	Rs. 1 per 1 Madras Measure	Rs. 3 to 4 per Madras Measure.
Cow and calf	Rs. 8	Rs. 25 to 40

At that time (1907) people had only earthen vessels for daily use but now almost all people including Koyas have brass and bronze vessels. Lakshmi Narasu, the late leader of the Koyas was a well educated person. His son Tirumala is rich and he undertakes contracts for

felling trees in the forest and manages to make much money by exploiting his fellow Koyas. His wife is decked with jewels and looks like quite a civilised person.

CHAPTER IV

INTERNAL IMMIGRATION

Future Policy.

My enquiries into the economic conditions of the rural population of the Andhra country have clearly brought out the fact that most of the agricultural workers are unemployed or under employed for nearly half the year because of over-population and scarcity of work.* We have seen in the last three chapters that there is much cultivable land in the Hyderabad State available for cultivation; that the density of population of this State is much lower than that of the Madras Presidency and that the prices of land and of agricultural produce are lower in the State than in the Andhra country and that the agricultural methods obtaining in the State are much more primitive than in the Northern Circars. It is also seen that by the immigration of people like Chundu Krishnamma, Gajula Kondayya, the rural economy of the State is enriched while by the advent of Reddis at Warangal, Kammas and Reddis in the Warangal District as a whole, the productive capacity of the land and the agricultural methods of the ryots have been changed for the better. It must also be observed that this immigration of ryots and their workers from the Andhra country into the Hyderabad State, benefits immensely not only the Hyderabad State but also the Andhra country by minimising considerably its unemployment problem. Therefore it is to the mutual advantage of these two parts of the

* "The average of unemployment in areas of large estates may be estimated at 150 days per year." *The Agrarian Problem of Spain* by Fernando de los Rios in *International Labour Review*, June 1925.

country that immigration into the State must be furthered on constructive and progressive lines. The responsibility for the proper development of immigration of ryots and workers into the State lies not only upon the State but also upon the provincial and central Governments. The responsibility for finding proper sources of employment for the unemployed ryots and workers rests with the Madras Government, that for developing the agricultural resources, clearing the forests and bringing land under cultivation rests with the State while the responsibility for safeguarding the interests—social, economic and political of such immigrants rests with the Government of India. In so far as the proper discharge of their responsibilities renders it necessary the provincial and central Governments must have to interfere in the internal administration of the State. This kind of interference is considered to be consistent with the national integrity of such countries as Ceylon, South Africa, British Guiana.* And it cannot be inconsistent with the rights of H. E. H. the Nizam in view of Lord Reading's pronouncement that H. E. H. the Nizam cannot even claim sovereignty over the internal administration of his State. In fact the British Indian immigrants into this State have a much greater claim for help and supervision on the Government of India than those in countries like South Africa.

So I propose that the Government of India must appoint an Immigrant Officer in Hyderabad to see that the British Indian Immigrants are treated properly, and given the necessary facilities for securing, developing or retaining land. This Officer must be assisted by various Assistant Immigrant Officers, stationed at the most important centres, whose duty it must be to register all the names of the Immigrant ryots, to help them in securing

* The Government of Ceylon has to pay a rupee per each Indian immigrant to the Government of India whose representative has the power to inspect every estate on which Indians are employed. There is the Agent of the Government of India in South Africa. British Guiana had to satisfy the Deputation of the Government of India when it desired to have Indian immigrants.

land; to assist them in their dealings, with the local officers and when necessary to protect their rights against the tyranny of the local ryots, officers or jaghirdars.

In this connection, the following extracts from the statement submitted by the author to the Royal Commission on Agriculture suggest how much more ought to be done by the parties concerned in order to increase the stream of immigrants into the Hyderabad State.

“Special steps must be taken to attract capital and enterprising skill into regions where much cultivable land is under-cultivated or not cultivated at all. Ryots, pleaders or men with capital are not so enterprising as to migrate into the State and invest their capital on cultivation of such lands.

“Ryots of the deltaic villages must be informed of the particulars of the undeveloped regions of the country, the facilities for immigration created by Government, and the prices of commodities, labour and agricultural implements. The workers of the Ceded Districts, from among whom large numbers are annually recruited by the Assam Tea Estates, must be informed of the possibilities for obtaining in the State a few acres of land each and securing remunerative employment on the estates of landholders; and the steps taken by the Government for the prevention of malaria and other infectious diseases.

“Capitalists must be assured of a permanent tenure on the land granted to them and they must be given all possible guidance and information as regards the construction of buildings, purchasing of agricultural implements, selection of seed and raising of different crops.

“A proper system of Labour Exchanges must be organised to recruit sufficient labour to serve the needs of the landowners of these undeveloped lands. Proper precautions must be taken to protect such workers against being exploited by their employers. Such workers must be induced to settle down in those parts of the country more or less permanently by granting them a few acres

each* and by giving them cheap credit on easy terms.† These workers must be provided with houses not by their own landlords but by the Government in return for nominal rents. Co-operative stores must be started under the auspices of the Government with the co-operation of landowners.

“The ryots who are desirous of migrating and who are prepared to brave the risks of malaria, must be given first of all land either freely or at very low prices, payable without interest by a number of annual instalments, commencing after the lapse of a few years.‡ Secondly the Nizam of Hyderabad must be prepared to make advances of money to the settlers at a nominal rate of interest so as to enable them to bring their lands under proper cultivation* Thirdly settlers must be provided with houses and stables built by the State at its own expense and they must be charged only nominal rents for the first few years.

“Seed must be supplied freely to immigrant ryots for the first four or five years. Cattle and implements must be supplied to the settlers at reasonable rates and money recovered in annual instalments. No land revenue must be charged for the first few years and a light assessment can be made for the first twenty years upon the improved land. The settlers must be given assurance that taxes on land will not be arbitrarily raised as the passing whims of an officer or ruler may dictate. The subordinate officers such as the Revenue Inspector, Irrigation Section Officer, Tahsildar must be strictly prohibited from annoying the settlers and the question of tenure of land

* The Agrarian Problem in Spain: an abandoned or ill-cultivated land whether woodland or arable shall be given to landless workers.

† Workers are allowed in Denmark to repay the price of land in 60 years in annual instalments, while in Norway they are given an additional grant towards the construction of houses etc.

‡ This practice is to be had in Denmark with the special proviso that the worker must first of all pay 1/6 or 1/10 of the sale price of the land.

* In Canada, land available for colonisation is divided into homesteads of a certain area and each homestead is granted to one or a few farmers, after certain conditions of residence are satisfied. This practice prevents a few farmers from securing most of the land in any part of the country.

of the settlers must not be subject to the discretion of such officers. Every settler, when he so wills, must be allowed to leave his farm and sell it to a new settler.

"It is necessary to dig proper drainage canals, to drain the lands of the surplus water, and moisture and to clean the stagnant pools of water and thus to lessen the chances for the mosquito to propagate its race. Wells must be dug at the cost of the Government for purposes of pure drinking water. A proper net work of hospitals must be established in order to insure prompt medical help to people who may be attacked by malaria or other fevers. Deserving ryots and agricultural workers, desirous of migrating into the Native State shall be provided with free railway passage; so also when they desire to quit the state for good. There must be developed a proper network of educational institutions for the younger generation of settlers. Last but not the least important need is the proper development of transport facilities *

It will be seen, from the following account of the immigration policies of different countries that the policy I have suggested in my statement to the Royal Commission is not without precedents.

The author hopes to give a more detailed account of the most important steps taken by the British colonies to make the immigrant prosperous in his third volume of *Economic Organisation of Indian villages*.

U. S. A.:—The Government of the United States of America set apart £190,000 in 1920-21 to further internal immigration of population. Under the law of 1907 there was established in the Bureau of Immigration a 'Division of Information' with the purpose of supplying to immigrants regarding the conditions in different sections of the country so that their choice of a home might be intelligently made. So the Bureau of Immigration has

* It must here be noted that there are at present 4 buses running daily between Singareni and Borgampahad as against two only an year ago. The extension of the railway from Singareni to Kottagudem is a step in the right direction. It is to the credit of the H. E. H. the Nizam that he should so busy himself with the extension of railways in his State.

prepared a circular letter which it sends to Governors of States and others in authority, asking for the co-operation of the State authorities in securing information regarding any free Government land in any State ; prices, qualities of other lands for sale that would be suitable for settlers, information regarding climate, water supply, markets, prevailing crops and other matters that would enable a thrifty farmer to decide where he could most profitably invest his savings. "The Bureau through the Division of Information by thus co-operating with the states in getting information is taking an active part in the distribution of immigrants. It is proposed to furnish this information freely to associations of immigrants and to all inquirers who might be able to make good use of it. In 1912, seven bulletins were published to serve this purpose."

The Immigration Commission recommended that some department of the Government should take active measures to bring about internal immigration. "It would be extremely desirable to relieve the congestion of the cities and to improve the condition of the immigrants if those who are thrifty could be distributed to sections of the U.S.A. where they might invest their savings in farms and engage in agricultural pursuits."*

Ceylon.—The following extract is taken from my statement to the Royal Commission on Agriculture.

"As regards the question of inducing agricultural workers to move from districts where there is an over supply of workers, to districts where there is a shortage of workers, the experience of Ceylon is very instructive. As many as 125,585 workers emigrated from India to that island in 1925 and 45 per cent of them had been in Ceylon before. Out of the estate immigrants who were in Ceylon in 1924, 41 per cent had been in that island before. This, as the Madras Labour Commissioner wrote in 1923,

The Immigration problem pp. 325—30 by T. W. Jenks and W. J. Lank.

is the best possible test of popularity of emigration among the rural classes.”*

“The special facilities offered by the Government of Ceylon are the following:—

(a) Indian labourers are transported freely from their native villages to the estates on which they prefer to work.

(b) They are offered medical help, while they are on the estates and if any of them becomes permanently unable to work, he is sent back to his village free of charge.

(c) All possible kindness and consideration are shown to them while they are on their way from their homes in India to the estates or vice versa. For instance they are freely housed and fed in Colombo where they have to halt to catch their trains, leading to their respective estates.

(d) Educational facilities are afforded to them in many of the schools, though there is much room for improvement in this direction.

(e) Though there is a difference of opinion as to whether the wages paid on the Ceylon estates are higher than the local wages current in South India, everyone is agreed upon the fact that “the agricultural labourers emigrate to the Colony because they get steady work on the estates throughout the year while no such continuous work is available in their own districts.” The controller says: “On these estates, the Indian labourer is in a unique position, as work is guaranteed for him by law and in practice, for six days in a week if he chooses to work, while free hospitals are available if he is too ill to work.”*

(f) Legislation is proposed that Indian labourers should be paid their monthly wages on or before the tenth day of the following month.

(g) By recent legislation, it is proposed to pay a standard minimum wage to these workers.”†

Canada:—Tenures.

* Report of the Controller of Indian Immigrant Labour for 1925. published in July 1926.

† Ibid.

(1) *Cash*.—In all cases of purchase of land for cash the applicant is required to pay $\frac{1}{5}$ of the purchase money at the date of the sale, and the balance with the Crown grant free, within 30 days from the date of the approval of the application.

(2) *Occupation with right of purchase*.—Term 25 years ; rental 5 per cent on the capital value of land ; right of purchase after the licence has been held for 6 years ; provided the residence and improvement conditions are complied with. If the licensee does not acquire the free hold prior to the expiration of the term of 25 years, he has a prior right to a renewable lease.

(3) *Renewable lease under the Land Act*.—Term 66 years, with a perpetual right of renewable ; rental $4\frac{1}{2}$ percent on the capital value of land. Right of purchase at any time during the currency of the lease. Purchase of free hold may be made on the deferred payment system if desired.

Special Tenures: (4) *Cash*. (5) *Deferred payment under Special Tenures*.—Term such period as the Land Board may determine, usually 19 years ; licensee to deposit 5 per cent of the purchase money and there after pay the balance of 95 per cent by equal annual payments, together with interest at 5 percent, payable half yearly on all outstanding balances. The licensee has the right to pay off the whole part or any, of the outstanding money at any time during the currency of the licence.

(6) *Renewable lease with purchasing clause*.—Term may be for any period not exceeding 33 years in the case of settlement land and 66 years in the case of Crown land, with perpetual right of renewal for 33 years or 66 years as the case may be. Free hold may be acquired any time during the currency of the lease. Purchase of the free hold may be made on the deferred payment system, if desired.

Conditions of occupation and leases.—

(6) A certain amount of improvements is required to be effected on rural land purchased for cash or held under occupation with right of purchase or renewable lease tenures.

(b) Residence is compulsory for certain periods.

(c) Rebate of rent is given in many cases when the half yearly instalment of rent is paid within 30 days of its becoming due.

(d) Application for mortgage transfer and sub-lease of a Crown lease-hold under most of the tenures require the approval of the Land Board of the District.*

Much of the land legislation of recent years has been in the direction of preventing large areas of good land from being acquired or retained by a single individual. The Land Laws Amendment Acts of 1912 and 1913 went further in the direction of encouraging or compelling subdivision of land held in large areas.

The Land Board is constituted by the Commissioner of Crown lands for the District; three members nominated by the Governor General and one member elected by the Crown tenants of the District. Such Boards transact all business connected with the sale and letting, disposal and occupation of Crown lands and all matters connected with the management and control of public lands in their control.

Train the Immigrant.—Under the latest plan, the Federal Government of Canada will pay a cash grant of £ 16-10-0 for every boy brought out under the scheme, and while part of this money would be devoted to paying his passage, the balance would go to the provincial Government to help the cost of training the boys for an agricultural career. Each province which agrees to cooperate must set up and equip a training farm for the boys, and these would be used as depots to which the boys would be sent direct. The length of their residence at these depot farms would depend upon the aptitude of each individual for farm work and the demand for their labour from farmers. As openings occurred, they would be gradually distributed among farmers and the Federal government, through the inspection staff of the Soldier Settlement Board, would exercise continuous supervision.

* Canada year Books from 1900 to 1923,

PART II.

THREE DRY VILLAGES.

CHAPTER V.

This enquiry into the economic conditions of ryots of these three villages—Uppalapadu, Takkellapadu and Kakumanu was made between August, 1926 and February 1927 and the statistics concerning the agricultural and family budgets were gathered for the year 1925-26. The method adopted for gathering facts was the same as that accepted for the previous enquiry into the deltaic villages. But while I paid more attention in that enquiry, to the Farm Costs and standard of living of ryots, I have concentrated more upon general tendencies of the organisation of these dry villages.

Much interesting and fruitful knowledge can be gained if the results of these two studies are compared and contrasted. For instance, the questions of indebtedness, fragmentation; uneconomically small holdings, disinclination of ryots to work hard; and of panchamas to work as annual servants are to be found in operation with almost equal force both in dry and deltaic villages. The women of dry villages work hard in the fields while very few do so in the deltaic villages.

The general tendencies, which were found to be affecting the economic organisation of the deltaic villages in the Guntur District are observed to be equally prevalent in the village economy of Pedapadu of west Godavari District. This proves that my first study can be taken as a very safe guide to study the economy of the deltaic villages of not only Guntur District but also Krishna and Godavari Districts where Kammas, and Kapus are the landholding classes,

Standard of Living of Ryots.—The fourth chapter in the first volume of 'Economic Organisation of Indian Villages' is specially devoted to the study of the standard of living of ryots and so the following remarks are to be understood in relation to that chapter.

The kind of food consumed and the arrangement of 'Menu' are not much different from those prevalent in the deltaic villages. * The latest fashions in dress and jewellery, and in the ways and means of squandering money upon marriage and other ceremonies have a tendency to spread from the deltaic villages to the dry villages.

The introduction of the culture of tobacco and ground-nut has enriched unduly several big ryots of many villages which are dependant upon dry crops and these ryots have taken a fancy to marrying their young people to those of the deltaic villages. This tendency necessitates much inordinate expenditure upon marriages, dowries etc. The poorer ryots suffer much by trying to imitate these semi-Zamindari ryots.

But luckily the evil system of 'Pardah' which causes so much voluntary unemployment of women is not very much in favour in these dry villages and almost all women go to the fields either to work like other workers or supervise the agricultural operations. This phenomenon enables most of the small ryots to get on with their cultivation of 15 acres and less without a servant. Unfortunately more and more women are beginning to feel ashamed to own that they go to work in the fields.

Though many youngmen of the deltaic villages are taking a liking to town life and its concomitant evils of prostitutes and coffee-hotels, these ryots have not yet shown any such tendency to waste their properties.

The Kamma women of the deltaic villages have begun to spend much money upon too many and too costly sarees, bodices; soaps, scents and flowers but the women of these villages are not yet so advanced.

Most of the women of small-ryots of these dry villages still consume cholam, ragi or variga at least at one meal time a day; though the consumption of rice—a very handsome cereal but poor in vitamins—is becoming popular. Almost all the people in well-to-do families consume only rice. Unluckily it has become a necessity in Uppalapadu for small ryots also to consume rice at least twice a day.

Standard of living of ryots in dry and deltaic villages

	Deltas.	Dry.	H. L. Weavers. †	On the margin of decent standard of living.
Annual income of average ryot.	Rs. 194-5-3	Rs. 80-9-3	Rs. 64-4-7	
Cost of maintenance of an adult.	Rs. 108-10-7	Rs. 84-2-2	Rs. 50-7-0	Rs. 50-7-0
Cereals consumed by an adult.	Oz. * 19-23	Oz. † 20-24	Oz. 16-66	Oz. * 18-0
Total food consumed by an adult.	Oz. * 22-85	Oz. † 21-72	Oz. 18-41	Oz. * 20-25

There are 52 persons or the equivalents of 41½ adults in these 8 families. Each adult has an annual income of Rs. 100-15-6 and an expenditure of Rs 84-2 2. These eight ryots are able to save only Rs 698-5-0 or Rs. 87-4-6 per family or Rs. 13-6-10 per person. But two families had a total deficit of Rs 199-7-0 in their family budgets, while one family could not save anything at all, so only five families saved something and they are very rich. In the consumption of food, one family suffered seriously from under-feeding because it is too poor and contains too

*See Vol. I Chap. IV.

†See Chap. IX.

‡Economics of Hand Loom Weaving Industry by N. G. Ranga.

many children. All the other families fare satisfactorily in this respect and three get more than 23.0 oz per adult because cholam, ragi and variga which are cheaper cereals than rice are obtained in larger quantities and consumed more liberally.

Total Savings:—Amrataluru. It is estimated by Mr. S. Ramaswami that the 3000 acres of wet land cultivated by the ryots of Amrataluru yield 36,000 sacks of paddy (168 lbs. each sack), worth Rs 2,88,000 and Rs 60,000 worth of straw and sun-hemp. Out of such a total revenue of Rs. 3,48,000, he estimates that at least Rs 1,60,000 is spent upon the agricultural expenses and the maintenance of ryots, Rs. 20,000 upon oils, cattle-food and manure and Rs 10,000 upon Land Revenue and Rs 20,000 upon the clothing budget of ryots; leaving a surplus of Rs 1,18,000 per annum in 1926-27. If this calculation is correct, we shall get Rs. 39.5.4 as savings per acre of wet land in that village or Rs 25.10.5 per person per annum. But I am afraid Mr. S. Ramaswami has under-estimated the expenditure of ryots upon agricultural operations and their families. It will be surprising if this village can save even a lakh of rupees per annum. But even these savings are effected mostly by ryots who have more than 15 acres of wetland, while all the others are at very great pains to balance their budgets.

Uppalapadu:—Forty land holders of Uppalapadu whose family budgets have been investigated have got an annual income of Rs. 1,18,125 as against an expenditure of Rs 67,425. They own altogether 3,150 acres of dry land and so they got an income of Rs. 34.5.2 as against an expenditure of Rs 21.6.6 Of these forty ryots twenty seven have invested on the whole Rs. 1,38,200. But thirty three ryots are indebted to the extent of Rs. 63,000, of whom 20 ryots have their own investments. So the nett investments of these 40 ryots amount to Rs. 74,500 or Rs. 1862.8.0 per family. Only three of these ryots have less than 10 acres of land while as many as 22 ryots have 50 and more than 50 acres of land. So really well-to-do

ryots are able to save Rs. 12-14-8 per acre and to invest about Rs. 2000 each.

They have realised 617 candies of tobacco worth Rs. 59,849. Chillies (83 candies) worth Rs. 6,065; dry paddy (99½ Candies) worth Rs. 14,650, and Cholan fodder (1448 Cart loads) worth Rs. 14,480 during 1926-27. But the 1926-27 season was exceptionally favourable to ryots and what Mr. Darling says of the Punjab is worth remembering in this connection, so as to have a proper idea of the average productivity of dry villages. "It is usually reckoned that a cycle of five years will give one good year, one bad and three that are neither good nor bad. It is only in the good year that the ordinary small holder pays his way without a loan. In the bad, he will have to borrow for nearly everything he wants. Even in the middling year, he will have to borrow now and again perhaps to buy a bullock or marry a child. In these years, if he is careful, he may be able to pay the interest due on what he has borrowed before but it is only in a good year that he can actually reduce his debt." *

Labour:—When the employment available for average workers during normal seasons was taken into account, it was found that there would be employment for men and women for about 240 days in the year. But an average worker of the four families whose family budgets are given in the chapter on Labour got employment for only 169½ days or a little more than 5½ months in 1924-25. we would be on the safe side if we take the mean of these two figures as the average amount of employment available in such dry villages for men and women in a year. Then this figure comes to 205 days, which is not much different from that (231½ days) of the deltaic villages.†

Each person in these four Panchama families got an annual income of Rs. 49-4-11 and an expenditure of Rs. 48-0-1 as against the corresponding sums of Rs. 56-5-2 and Rs. 50-9-9 for an average person of a Panchama

* The Punjab Peasant by Malcolm Darling p. 27.

† Economic Organisation of Indian Villages Vol. I, p. 182.

family in the deltaic villages.* An adult of these four Panchama families was able to devote Rs. 53.13-0 per annum to his family expenditure while it was supposed that a Panchama or a Sudra of the deltaic villages who was on the minimum standard of living should spend at least Rs.57-1-11† Curiously enough an average adult of these dry villages gets 19.25 oz of cereals as against a corresponding ration of 18.89 oz for the deltaic Panchama. But whereas the latter got a little of pulses and meat, the former scarcely had any taste of them. So we are obliged to conclude that an average Panchama of these dry villages maintains himself on a lower standard of living than that of a deltaic Panchama and that his standard of living is often below the minimum of that of the latter.

As for unemployment, the Panchama workers of the dry villages are unemployed for nearly 5 months in the year, while those of the deltas are unemployed "for more than 3½ months in the year ‡ In the face of these facts it is idle to maintain, as Mr. Chenchayya has done§ that there is no serious problem of unemployment in the rural areas. I found in my enquires into the "Conditions of employment and Unemployment of Workers of Madras city" that there is widespread unemployment among the urban workers also§

It is the duty of the Government to tackle this great question of unemployment. Much of this unemployment can be minimised through the establishment of Labour Exchanges (i). Seasonal unemployment of rural areas is a serious problem and the seasonal demand for labour of certain localities can be met by the labour supply of areas which suffer from unemployment.||

* *Ibid.* p. 186.

† *Ibid* p. 189.

‡ *Ibid.* p. 182.

§ Lecture in Y.M.C.A. September 1926.

§ Mysore Economic Journal, May 1927.

|| Vol. I, p. 183.

There has already been such movement of labour from dry villages to deltaic villages and vice versa but not in any systematic way. For the proper movement of labour, Labour Exchanges are absolutely necessary. The French Exchanges placed more than two million workers in work in 1920 and the English Exchanges did the same, in addition to organising the Unemployment Insurance.* France, England, Sweden, and Norway have all organised such Exchanges, to deal with the unemployment problem of not only urban areas but also rural areas.

In France.—for instance “On the initiative of the Ministry of Labour State-Subsidized Departmental Exchanges have been established in nearly all departments. These Exchanges are under the control of the Central Office and in their turn control, the Municipal Employment Offices. In order to equalize the supply of and demand for labour between the various districts, six Regional Employment Exchanges, each comprising a certain number of departments, have been established. In order to facilitate the interchange of labour the Ministry of labour has made an agreement with the Railway companies by which workmen who have found employment through a public Employment Exchange are entitled, on taking up the employment, to travel at half the ordinary fare.”†

These Exchanges are subsidized by the State in France, Sweden and Norway, while they are maintained in England by the State itself at its own cost. In Sweden, government pays all the expenses of the Exchanges incurred on telephone, telegrams and correspondence‡ if these Exchanges are to be of any use at all for us, they must be established in every District by the District Board. The Provincial governments ought to subsidize these Exchanges, in addition to paying, as in Sweden, all

the expenditure on telephone, telegrams, and correspondence. Without a proper network of Exchanges, not much good can be done to labour in India.

Emigration:—Where it is impossible to provide work for all the surplus labour of one or a few Districts, one of two things must be done. The unemployed workers may be enabled to engage themselves on subsidiary industries or relief works started by the State or they may be persuaded to emigrate to other less populous parts of the country. As is shown in the first part of this book, emigration provides a rich source of employment for very many workers, provided government takes proper steps to see that they are helped in all possible ways. Indeed it is the duty of government to do so and it is much more cheap for government to encourage emigration in a systematic way than to organise relief works.

Subsidiary Industries and Relief works:—For those workers who cannot emigrate to other parts of the country work must be shown by Government. Even in such a highly industrialised country as England, a need is felt to organise such 'Home Industries' as "weaving, spinning, embroidery, pottery, leather, woodwork, hurdle, mat and basket making, making of brooms, of sacks, of strawropes, matting and wood-working industries, sugarmaking and jammaking" * In a Country where Mahatma Gandhi found that the villagers, who remained in the Villages, used to spend five months of the year, when agriculture was at a stand-still, in doing almost nothing,† there is a greater need for organising many more such Home Industries.

Even these industries cannot provide work for all the thousands of unemployed women in every Taluk. There are numerous men in every village who are suffering from the bad effects of unemployment upon their physique and morale. But unfortunately these unhappy unemployed masses have not yet realised that it is the duty of the State to provide them with work and

* Vol. I, p. 149 of Rural England by Montague p. 144 Fordham.

† Y. Sept. 15, 1927. p. 15

that it is due to the apathy of the public that they are suffering.

Every village has many "stagnant pools of labour"* and most of the employers are glad to encourage many workers to hang on to their villages by giving them poor-feeding now and then.

It is high time that the Government shall realise its responsibilities. Relief works are started in India only when a famine is declared to have set in after Test Works are opened. But it is also necessary to organise such relief works even when there is no famine, during those rainy and summer days when there is very little work to do in villages. House-Construction, road-making, canal-digging, tank-cleaning and brick-making are some of the many forms of work that can be created for the unemployed.

Cattle:—The stature and quality of cattle of the four villages under review has been on the wane in the last sixty years and the number of animals now maintained in every one of these villages has been decreasing for a long time past. † The reasons ascribed for these tendencies are that there has been a steady decrease in the pastures available for cattle and in the attention paid to cattle-breeding. Though the Nellipaka cattle are small in stature, their number has so far shown no tendency to decrease since the forests are still within easy reach of the village. But the prices of cattle of all kinds have risen in every place.

But unfortunately dairy farming has been little developed as a fine art. The Koretepadu ryots of Guntur District have, it is true, specialised in this industry but their example has not yet been copied by those of the neighbouring villages. As the Planters' Journal and Agricul-

* Minority Report of the 'Poor-Law' Commission, 1909.

† But it is observed that the number of bullocks, cows, she-buffaloes and young stock of a village in Coimbatore District has been steadily increasing ever since 1871. "Economics of a Coimbatore village" by P. V. Hanumantarao, published in The Journal of The Madras Agricultural Students' Union, December 1923.

turist says "until and unless the milking qualities of our Indian breeds can be improved by selection, it will be difficult, if not impossible to make cattle breeding pay, except in backward tracts where grazing is cheap and plentiful."*

Dairy farming will pay only when it is taken seriously and it pays better in Guntur District if it is developed as a subsidiary industry to Agriculture.

In order to develop this industry, there must be available plentiful and cheap supply of fodder. It is true there are many kinds of grass, growing wildly in the neighbourhood of Uppalapadu but not even one kind of grass is grown on a large scale and no fields are separately kept for a systematic culture of these grasses. Research into the ability of different kinds of grass and other fodder in enabling cows and she-buffaloes to give more milk has been carried on with some success by Dr. Harold Mann.† Much more has to be done in this direction. Moreover demonstration farms like the Saidapet Military Grass Farm must be organised in different parts of the country, where different grasses will be grown on field-scale and demonstrations must be held, for the sake of ryots, to show the beneficial effects of such grasses upon cows and she-buffaloes.

Till now, most of the ryots of Guntur District have been occupied with producing only ghee, curds and butter-milk though a few have begun to produce butter to supply to the many Englishmen, gathered round the Tobacco Works of the Imperial Tobacco Company at Chirala. Just as the Bengal Co-operative Department has organised the sale of milk brought from the neighbouring villages in Calcutta,‡ so also the Madras Cooprative Department must undertake the responsibility for finding the ways and means for enabling the Guntur ryots to market their milk, ghee or butter in distant towns.

* The Journal of the Madras Agricultural students' Union, March and April, 1926.

† Proceedings of the Board of Agriculture, Pusa, 1916.

‡ Journal of Students Union.

The Madras Government has made a great mistake in transferring the Ongole cattle from the Chintaldivi cattle farm to that of Hosur, because the latter place is much less suitable for the Ongole cattle than the former. It is indeed a great blunder to think that the Chintaldivi farm can be made a demonstration farm because it is more than forty miles away from the nearest railway station. Even the Lam Buffalo farm is five miles from the Guntur station. Whatever might be the motive of the Department of Agriculture in its past policy, it must at least decide to exhibit the results of its experiments at every exhibition organised either by its own officers or by the public. It will be very much better if Government can persuade rich land-holders like Messrs. J. Kuppaswami M. L. C. of Karamchedu; the Maharajahs of Venkatagiri, Pithapur, the Rajahs of Vizianagar and Bobbili and the various other Zamindars of the Andhra country to develop each a cattle breeding farm like the famous Kelmscott farm of Oxfordshire * "No one is so exalted that he will not be a farmer to the extent of investing his capital in horses, cattle, sheep, and pigs which may compete for the prizes at the Royal show or of going among them once in a while to see how they thrive; but this comparatively rare blossom does not always grow on the trees of unassisted agriculture" † Mr. Gilletti, I.C.S. Collector of Tinnevely has rightly said in his articles to the Statesman that an average Indian ryot is very unkind towards his cattle and a very hard taskmaster of his bullocks. ‡ He urges that much more land shall be left for pasture than at present. Though there are obvious difficulties in doing this in the deltaic villages, there can be no objection why his suggestion shall not be accepted by the ryots of dry Taluks. Many ryots of Guntur and Nellore Districts suffered heavy losses by the sudden death of hundreds of cattle during the 1925 and 1927

* Agriculture in Oxfordshire by John Orr. pp. 54-58.

† *Ibid.*, p. 56.

‡ Rural India December 1926.

Cyclones. A cattle insurance scheme, if started after the example of that of Mysore Government will help ryots in such crises.

Sheep and goats have decreased in their numbers to an extraordinary extent. Many of them died during the cyclones of 1925 and 1927. But the main reason why their number has fallen is the scarcity of grazing fields and the felling of forests. The demand for blankets made of local wool is still very great and that for the sheep and goat manure is still strong. The manufacture of blankets is still carried on merrily in Chandole and Ellore. The demand for the milk of these animals will rise as the manufacture of butter is developed. More and more people are taking to meat-eating and as economic conditions are bettered, people consume more and more meat. So there is a great potential demand for the bye-products of sheep and goat. Unfortunately it is not yet fashionable for Kammas to breed them but they have to take to this industry if they want to maintain their present standard of living. At the same time proper precautions shall be taken to prevent the owners of goats from letting their animals to spoil the crops of other ryots. *

Absenteeism of landholders:—It has been noticed that more and more landholders of the deltaic villages are leasing out their lands, finding it more profitable than to cultivate directly.† The same tendency is found to be in operation to an equal degree both in Pedapadu of Ellore Taluk, which is a deltaic village and in Kakumanu of Bapatla Taluk, which is a dry village. Absenteeism of landholders has not yet taken a deep root in Uppalapadu and Takkellapadu. Wherever there are many peasants who are obliged to take others' lands as a subsidiary work in order to balance their family budgets we find many landholders managing to lease out all their lands and lead a lazy life. But this tendency to become lazy people, leading a self-inflicted unemployed life and living upon

* Rural India, February 1927,

† Vol I, Chap. 2.

unearned incomes, will, if unchecked, produce not only many complex economic factors but also demoralisation among the peasants. In my written statement to the Royal Commission, I suggested that all those landholders who have less than twenty acres of wet-land or thirty acres of dry land, who have no other work to do in their own villages and who lease it out ought to be made to pay about Rs. 5 per acre as punitive tax, so that they can be persuaded to take to cultivation again. Only able bodied people are subject to such a tax.

Village Shops:—The village retail shops of all the deltaic villages whose economic conditions were studied in the first volume are run by Vaisyas. In Nidubrolu alone, there are a dozen shops, four of which are in addition 'Coffee-hotels'. They do on the whole Rs. 2,00,000 worth of business per annum and the shopkeepers manage to make about 25% profit, including the interest on their capital. But it cannot be said that all the things bought in a retail way by the people of Nidubrolu are worth only two lakhs of rupees, because many people buy all kinds of things including cloth in Ponur. So it is difficult to estimate the cost of retail-purchases of the villagers of Nidubrolu. Thurumella and Amrutaluru people buy most of their ordinary things in Tenali; sometimes from hawkers who go from place to place and often from the village shops. In the same way, Appikatla and Iteru people go to Bapatla and Ponur; Brahmanakodu people to Guntur and Nidubrolu; Uppalapadu and Takkellapadu people to Guntur, and Kakumanu people to Guntur and Bapatla. The general tendency now-a-days is to buy more and more things in the bigger markets where things can be had much cheaper than in smaller markets and villages.

Failures of crops and Relief works:—For the last four years, Ongole Taluk has been suffering from insufficient rain-fall and the consequent poor productivity of land. During 1926-27, the Mungari crops have been almost a complete failure; the sajja crop having failed completely

and the cholam crop yielding very poor quantities of fodder. But the Hingari crops *i.e.*, variga, maize and tobacco have completely failed. Since the ryots of this Taluk are dependent upon the local production of variga for their staple cereal and cholam fodder for cattlefood, they had begun to feel the stress of famine by the first of January 1927, when I was able to organise the Ongole Taluk Famine Relief Committee with the active co-operation of Messrs. D.G. Sastri and Vandanam ex M.L.C. After contributing a number of articles to the press on the general condition of crops and the ryots, the Committee was able to induce the officers to take up the question quite seriously. Mr. Duff, the Collector began his investigation into the actual conditions of things on the 17th January and he was most conscientious in his work like Kipling's Scott in William the conqueror. He invited the secretary of the Famine Relief Committee to tour with him so that they can mutually be benefited by one another's observations on the situation. This departure from the ordinary routine followed by many executive officers has more than justified itself in that the secretary came to realise the impartiality of such an officer while the latter was able to see that the Committee was fighting for redressing a real grievance.

On the 28th January, the Committee's deputation waited upon Mr. Vernon, a member of the Revenue Board who was sent to study the situation. Mr. Vernon was luckily persuaded to accept most of the suggestions of the deputation. At last the Committee had the satisfaction of getting almost all it wanted and so its routine work which proved to be very beneficial to the ryots was entirely left in the hands of Mr. D.G. Sastri who proved to be the best friend of ryots.

The Committee asked for a complete postponement of the collection of Land Revenue for 1927-28 but the Collector has used his discretionary authority and exempted most of the deserving villages from immediate payment.

The Committee wanted that Government should give concession rates for transporting straw from deltaic villages to the villages in Ongole Taluk and organise Fodder Depots' to sell fodder to ryots at cost price. The Government accepted the first part of its suggestion and so paid $\frac{2}{3}$ of the ordinary transport charges for straw. This concession has proved to be very advantageous to most of the ryots, tips to station-master and their staff notwithstanding.

The Committee requested the Collector that at least two lakhs of rupees should be advanced to ryots as "taccavi." He was most prompt in this respect. He appointed a Special Tahsildar to disburse "Agricultural Loans" and sent him to Ongole with considerable sums in hand. The Committee got hundreds of forms printed in the prescribed manner and distributed them among the ryots so as to avoid friction and loss of time. Though there were exceptional opportunities for taking bribes, it must be said to the credit of clerks and the Loans Tahsildar that practically no serious complaint was heard of. But many karnams managed to get tips even though the clerk of the Committee was closely supervising all the operations until the ryots were paid in cash. Through the generosity of the Revenue Department and Revenue Board and the energetic and prompt action taken by the Collector, Loans Tahsildar and Mr. Raghavan I. C. S. nearly two lakhs of rupees were disbursed among the ryots as "taccavi". This close co-operation between the Committee and the Government officers is again a departure from ordinary procedure and has been proved a success in practice. It must be noticed that there was no difficulty in distributing so many loans and ryots approached Government for loans most readily. Even the most antiquated formalities of the administration were not impediments because the Committee carried on widespread propaganda amongst ryots* Here is an instance

*The question of Royal Commission on Agriculture, asking for suggestions to make taccavi more popular.

to prove that taccavi loans can and will be popular provided there is hearty co-operation between the representatives of people and officers.

The Committee demanded that Test works should be opened and the Relief Works should be started' The Collector approached the Committee in a most reasonable attitude and explained to the Secretary of the Committee that test works could not be a success as there were not many workers ready to accept the paltry wage of 1½ annas a day allowed under the Famine Code. But every one saw there was real distress amongst labourers. Thousands had gone to the deltaic villages of Guntur and Nellore Districts and finished the transplantation of paddy in half the normal time for half the usual costs and everywhere there was unemployment and misery. Just at that juncture the Revenue Board rose nobly above its red-tape, by declaring that it was prepared to finance all relief works completely, started and finished by Local Boards before the first break of South West Monsoons. More than a lakh of rupees was spent upon these works and many of the unemployed were provided with work. Similarly relief works shall be started in every Taluk during seasons of unemployment and the expenses may be shared by the Government and Local Boards.

Lastly the Committee wanted that all those villages which suffer from insufficient supply of drinking water should be provided with wells, tanks and other sources of water supply. But not much was done in that direction thanks to the lethargy and poverty of our District and Taluk Boards.

"Fodder supply in Famine Tracts"* To supply fodder locally and to insure against famine 22 Fodder Societies were organised in the Sindgi Taluk of Bombay Presidency. In a village where such a society is started, every ryot who can pay and who produces Jowar crop is requested to pay 100 lbs. of kadbi or the equivalent price. Rich ryots may give donations in addition. This Jowar

* The Poona Agricultural College Magazine, December 1923.

is sold and all the money thus collected as admission fees is utilised for preliminary expenses. Ryots are requested to deposit all their surplus fodder with the society and take a receipt. The fodder before it is received is weighed by the society. In September or so, the deposit fodder is sold "at the option of the depositor and the amount realised is paid to him" less 10% taken by the society to cover expenses. "One of the objects of the society is to have a sufficient stock of fodder available in every village for use in times of scarcity". This fodder is lent to ryots at 40 to 50 % interest "In this way, by proper supervision judicious management, careful watching and timely disposal of the fodder and replacing the same, the society would be able to have on hand in a few years, its own fodder sufficient for the villagers for at least a year, available at the village itself,"

*Village Agricultural Panchayats**:—Every village must have a Village Agricultural Panchayat' not only to do all those things which are expected to be done by the few existing village Panchayats, established under the Madras Village Panchayats Act † but a lot more. Such a Village Agricultural Panchayat has joint-authority in co-operation with the Irrigation Officers, in superising the distribution of water from tanks canals or. channels, It can undertake the primary responsibility fororganising Jangam Kadhas, Hari Kadhas, Street Dramatic Parties which are all institutions to propagate adult education.‡ It ought to maintain a free Ayurvedic or Unani dispensary, in addition to providing freely medicines for cattle, poultry, goats and sheep and pigs. All the tanks, wells and other public property of a village must be handed over to it while it has to shoulder the responsibility of providing wells, tanks or

*In my written statement submitted to the Royal Commission on Agriculture, I have given a detailed account of my scheme for the constitution of Village Agricultural Panchayats The above is a brief outline of my scheme.

† See also the proceedings of the Panchayat Conference Rural India, Sep. 1927.

‡Ancient Educational Institutions' by N. G. Ranga Published in Indian Educator, May June. 1926.

pools for drinking water, in co-operation with Government. The village day and night schools, library and itinerary lectures are all to be supervised, supported and maintained in proper order by such a Panchayat with the co-operation of Government.

Finance:—The income coming from fishing in village tanks, selling the sole right to measure paddy and other grains; giving a monopoly of selling salt etc; selling the fruit of avenues along village roads and the village groves, auctioning the right of grazing on the canal banks which right must be transferred to the Panchayat by the P.W.D. all that should be paid to such a Panchayat. In addition to such income, a Panchayat can and ought to raise house-rate upon all the inhabited houses on such a basis as is to be had with the Union Boards.

The Panchayat can have the right to expect the occupiers of houses in any street or bazaar to contribute a quota of the primary expenditure of first laying out an earthen and then a metalled road; either by contributing labour in carting earth and metal and in making the roads or by paying half the total expenditure of the enterprise. Similarly all the preliminary expenditure (lights, wells, night schools) ought to be met both by particular parties benefited and the Panchayat.

Election:—It is found on a detailed study of the working of the existing Panchayats, Co-operative Credit Societies and Union Boards that the present method of election of representatives for all the primary institutions has the tendency to accentuate factions where they already exist and to create them where they do not exist, I have toured throughout the Andhra country and I found election by voting does not seem to suit the peculiar social and economic organisation of most of the villages.

So I propose that election by lottery ought to be introduced. It will not be entirely an undemocratic method as it is still used to some extent in the working of British Parliament and our legislatures* and it is on a line with

* Lowell, Government of England.

our own South Indian ancient constitutions.*

All those people who are above 25 years of age and who are actual cultivators—not absentee landlords—and who cultivate half an acre or more are entitled to a vote. All voters can stand as candidates. The proposer and seconder of any candidate cannot support any other and cannot themselves become candidates and so a primary election is held between every three voters. Only men can become voters, while all those such as dumb, blind, mad people who are at present disqualified from having a vote will remain so. Then every village will be divided into as many wards (say 10) as there are members in the Panchayat. The names of all the candidates for the membership of any ward are written on small slips of paper and are thrown into a pot. A blind-folded boy is asked to pick out the required number of those papers and those whose names are found on these papers become elected. This system of election cannot in the nature of things produce more inefficient and unintelligent members than those we have. Moreover, the things that have to be done in the Panchayat are mostly routine things and for mere execution of policies and programmes developed by higher authorities, an actual ryot of 25 years of age is just as competent as an elected (but often an ignorant and prejudiced) member.

To guide these members of a Panchayat in governing it, there must be appointed a Permanent Secretary by the District Federation of Agricultural Panchayat. This secretary must have taken his University Diploma in Social Science.† All these secretaries are permanent functionaries of Government but a Village Agricultural Panchayat can have the right to get its secretary transferred, if it cannot get on with him. The salary of the secretary is met by Government.

All the Panchayats in a District ought to be affiliated to the District Federation of Agricultural Panchayats. The

*Local Government in Ancient India by Radhakumud Mukharjee.

† Agricultural Industries by N. G. Ranga. Published in Indian Economic Journal, June, 1927.

primary duties of the District Federation are to prepare a detailed scheme of agricultural development of different parts of the District; to organise co-operative organisations among ryots; to distribute periodically information concerning the prices of agricultural produce, mechanical tools used by ryots and consumable goods, the prospects for the local produce in different Indian and foreign markets. And they must try to popularise the successful methods of agriculture, sericulture, poultry and dairy farming,—the information about which they will get from the Agricultural Department—among the ryots by sending out propagandists, some of whom will be paid-workers.

These Federations ought to act as intermediary between Government Departments such as the Education, Industries, Co-operative, Labour, and the people. They must hold exhibitions of Agricultural and Home Industries' products at least once in every Taluk per annum. Whenever there is any famine or unemployment or a failure of crops or any form of distress in any part of a District, such a Federation must at once begin to investigate into the extent of damage sustained by ryots. Its findings are sure to command consideration and attention from the Government. The Presidency Federation will try its best to see that the representatives of the ryots work for the benefit of ryots in the Legislative Council. This Presidency Federation will prepare a national programme of agricultural development of the country. The State shall pay half the expenses incurred by the Presidency and District Federations of Agricultural Panchayats.

England and Ireland.—Agricultural Organisation Society was organised in England after the example of the Irish A.O.S. The State has been meeting nearly half its expenditure. The A.O.S. of Ireland was organised in 1894 on the inspiration of Sir Horace Plunkett. The 1909 Commission found that the best way to encourage "the organisation of co-operation was by subsidizing the Agricultural

Organisation Society".* Government began its grants to the A.O.S. since 1913 and its basis of subsidizing is 13 sh. 4 d. per every pound sterling subscribed by the affiliated societies. The "A. O. S. has been mainly supported by grants made to it from Government sources". Mr. Noel Buxton while he was the Minister of Agriculture in 1924 declared that "he is going to rely upon the Farmer's Union to do the organising." He said in addition that the "willingness of that body to do this work is an event of first importance in the history of British Agriculture."

Belgium.—Agricultural Co-operation owes its progress in Belgium as in Netherlands mostly to the beneficent activities, of the peasant's league or Boer Bond, founded in 1890 at Louvain. †

The Guild in the village has been instrumental in organising the Credit Society which it controls. It has also organised "Sections of purchase". The National Bond controls these Guilds. There were in 1919, as many as 676 Men's Guilds with 60,000 Members, 153 women's Guilds with 14,000 members. Regional Federations are organised for purposes of discussion. Guilds Credit Societies, Dairies etc are visited and inspected with sympathy and efficiency by the inspectors and officers of the Bond.

Japan :—Agricultural Societies, known as Nokai are established under the Agricultural Societies Act of 1893. At the head of all these Societies is the Imperial Agricultural Society. In 1917, there were 46 Prefectural Sub-sections which were subdivided into 557 County Associations and 40 Urban Associations. These County Associations are again subdivided into 11,573 town and village Associations. Government grants subsidies not exceeding 150,000 yen or about Rs. 4,00,000 per annum to these Associations. The objects of these societies are to promote agriculture in every shape and form and to organise Co-operative societies and "collective purchase of agricultural requirements and to act as intermediary for collective

*Hoarce Plunkett's introduction to Agricultural Cooperation in the British Empire.

† Impressions of European Co-operation p. 32,

marketing and to undertake the management of agricultural ware-houses”*

Young Men's Associations of Japan:—These associations are organised to promote “physical exercise, early rising, thrift, provision of libraries, encouragement of industry” etc. They do not undertake business. “Here in fact, we can see the” spirit of co-operation “moulding a nation's destiny and it is the active working of that spirit just where it is wanted, in the village itself, that accounts for the wonderful progress made by the co-operative movement in Japan”.

China:—According to a law passed in China; the Provincial, departmental, urban or village agricultural associations are established and they may submit to the competent authorities. and advancement of agriculture schemes for improvement. When crops fail or shortages occur, these Associations shall carry out an enquiry into the circumstances and propose emergency measures of relief. They shall make a collection of all species of agricultural products and establish a museum of agricultural production.” They shall send persons on lecturing tours on subjects dealing with the technical methods by which agricultural work may be improved. They shall also establish and run winter Schools. †

Indebtedness.—The Indian ryot borrows every where, not according to his need, but according to his capacity” Sir Theodore Morrison.

It is seen through the accounts given about the indebtedness of the villages under review, that indebtedness is quite general among most of the ryots. The records of Ramanayya of Nidubrolu show that the ability of ryots to borrow larger sums of money has grown to a disastrous extent in the last sixty years. This is so because “the peasant of to-day has far better security to offer than his father and can consequently raise more money upon it”‡

* Cooperation in Japan, pp. 96-98.

† International Year Book of Agricultural Legislation Chap VI.

‡ The Industrial Organisation of an Indian Province, by Sir Theodore Morrison, p. 105.

We have also noticed that the number of money lenders has also risen to a corresponding extent and their ability to lend larger sums of money at lower rates of interest has risen correspondingly'. But there are many money-lenders who have large amounts of money seeking investments while there are large numbers of people in other parts of the same Guntur District who are paying heavy rates of interest to secure some credit. This phenomenon was noticed long ago by Morrison.*

Mr. Malcolm Darling is of opinion that the question of indebtedness of the Indian peasant assumes a special importance because "a large part of the debt is unproductive." † I am of opinion that a greater part of the debt of the Andhra ryots is productive, while a large part of the total indebtedness is incurred owing to inordinate expenditure upon marriages and their attending evils such as dowries and undue speculation in land values and prices of agricultural produce. ‡ Mr. Darling says that 33 to 50 % of the total debt of the Punjabee is probably due to compound interest and the same is true Andhra peasant. So the proportion of unproductive debt to productive debt has a tendency to rise gradually.

In Faridpur District, only 6 % of the indebted ryots were found to be inextricably involved in debt and they are all "cultivators with small resources" § In the Punjab, the percentage of ryots who are in debt to the total ryots varied from 35 in two cases to 30 in the five Districts taken while the debt's multiple to land revenue varied from 17 to 27 §. In Karumathampatti of Coimbatore District, some ryots borrowed Rs. 5,400, out of which one ryot alone took Rs, 2,000. || "It is beyond the scope of the small ryot to redeem his land when it is once mortgaged."

* *Ibid* p. 106.

† The Punjab Peasant in Prosperity and Debt. p. 18,

‡ "Agricultural Indebtedness" Published in 'Rural India' August 1927.

§ Economic life of a Bangal District. Jack, p. 111.

§ The Punjab Peasant. p. 24.

|| 'The Economics of a Coimbatore Village,'

gaged" @ in Vazhamangalam of Pudukkottai State. "All but some 20 families are more or less involved in debt" "Debt is an almost universal condition" in Eruvellipet of Trichonopoly District.¹ The ryots of Mallur in Salem District had to incur a debt of Rs. 20,000 owing to a famine at a high rate of interest. Apart from this "the village has little debt" as it is a very poor village and no money lender is anxious to lend large sums of money to its ryots. In Gangaikondan of Tinnevely District, all Brahmins "are indebted to some amount, except three rich families" ² while others are "indebted only for small sums." But in Dusi of North Arcot District, all the landholders are free from debt and are in addition money lenders to their own tenants, most of whom are indebted ³ Thettupally of Chittoor District is a poor village and is therefore comparatively free from debts since there can be no one to lend money on easy terms. But during the 1916 dearth, the ryots were obliged to borrow about Rs. 2,000 to buy bulls etc. ⁴ In Vunaguntla of Krishna District. "65 to 75 % of the population are in debt." ⁵ In Watakanchery of Cochin State, "nearly 75 % are in debt, especially so the poor agriculturists" ⁶ In Guruvayur of Malabar, "the number who are in debt is increasing from year to year" ⁷ In Kothachira of Malabar, many ryots are heavily indebted ⁸. In Vatanamkurussi of Malabar "debt is driving many villagers to other and distant places" ⁹ "The Village income is barely equal to meet the necessary personal expenditure and is unequal to bear the interest charges. The deficit is to be made good by less food and less clothing in a Malabar village," ¹⁰ In Jatagaon Budruk of Bombay Presidency, each of the 147 families was indebted on the average in 1917 to the extent of about

@ Studies in Rural Economics. P. 94.

1 Some South Indian Villages. p., 24.

2 Some South Indian Villages p. 19.

3 Ibid p. 69

4 Ibid p. 91.

5 Ibid p. 101.

6 Ibid. p. 117.

7 Ibid p. 120-30.

8 Ibid p. 137.

9 Ibid p. 157,

10 Ibid p. 177.

11 Ibid p. 195.

Rs. 200. "The majority of the loans bear interest at 20 per cent per annum. * We can see from the above facts, gathered from some of the most detailed surveys of villages, that indebtedness is as generally prevalent in other parts of India as in the Punjab. If the Punjab peasant is indebted to the extent of 19 times his land revenue, the Andhra peasant cannot be less deeply involved in debt. In Nidubrolu itself, the Co-operative Credit Bank lends a lakh of rupees and the half a dozen money lenders of the village and Marwaris of Tenali lend another three lakhs of rupees; so a population of less than 5000 is indebted to the extent of Rs. 4,00,000 or Rs. 80 per head at 12% interest. In Kakumanu, the 3140 people have on the whole borrowed Rs. 1,50,000 or about Rs. 47-12-0 per person. In Uppalapadu and Takkellapadu, a population of 4600 owe about Rs. 1,50,000 or about Rs. 32-9-9 per person.

One of the most important causes of unproductive debt is the expenditure on marriages, housing and English education. || "Brahmins are of all castes the most indebted the cause being their marriage customs"† "One of the chief effects of caste system is that there is no inducement for these people to effect great savings and thus better the social position"‡. The Kammas of the Guntur and Krishna deltaic villages are as guilty of these bad practices as Brahmins and it is a pity that the up-country Kammas and Reddis are also taking to these bad habits. There is yet as much difference between the indebtedness of the deltaic and up-country Kammas as there is between a Rajput and a Jat of the Punjab, while the debts' multiple of land revenues of a Rajput in four districts is no where less than 23, that of a Jat is no where more than 19\$.

* Land and Labour in a Deccan Village No. 2 by Harold Mann p. 117.

† Some South Indian villages. p. 137. || *Ibid* 69 and 116.

‡ Economic life in a Ma'abar village by S. S. Aiyer, p. 62.

\$ The Punjab peasant p. 39.

More and more youngmen of these villages are attracted by the more interesting life of towns and it is owing to this that ten young men of Nidubrolu, two of Brahmanakodure, one of Appikatla, several of Thurumella and Amrutaluru, two of Uppalapadu and Takkellapadu of Guntur District have come to grief. Most of such young men of Nidubrolu had less than five acres each and all of them lost their land, through drinking heavily, indulging in prostitutes, unnecessary expenditure upon clothing; writing pronotes for say Rs. 200 when they had taken only Rs. 100 and paying too heavy rates of interest to the Marwaris of Tenali. In fact one young man of 19 years of age has received only Rs. 100 in return for a pronote issued for Rs. 400.

The evil effects of such life are not confined to these people alone. There are many more foolish people in every one of these villages who take their fashions from these depraved souls and who spend money on unnecessary indulgences in Coffee-hotels, coffee-drinking and excessive and costly clothing and expensive smoking. The effects of English-education have also tended to the same end in not a few cases*.

Such is the problem of indebtedness in different parts of India and particularly in the Punjab and in Southern India. It is necessary to investigate into the incidence and effects of indebtedness upon the rural economy of villages, in greater detail than has hitherto been made, on the lines of that made in the Punjab. † Though it has been agreed by all authorities that indebtedness is a serious problem, no one knows the causes for the growth, the exact amount and the effects of indebtedness in different parts of different Districts and such information is urgently needed to enable us to formulate a practicable method of reform and to propose the necessary legisla

* Effects of English Education upon Rural Social Economy Published in "Educational Review" April, 1927.

† Evidence of Dr. John Mathai before "Economic Enquiry Committee",

tion. It seems to me, that, since the Co-operative Credit Societies are already organised in many parts of each District and since they can certainly gather much valuable information, the Cooperative Movement is the proper institution to organise such a detailed investigation on a provincial scale on much different lines from those followed by the Co-operative Societies of the South* It will be enough to appoint two expert investigators, one for the Tamil country and Malabar and another for the Andhra country and they will have to go round each District and work in active co-operation with each local Cooperative Union and get at facts concerning each of the villages which have co-operative societies. The information gathered thus must be exhaustive to be of any use and the old palmyra records of as many ryots as possible ought to be secured so as to get an idea of the history of this problem. The Marwaris and other money-lenders must be compelled on pain of imprisonment to place their records before such officers. These officers must faithfully record the proceedings of the discussions held at every Co-operative Union upon its local problem of indebtedness, so that we can get an idea of expert local public-opinion.

Remedial measures.—¹The Co-operative Credit Societies must accept their responsibility to free the indebted ryots from the clutches of money lenders. So they must try to give accomodation to such ryots and see that their debts to outsiders are cleared.

(2) Where the local societies are not able to clear all such debts, they must recommend the application of

* A Co-operative Survey of Economic conditions and Reduction of Agricultural Indebtedness". Published by the Madras Provincial Co-operative Union Ltd.

* 'Agricultural Indebtedness' by N. G. Ranga published in 'Rural India' August 1927.

(1) (In my written statement submitted to the Royal Commission on Agriculture, the above remedial measures are suggested for discussion,

the 'Penal Rate of Interest' provision of Civil Law or some other legislation to such cases and try to prevent such private money-lenders from charging more than a certain prescribed rate of interest. Legislation must be passed to see that such debts are allowed to be repaid by ryots only in certain easy instalments and that legal proceedings are not taken against those ryots who are heavily indebted. So far and no further should the institution of private money-lenders be recognised by law.

(3) Wherever and whenever the local Credit Banks are able to clear off such debts, they must be allowed to borrow necessary funds from the Land Mortgage Banks and enable the ryots to free themselves from the hold of money-lenders.

(4) To prevent the growth of indebtedness, Village Agricultural Panchayats must be informed about every transaction taking place at any private money-lender, with any reference to any of its villagers. If a pronote is made out by any of its villagers to any money-lender, the latter shall register it at the Panchayat; otherwise it shall be null and void. This necessitates that before any money-lender of whatever place actually lends money to its villager, he must, in his own interests, inform the local Panchayat and accept its advice. Otherwise his pronote may not be registered and if registered may not be of much value.

(5) The Panchayat must be closely watching the affairs of every ryot who seems to be sinking into indebtedness. It must advise him to behave better; and show him the way to avoid debts. But if he persists in his bad habits and goes on increasing his indebtedness, the Panchayat ought to have powers, on the recommendation of some of his nearest relatives, to prohibit any money-lender from lending him any further sums. Of course anyone who goes against its declaration and lends money to such ryots will have to lose his money.

(6) But those ryots who have more than 8 acres of wet land or 15 acres of dry land and who are in business

may contract themselves out, from the provisions of such legislation with the permission of the District Federation, on the plea that secrecy is needed in their business.

(7) Those ryots who have any grievance against the actions of such a Panchayat can have the right of appeal to a special Committee of District Federation, which is to be presided over by an "Appointed"* (Government nominee) member,

(8) The exact limits of an 'economic holding' must be worked out for different parts of a District by the District Federation with the co-operation of Village Agricultural Panchayats and any ryots who has less than such a holding cannot alienate his holding but he can borrow funds for productive and emergency purposes only from the local Credit Society, with the permission of the Panchayat.

Rural Road Transport :

"There is one pre-requisite for the extensive development of material sources of India, namely adequate transport facilities.* Though railway development has progressed very rapidly, there is yet much more country to be opened up. Even those villages which are only removed from the nearest railway line by a distance of forty miles are at present practically isolated owing to the dearth of trunk roads, the bad condition of the existing roads and the lack of proper means of transport. About 120 years ago, Sir Thomas Munro wrote "I met with several droves of bullocks and buffaloes, belonging to Dharwar, returning with salt from Goa"† Though things are no longer carried by pack-bullocks, agricultural produce is transported from most of the villages to the markets on the slow-moving bullock-carts. This means of transport is also hampered in its ability to serve the ryots by the intolerably bad

* British Trade Boards Act

*India's Demand for Transportation by William Ernest Weld L. P. 20.

† Sir Thomas Munro, by J. Bradshaw p. 102.

condition of most of the trunk roads and by the non-existence of any kind of road in most parts of the country. The total mileage of trunk and minor roads is ever on the increase in every District but such roads are not kept in proper condition at all. To add to all this, motor-buses have come to infest almost every trunk-road of a District and so bullock-carts find it impossible to pass since bullocks are frightened at the horns of the cars and upset the carts with their drivers.¹

Roads and canals must be utilised to serve as feeders to railways but till now railways have been considering the canals as competitors and so have been quoting lower rates with a view to kill canal transport. Thanks to the long distances between many canals and railways, most of the Indian canals are little affected by this unwise attitude of Railway Companies. The existing canal transport is too slow and cannot be expected to become more popular, and serviceable unless motor-boats are used. But the existing bunds of most of the canals cannot stand the wear and tear caused by such boats and so for any rapid introduction of such means of transport, it is necessary to construct barges all along the banks of the canals with granite blocks or sacks of sand. The necessary expenditure which will have to be incurred to do so will be more than balanced by the additional revenues accruing from the enhanced dues and the increased volume of commodities transported. So government must take up this question seriously and tackle it in such a way as to make the existing waterways in the Madras Presidency* very useful and important public high ways of transport. Such a policy will be in keeping

(1) There were 94 deaths in 1925-26 and 149 in 1926-27 in the Mofussal. Extra Police have not so far been sanctioned to regulate motor traffic in the country. Legislative council Proceedings. November, 1927.

* Godavari Canals measure 506 miles of which 493 are navigable and the corresponding figures for the Krishna are 372 and 332 miles. Kurnool-Cuddapah Canal is 190 miles long.

with a much more progressive one of the German government "The region known as S. W. Germany is agriculturally one of the most fruitful and industrially one of the most developed territories of Europe. But the land is extremely mountainous and the processes of canalization will involve tremendous technical as well as financial feat. The promotion of water-routes continues to be regarded as industrial and commercial necessities in Central Europe" * Yet Germany goes on construction new water ways.

Quickening the speed of the means of road transport is much more important than that of canals since the mileage of roads is much more than that of canals. Commodities like fish, meat, milk, butter, fruit, vegetables, flowers get easily spoiled in this hot country and if they are to be marketed in distant towns or cities, the present means of transport (bullock-cart) is hardly suitable. Motor-bus service is the only one suited to transport such goods to markets. In England and Scotland, where there is a net work of railways in a much truer sense than in any other country in the West, motor transport is highly developed and is indeed made a highly specialised industry. Roxburghshire Country Council appointed a committee to enquire into the possibilities of development by motor-transport; and the committee wrote "as between railways-including light railways and mechanical road transport, this committee consider that development should proceed along the lines of increased and improved mechanical road transport"†

"Now a days in many rural districts in the vicinity of large towns, it is a common sight to see milk churns or other agricultural produce stocked on platforms at the side of main roads"‡ Then the motor-buses take them to the neighbouring towns. In Scotland, even mails are carried by special 'Mail Buses' or ordinary buses. Rail-

* Economic Development, by B. K. Sarkar. 187.

† Economics of Road Transport, by K. G. Fenelm 1925. p. 100,

‡ Ibid P. 57,

way Companies have come to consider that mechanical road transport is a rudimentary form of branch line. So the G. W. R, G. N. of Scotland Railway have been running motor-buses for tourists and others around Aberdeen, and Banff;

The French government has developed a considerable number of motor-busroutes to carry commodities, wherever there are no railways. It has in addition been granting subsidies to those companies which run their motor buses in the pyrenees and such other districts, where the freights available are not sufficient to cover the expenses. Thinly populated and hilly regions get such subsidized buse services. But those districts which are not far from big cities are not provided with such subsidized buse services, and they pay their own way. Government fixes the fares, determines the minimum requirements as to the service that is to be offered and the route, speed and the number of trips in a day or week, for all buse-services. Subsidies are graduated in relation with the mileage served and the capacity of the different cars. But no monopolies are granted.

In order to introduce mechanical road transport into the districts of Madras Presidency, it is necessary to institute an intensive enquiry into the potential demand for such a means of transport; the magnitude of the loss sustained by the ryots owing to their inability to market most of their perishable commodities which cannot stand much exposure, and long transport and the sufficiency or insufficiency of roads and the probable additional expenditure needed to carry out the necessary repairs or alterations of the existing roads and to construct new roads. When these questions are discussed, the relation of the prices of commodities; and the middleman's profit to the stagnation of most of the perishable commodities in villages must be found out.

In this connection, the conclusions of a very careful investigation carried out by an American economist into our needs for mechanical road transport are of special

CHAPTER VIII.

Vol. 2. Three Villages of Dry-land.

General economic conditions.

There is ample proof to show that these dry villages in Guntur District have made great progress in the last century. Prices of the agricultural produce have risen enormously while the value of a ryot's house-sites has appreciated. The prices of lands have also shown a similar tendency to rise. On the other hand the prices of all commodities which ryots have to purchase from out-side have also risen almost to the same extent. Money has become more abundant and consequently more cheap to borrow and ryots whose capacity to borrow was very much lower at one time are now able to borrow large sums for improving their lands.

There are very few ryots who have ventured into business. In Kakumanu a Kamma started a shop to sell cloths and made about Rs. 500 during last year. There are four Kammas who buy tobacco in Uppalapadu to sell it again to Guntur merchants after storing it in anticipation of higher prices. Four ryots of Uppalapadu and Takkellapadu are trying to export their tobacco bought in their villages to England and provided they can make some profits many more will enter this business. † Gardening is not developed in any of these villages because of the shortage of water-supply. Trees are not grown in large numbers in these villages because the ryots are of opinion that trees exhaust their soils and that they come in the way of ploughing the lands properly. Moreover crops do not grow so well under the shade of such trees. Hence such a shortage of green-manure.

Uppalapadu and Takkellapadu of the Guntur Taluk are entirely dependent upon dry crops. The 2,217 souls of Uppalapadu have between them 4,700 acres or a little more than 2 acres per head. There are about 300 land-

Sweden, Norway and Japan suffer from them as much. "If things are better in Europe, it is not because the evil does not exist but because to a large extent it has been remedied."* The majority of peasant proprietors and tenant farmers of Japan cultivate less than 5 acres and only 4 % cultivate more than $7\frac{1}{2}$ acres. As many as 36% of the peasants and servant farmers hold $1\frac{1}{4}$ acres each. † In Italy family holdings, have been split up to a dangerous extent in the last forty years. In 1871, there were only $1\frac{1}{2}$ million farms tilled by their own owners, whereas there were 5 millions of holdings in 1912, of which $2\frac{3}{4}$ millions were less than a hectre of land each and 7 millions in 1918. ‡

Fragmentation and Consolidation:—As for remedial measures, "A bill was prepared for introduction in the Bombay Legislative Council, to make it possible for holdings to be made permanent and another, entitled as the Bombay Small Holdings Bill to "neutralise the evils of the steady fragmentation as a result of the Law of Succession." and to make them impartible" (i) But in the Punjab, Co-operative efforts are made on voluntary basis to consolidate holdings. Much success has attended such efforts. It is reported that in three years, 133 consolidation societies have been formed with 500 members and 35,000 scattered parcels of land have been consolidated into 4,500. The area thus restriped up to the end of 1925 was about 50,000 acres.(ii) But it is doubtful how far this voluntary work will be able to counter this great national evil. Fragmentation is proceeding on a gigantic scale throughout the country and much more drastic steps than voluntary co-operative consolidation are needed to

* The Punjab Peasant by Malcolm Darling, p. 31.

† Co-operation in Japan, p. 86.

‡ The making of Rural Europe, p. 200.

(i) Indian Review, September, 1927.

(ii) India in 1925-26, p, 153.

effectively check its growth, despite doubts raised by some economists. (1).

Norway and Sweden:—The Lagaskifte, the system of consolidation was established in Sweden by a Law of 1825. A Lagaskifte in Sweden and the corresponding form of consolidation in Norway may now be initiated on the application "of a single landowner and carried through at his request alone."* Redistribution is carried out by an official surveyor, two local assessors who are appointed by the meeting of the local landowners. If their decisions are unsatisfactory, the person aggrieved can appeal within 60 days to a Land Court consisting of a Judge and three local peasants with a further appeal to the Government within 30 days. Such cases do not come before the ordinary Courts and so work is expedited quickly and cheaply. But in Norway the appeal against the decisions of the Land Court may be brought before the Civil Courts, "when on the average 18 months delay is caused". In Norway, law allows a second consolidation after 30 years, if the majority of peasants so desire it to take place. But in Sweden, all must agree for a re-consolidation before it can take place. An amendment is proposed to the existing law to allow the majority of peasants to decide whether a reconsolidation shall be carried out or not.**

In Sweden, out of 67,000 villages, 51,000 have undergone Lagaskifte'. In Norway, Government bears about $\frac{2}{3}$ of the expense of consolidation while the peasants pay the rest. On the average the cost to the Norwegian Government per acre for consolidating may be Rs 2½. But in Sweden, the cost to peasants per acre was Rs. 2½ in 1923 and Rs. 2 in 1922. In Sweden, as much as 105,000 acres of land was consolidated in 1922 and 365,000 in

(1) Fragmentation of Holdings by Ramakrishnan in the Hindu. October 1927.

* Studies in European Co-operation. Vol. II by C. F. Strickland, 1925.

* *Ibid.* pp. 151-2.

1923, as against 31,550 acres in the Punjab in 1924 and 50,000 in 1925. Some such legislation is needed to carry out consolidation on a national scale in India. But the avoidance of Civil Courts and the minimising of expenses of consolidation are of absolute necessities in India.

*Uneconomical holdings;—Remedies:—*Mere consolidation of many scattered holdings does not solve the misery of most of the villages in India. "The family budgets of Bairampur in the Punjab show that a Jat with 14 acres of dry land cannot support a family of 5 without getting into debt; while in an ordinary year a Guzar with 6½ acres and a family of four can just make both ends meet, in a bad year he cannot get on without a loan"* Mr. Darling correctly says that 'small holdings invariably mean small incomes'. If the small holders are to be enabled to maintain themselves and their families on the margin of decent standard of living at least†, they must be shown either a supplementary source of income or a way of emigrating to less developed parts of the country. "For the Jap, Civilised existence would be impossible but for the rearing of silk-worms, which is the great subsidiary domestic industry of the country."*

But the existing small holders shall not be allowed to lessen their holdings or to let their sons have much smaller holdings than they have at present. For instance, a ryot who has less than 6 acres of wet land or 15 acres of dry land will have to maintain himself and his family below the margin of decent standard of living. Such a ryot is a public danger to the economic safety of the class of peasants and it is in the interests of an agricultural society such as ours, to see that the numbers of his kind do not increase. So legislation shall be passed to see that ryots who have each less than 6 acres of wet-land on which only one paddy crop is raised or 15 acres of dry land on which no garden

* The Punjab Peasant M. Darling, p. 20.

† Economic Organisation Vol I Chap IV.

* The Punjab Peasant, p. 178.

crops are raised, are prohibited from selling or mortgaging their lands, on the lines of the Five Feddans Law of Egypt.

But such legislation alone cannot prevent either the operation of the succession [Laws of the Hindus or the existence of holdings, smaller than the economic holdings. In order to check the baneful effects of equal division of property, the Hindu Law shall be so far amended as to allow heirs only equal rights in the capitalised value of the holding and to prevent such a holding from being divided up amongst all the heirs. One of the heirs may be allowed to cultivate the holding while the others are paid rents, varying according to the market rate. But if the other heirs do not find any other work to do and if they wish to cultivate land, then they may all be allowed to cultivate it in co-operation with each other.

But in Italy, voluntary method is the rule. A father can convert his property as a 'Family Property' which is inalienable and is exempt from attachment or seizure during his life-time or until such time as it passes to a major heir, by a declaration before the Magistrate. As long as any of the children are minors, the property is inalienable. Then the property will be assigned to one who is able to offer payment in money to others. Sometimes lots can be drawn if there are more than one offer. The heir may within two months declare his intention of maintaining the constitution of the "Family property."*

"*Woman's place in Rural Economy*".—The Kamma women of Koretepadu and the neighbouring villages bring dairy produce and vegetables to Guntur. But though most of them are neatly dressed and wear plenty of jewels, none of them is properly educated from an agricultural point of view. It is a well-known fact that Kammas, Telagas and Reddis the most important cul-

* Impressions of the Co-operative Movement in France and Italy, by Otto Rothfield.

tivating castes of the Andhra country owe their supreme economic position mostly to the thrift, foresight and carefulness of their women. But in the deltaic villages, the so-called civilisation of this century, imported from the west by ill-educated men is working havoc because many women are gradually taking to a lazy, careless, wasteful way of life and are therefore becoming a veritable burden on their husbands. As far as the dry villages are concerned, the Alsatian Proverb that "a farmer's wife can bring into the farm, in her apron, more than her husband can carry out (to sell) in a four-horse wagon"* still applies to most of the women.

The Rural Services Exhibition held by Y. M. C. A. Madras, had three most interesting and important branches, dairying; poultry keeping; and bee-hives. But the women to whom they were specially intended did not attend the exhibition in as great numbers as they ought to because most women of the middle classes in Madras did not know the existence of the exhibition. If such exhibitions are to be of any use at all they must be taken to the very doors of women, both urban and rural. Not only elementary and adult education in general subjects is needed but agricultural education also is necessary for women.

Belgium—Education for Rural women.—(1) Professional agricultural sections are organised in primary Rural Schools, elementary, theoretical and practical education in agriculture and domestic economy is given to women who have passed through elementary course.

(2) Domestic agricultural sections are organised in the Secondary schools. These sections aim at infusing into girls a liking for the agricultural profession while giving them a general education.*

* The future of Our Agriculture by H. W. Wolff, p. 142.

* Such education is badly needed for most of the women of the deltaic villages, since they have come to think it beneath their dignity to go and work in the fields.

(3) Schools for Domestic Agriculture are intended to give a thorough professional education to girls who wish to take up agriculture. Teaching in theoretical and practical syllabus includes general education, elements of natural history agricultural and vegetable culture, flori-culture, care of animals, dairy work, dress making, domestic economy, elements of teaching and hygiene and book-keeping.

The students in all these schools are made to take part in all the following operations so as to get practical knowledge of the actual work on a farm. They feed the cattle, calculate the nutritive value and the cost of the food. They are shown how to recognise the points of cattle, make butter and cheese, and analyse the products of the dairy. They take charge of the poultry yard, look after the natural and artificial incubation, rear fowls, fatten the chicken, and prepare them for the shops and markets, they look after the bees, collect the swarms, gather the honey, and wax and make mead. They cultivate flowers vegetables, grain and fruit trees; preserve fruit and make jam and prepare various kinds of beverages by means of the garden produce.

There are in addition public courses organised for the special benefit of farmers, wives. The subjects taught include, hygiene of the farmer's house; his food and clothing; health and education of children; first-aid, sanitation of the stables, feeding of cattle, dairy, poultry yard, manures, vegetable garden, necessity for keeping accounts and advantages of agriculturist's profession,*

While so much is done in Belgium, and so much more in Denmark through its famous People's Colleges, the Royal Commission on Agriculture has not thought it necessary to devote a question to this problem. Though most of

* Woman's place in Rural Economy, by P. De. Wuyt, Director General of Agriculture Belgium.

the economists are anxious that more subsidiary industries shall be introduced into rural economy no one has raised the question that unless a woman is specially trained and educated in *demanding* and *carrying* on subsidiary industries, she cannot be expected to make a decent living through "Home Industries"

In England, much work is being done through 3,774 women's Institutes which are organised by voluntary workers for the benefit of women. The National Federation of women Institutes maintains two Handicrafts Organisers. These two workers have visited 22 counties during the last year. 'Guild of learners' tests were held in the following subjects. 'A' tests in Chair-caning, Millinery, Knitting, Tinkering Umbrella covering, Raffia, Eider-dawns, Gloving, Rush-work, Basketry, Soft Toy's, Hard Toys, Leatherwork, Upholstery. Furcraft, Soft slippers, Spinning and Dyeing, and 'B' class tests in gloving, Embroidery, Basketry Furcraft, Raffia, Smoking and plain Needlework were held. These Institutes organise Concerts, Dramatic performances, whist Drives, Socials and such other amusements which will create some interest in the life of rural women. In February 1927 alone, there were held Norfolk Federation Handicrafts Conference, Cookery Exhibition, Hertfordshire Federation Handicrafts Exhibition and Norfolk Federation County Exhibition. These Institutes organise 'Summer Schools' 'Winter schools,' seminar schools, 'week end schools' to teach one or two subjects. Our economists and students of rural economy will have to think out a programme for Indian women, which will have the best features of these two institutions of Belgium and England. Government ought to establish a few permanent 'Central schools of Rural Economy' while voluntary bodies like 'women's Institutes' shall carry the seminar schools to villages.

CHAPTER VI.

IRRIGATION.

It has been noticed in Chapter II of Economic Organisation of Indian villages Vol. I that the deltaic villages have prospered immensely through irrigation. We have also noticed that the prices of land ; the standard of living and the general intelligence and progressive spirit of the people have shown a tendency to rise. What is much more important is that almost all the land available in deltaic villages has been brought under very intensive wet cultivation and that famines and failures of crops which visit the dry lands so frequently have been practically unknown, ever since wet cultivation has been brought to the Krishna and Godavari deltas.

Hitherto the Government of India has been following two kinds of policy; one to bring irrigation to those parts of the country which assure an economic return upon the Capital invested in irrigation projects and the other, to ensure a certain amount of irrigation facilities to parts of the country which are subject to frequent visitations of famines and serious failures of crops and which are included in what are called famine zones. In following the second aspect of irrigation policy, Government has developed two sources of relief ; one to construct major irrigation schemes in which much capital has to be invested, and the other, to develop minor irrigation sources such as small anicuts against rivulets; tanks and wells. Through these schemes, it has been intended to give only partial immunity from the direct effects of famine to certain villages or groups of villages. And so such schemes necessarily cost much less than major irrigation schemes such as the Krishna, Godavari, Kaveri, Mettur Projects which need immense amounts of capital.

In Madras Presidency, 614, 687 acres of land was irrigated in 1918-19 by Minor Irrigation works as against a total of 7,276,257 acres of land under works of all kinds in the triennium of 1918-21. The productive works alone of this Province irrigated 3,682,675 acres of land in the triennium of 1921-24, and 3,755,814 in that of 1918-21 as against the corresponding figures of 9,714,815 in 1921-24 and 8,480,798 in 1918-21, for the Punjab*. The area under unproductive works in the Madras Presidency has only risen from 281, 608 in 1918-21 to 290,654 in 1921-24. While there has been phenomenal rise in the area under Productive works in the Punjab, the corresponding area in Madras has decreased a little in these two trienniums. It looks from these facts as if the Madras Presidency has reached the limits of satiety as far as its needs for irrigation are concerned. But it is not the truth. The Mettur Project has been undertaken recently and the Government proposes to investigate into the possibilities of taking up the Tungabhadra and Krishna Projects, which are expected to bring in another $1\frac{3}{4}$ millions of acres of land under irrigation. When it is said to benefit the Krishna Guntur Nellore, Kurnool and Chinglepet Districts, and the latest project *i. e.*, the Mettur Project is expected to benefit Coimbatore, Salem, Madura, Tanjore Districts, it can be realised how much more land and how many more Districts need irrigation facilities. In fact the total irrigated area in Madras Presidency is only 18.9% of the total cropped area as against a corresponding figure of 38.2% for the Punjab which has taken to irrigation projects comparatively very short time ago. But the Madras Presidency has been starved in regard to irrigation facilities for the last thirty or more years by the timid and unprogressive policy of the Government.

Everywhere there is a crying need for additional facilities for irrigation. The Krishna Reservoir project, the Gundlakamma and Musi Projects and the many minor but equally important projects have to be developed, in

* Triennial Reports of Irrigation for 1918-21, 1921-24.

addition to many more projects from numerous streams, tanks and wells. All that the government has done in the last decade was to spend 22.90 lakhs of rupees on the Mopad Project, in Nellore District, 25.89 lakhs on Toludur Project in South Arcot District; 22.88 lakhs on Siddapur tank and five more works in Kurnool District, Bhavanasi tank in Guntur District and Muniyeru in Krishna District. It has also undertaken the following works.

WORKS IN PROGRESS	ESTIMATED COST.
1. Restoration of the Kovvur-junction Canal.	Rs. 1,37,000
2. Improvements to the Upper Portion of the Yerama-durru drain.	„ 9,74,006
3. Replacing the existing 3 ft shutters by 6' shutters.*	„ 3,90,000
4. Diversion of the Nallamada drain.	„ 7,35,000
5. Reconstructing the Thoppa-danaveli dam,	„ 1,14,000
6. Improvements to the lower reaches of the Cauvery from the in fall of the Ayyavayyanar to the sea.	„ 2,63,000
7. Mettur Project.†	„ 6,12,00,000

It cannot be said that the Madras Government has been vary about launching upon new irrigation projects as it has been realising very encouraging dividends upon all

* This work was completed two years ago.

† This Project is intended to benefit directly about 2 million acres. Proceedings of the Legislative Council. 25 Jan' 1927.

kinds of Irrigation Works, for instance 12.74 % in 1921-22 12-77 in 1922-23 and 13.70 in 1923-24.

Unprotected Lands

Out of the vast area of land which is not yet brought under irrigation but which can easily be protected by irrigation, only a very insignificant portion of it can be protected by Productive Irrigation Works while the rest will have to be provided for by minor irrigation works which cannot be productive. Hitherto Government has accepted the financial responsibility for the projection and maintenance of non-productive Irrigation Works for giving protection to those parts of the land which are in the Famine Zones, but actual protection thus given has been very little as the Government is slow to shoulder its responsibilities. The Cuddapah and Kurnool Canal and other Minor Irrigation Works are all that have been constructed to satisfy the present insatiable demand for water for irrigation and drinking purposes of the famine-ridden parts of the Presidency.

But there is nearly as much land which is not included in the Famine Zones as what is included, which is not protected from frequent failures of crops, and shortage of drinking water. This land is not sufficiently famine ridden as to be included in the Famine Zones and is not satisfactorily served by timely and sufficient rains. Such land has so far failed to get any protection except for a few wells. Government has not yet developed any constructive policy of supplying water for irrigation and drinking purposes of such regions and it is a great misfortune that no political party should so far have noticed this aspect of the national well-being.

We have seen that a ryot of the deltaic villages where only one paddy crop is raised, realises Rs. 58-14-0 per acre of wet land. * But an acre of dry land fetches only Rs. 17-1-2 in Kakumanu and Rs. 13-15-5 in Uppalapadu and Takkellapadu. Even if we suppose that in an

* Economic Organisation of Indian Villages Vol. I p. 61.

ordinary year, an acre of land of such unprotected villages fetches Rs. 20 per annum, we are still faced with the question that an irrigated acre of land fetches nearly thrice as much money as an acre of dry land.

In order to improve the economic conditions and to minimise the risks of failures of crops, Government ought to shoulder the responsibility of providing water to such villages as Kakumanu, Uppalapadu and Takkellapadu in Guntur District and it has in fact once thought of developing the Appapuram project at a cost of about ten lakhs of rupees, and to supply water to about ten villages in the same district. For some reason, unknown to the ryots, the idea of that project has been given up. But the Government ought not to have any objection to develop such projects if the ryots themselves undertake to accept all the financial responsibilities for such projects.

Scheme of Guntur Ryots

For instance the Guntur Taluk Ryots Association has developed a scheme according to which fifteen villages including Pedavadlapudi, Chilumuru, Vejendla, Kakani, Konduru, Penumuli Suddapalli, Uppalapadu, Namburu, Devarajabhotlapalam, Kolakaluru, Kaza, Chinavadlapudi with a population of 30,000 are to be supplied with water sufficient to irrigate 30,000 acres of land. The Ryots are prepared to pay all the costs of developing such a scheme estimated to cost about twenty lakhs of rupees. All that they want the Government to do is to supply them with sufficient water to irrigate their land. Indeed they are even anxious to raise only a short-time paddy crop and to forego the usual Government guarantee of supplying sufficient water. They are prepared to pay the usual water-rate, in addition to the existing dry assessment. Thus if they are supplied with water for irrigation, Government will get an additional annual income of Rs. 1,50,000 without undertaking any capital outlay. On the other hand, the ryots will be benefited to the extent of at least Rs. 6,00,000 per annum, even if we suppose that an acre of their wet-land may fetch only Rs. 40. But in

fact their land is at present either subject to frequent floods or frequent dearths of rain resulting in failure of crops and it does not fetch even Rs. 10 per acre on the average and so the benefit accruing from the advent of irrigation will be much more than Rs. 6,00,000.

Water Supply

Villages like Takkellapadu and Uppalapadu are suffering from dearth of sufficient supply of drinking water in summer and their ryots have to incur much financial expenditure and inconvenience, in addition to loss of time and waste of effort, in order to bring water from long distances. Rural water supply schemes, on the lines of those recently adopted by the Bengal Government * ought to be developed by the Madras Government. But in this case, the irrigation scheme of the Guntur Taluk Ryot's Association promises to remove this disability in a very satisfactory manner, without any additional expense to the Government. There are more than ten villages which will be directly benefited in this respect, by this scheme†.

Another important consideration is that the development of such a scheme will enable the ryots of Uppalapadu, Takkellapadu and the neighbouring villages which suffer from the lack of fresh water springs will, in future be able to develop fruit and vegetable gardening since fresh water can be got out of wells with greater ease and at greater intervals. There is an immense and growing market for the products of fruit and vegetable gardens in

* At present the Districts Boards in Bengal spend Rs. 10,00,000 per annum upon the development of Rural Water Supply schemes. The Provincial Government contributes only Rs.2,50,000 towards this work for a period of five years. But it proposes to raise a loan of Rs.80 to 100 lakhs for developing the Rural Water Supplies and it desires that the District Board should contribute as much as they do now towards the interest charges.

† Though water is let out through these newly proposed canals only between July and 15th October, ryots can manage to fill their tanks with sufficient water quantity required both for their gardening and drinking purposes.

Guntur and Tenali, the growing towns of this District and the ryots of these twenty-five villages will be enabled to make at least five times as much money from their dry-land as they can at present, if this scheme materialises.

If we suppose that there will still be more than 50,000 acres of land left for dry cultivation in the 25 villages of the neighbourhood of Uppalapadu and Takkellapadu, in addition to the proposed 30,000 acres of wet-land and if we assume that at least 10,000 acres will be devoted to garden culture, when the supply of underground water becomes available (provided it is not brackish) then the local ryots stand to make at least Rs. 8,00,000 per annum more than at present on garden culture alone.

At present a family of four adults has to spend at least two annas worth of labour per day in bringing water from the distant wells during the three months of summer and there are more than four thousand such families and so this loss alone amounts to about Rs. 45,000 per annum†

Through frequent failures of crops, these ryots are obliged to buy at least Rs 50,000 worth of additional fodder per annum and Rs 50,000 worth of manure-human, pig, and oil cakes.—Thus the total estimated benefit to the ryots of these twenty-five villages comes to about Rs. 15,00,000 out of which Rs. 2,00,000 has to be paid towards Land Revenue and water cess. So the ryots will be able to recover more than their capital, invested in this scheme in at least three years.

This scheme does not strictly fall in with the present Government policy of irrigation, according to which ryots will only have to pay a certain fixed water rate, while the government undertakes to develop the whole scheme. But this scheme is a Contribution Scheme* and as such

† See also. "Village Studies" by Deshpande, in Indian Economic Journal June, 1927

*In the Puranic period of A. D. 590-1200, Government was prohibited from levying any tax upon those lands which were benefited by tanks, wells, canals, dug specially for irrigation purposes by ryots themselves. Sukraneethisaram Chap IV

does not need that the Government shall under take any financial responsibility. Though Government shall itself undertake such schemes, the ryots of Guntur Taluk have done a proper thing in proposing to undertake all the financial responsibilities of such a scheme as it will otherwise take a long time to try and persuade Government to take up such necessary and beneficial schemes.

Moreover, Government when it becomes self-governed, will find it necessary to expect people of a locality which is to benefit from a costly scheme, to contribute at least a part of the total expenditure. In future Government cannot be negligent and careless about the real economic and social needs of the people and so it will have to start many such schemes in all parts of the country and will therefore find it impossible to finance all of them without some contribution from the ryots who will be specially benefited. Ryots are usually unwilling to pay higher land taxes from time to time in sympathy with the rising productivity of land and prices. And it is unjust to expect the general tax-payer to pay fully for all such irrigation schemes, the benefits of which will accrue to particular groups of ryots of certain localities. So from the point of view of equity, it is only fair that local ryots shall pay a part of the capital outlay of such schemes.

To turn to our villages again, Uppalapadu, Takkella padu and the twenty-three villages of that neighbourhood stand to gain through the proposed Guntur Canal Irrigation scheme of the Guntur Taluk Ryots Association.

According to this scheme, a separate Head sluice will be constructed near Seetanagaram, above the present Head sluice of the Krishna Western Division. A high level canal dug from the proposed Head sluice, is to be branched out at 6 miles into two channels, which are to supply water, with bodhe' canals, to 30,000' acres of land.

Since this land will be under short-crop irrigation, water will be needed only from July to 15th October, when the

Krishna river is generally in floods and the supply to the existing ayacut under the delta canal will not be interfered with in the least. Seedlings for the short-crop will be raised in 'lankas' in the early part of June so as to contemplate transplantation in July.

Since the shutters have been raised from 3' to 6', the land under the existing ayacut can easily be cultivated ; even the lands at the tail end are getting sufficient water. Some of the ablest engineers have agreed in saying that the construction of another head sluice will not affect adversely the interest of the land under the existing ayacult. They assert that even after the Krishna Tungabhadra project is developed, much more water can be found available than is needed for such schemes as Guntur Canal Irrigation of the Guntur Taluk Ryots and Appapuram Project of Kakumanu ryots. So it is hoped that Government will render all assistance they can to these enterprising, yet poverty-ridden and unhappy ryots.

CHAPTER VII.

CERTAIN ECONOMIC FACTS CONCERNING.

Pedapadu, a village in West Godavari.

Pedapadu is a village, about 3 miles from Ellore in East Godavari District. It has a population of 5000 people with about 1000 houses. Most of the ryots of this village belong to the Kamma caste and there are also a few very important Brahmin ryots. Most of the land of this village is irrigated and paddy is the only irrigated crop. The staple food of the people is rice. Though there are other castes also in this village, we are here concerned with only Kammas, Brahmins and Panchamas.

*Then and now :—*About a hundred years ago this village was surrounded by thickly-grown forests and

ryots used to depend mostly upon their cattle for their income. One particular ryot had 1000 cows, while a Brahmin had 500. The ryots of those days sold their young bullocks and heifers in the Hyderabad market. Ghee was then in plenty and could be bought at half or one anna per four seers. So people used it for consumption and lighting purposes. Ryots used to drink milk and consume cholam meal, cholam-bread and variga and ragi. There used to be perfect co-operation in work among different members of a ryot's family.

Table showing the change in different things in the recent past.

	100 years ago	40 years ago	at present
Total lending Capacity of Sowcars	Rs. 40,000		Rs. 12,00,000
No. of Sowcars	4		40
Price of an acre of ordinary quality	Rs. 25		Rs. 1,000
Price of an acre of fertile land	Rs. 40		Rs. 1,500
Price of land under the Kolleru lake		Rs. 50	Rs. 800
No. of workers needed to transplant or reap an acre of paddy land		4 or 5	10 to 12
The salary of an annual servant		Rs. 45	Rs. 150
Wage paid to a day-worker		1 anna	8 to 12 annas

Health:—Cholera used to visit these villages more often and in more virulent form than at present and more people used to die of it than in these days*. The ryots who-

* Vol. I, p 183

gave me this information could not explain why it should be so. It is generally admitted that cholera breaks out whenever there is a sudden change in the weather, and in fact most of the villages in the Gudivada and Machilipatam Taluks of the Krishna District are now (June 1927) in the teeth of cholera, because of the change in weather from the Rohini heat waves to the Mrigasira rains.* But the measures taken by the Government to prevent the spread of cholera from the affected villages to other villages are as inadequate and inefficient as those taken as regards the spread of foot and mouth disease of cattle. People die nearly in as great numbers in different villages as cattle died in 1926 in the Guntur District and in the environs of Nellipaka and Paloncha†.

Annual workers:—About 40 years ago an annual worker was paid only Rs. 45, per annum. But he is paid at present Rs. 150 per annum. Then there used to be a curious system of payment to certain day workers who agreed to be at the disposal of a particular ryot whenever the latter demanded their labour. Supposing a ryot produced 50 sacks, he had to set apart 10 sacks towards agricultural expenses known as 'Amam; one sack to the worker who looked after his cattle; another sack to the servant; and the third to his supervisor (he might himself be the supervisor) and $2\frac{1}{2}$ sacks to his servant for having worked in harvesting. His servant was thus left with $3\frac{1}{2}$ sacks; worth Rs. 7 in addition to $1\frac{1}{4}$ seers or 5 lbs of cholam per day whenever he worked. On the whole a careful and thrifty worker was then able to save $1\frac{1}{2}$ sacks of paddy worth Rs. 3 per annum while an ordinary worker was just able to maintain himself without any fear of serious under-feeding. Though the wages paid in those days were not enough, this system of ensuring a certain share in the produce of a ryot to his customary servant has certain

* In the Hindu calender, an year is divided into twenty four parts and each part is known as Karte., Rohini and Mrigasira are such Kartes'.

†See Ch. 4.

advantages akin to those of "chanamalu" * It enables such workers to face the periods of unemployment with greater ease than is possible for ordinary day-workers. The local ryots admit that the workers of the present day are much more respectable, and independent spirited than their fathers.

Rise and fall of families:—Two families, which occupied a very high place in the social and economic history of this village about 50 years ago have lost their pre-eminence and are reduced to a very poor state. One of the most important causes for their down-fall is the high cost of marriages, each of which costs on the average Rs. 1,000 as against Rs. 10 about 100 years ago. The next most important cause is litigation.

On the otherhand, five families which were indebted to the above families about 40 years ago are now in a prosperous condition and they have invested as much as Rs. 7,00,000 in money-lending business. One of them had actually mortgaged his 40 acres and two sites for only Rs. 150 about 40 years ago.

Personal Supervision:—Out of the 17 Brahmin ryots, only two directly supervise the agricultural operations while all the rest have leased out their lands. Out of all the Kamma ryots, only ten are found who still cultivate their lands, all the others having leased out their lands to Bobbili Telagas, who immigrated to these parts from Bobbili and its neighbourhood. But almost all the ryots of the two neighbouring villages *i. e.* Nayudugudem and Patapedapadu, interest themselves in cultivating their lands and are reputed to be very thrifty. Those ryots who have leased out their lands are little better than absentee landlords as they are not very much interested in the improvement of their lands. These idlers spend their time by indulging in local scandals.†

Renting of land:—Bobbili Telagas and others who number about 1000 are all engaged upon agricultural

* See Vol. I p. 122.

† Vol I p. 11

work. If men and women of the ryot's families take to this kind of work, most of these people will have to go away to some other place in search of employment. As for the rents demanded, the lease-holder is allowed $\frac{1}{3}$ of the total produce of lands which are a bit inferior while he is expected to deliver 10 sacks (or Rs. 85) per acre for land of the best quality. So even in this village it does not pay a lease-holder to take to renting of land as a whole-time employment *

Society :—Gosha or pardah is observed to some extent by the Kamma women of this village. Most of them do not go to the fields at all and many of them have given up even the time-worn habit of pounding paddy into rice.

There is a 'Puranakalakshepam' † all through the year in this village and its hamlet, Nayudugudem. A very intelligent pundit recites the epics during the day-time in Nayudugudem and during the nights in Pedapadu, men and women attend his recitations in large numbers varying from 100 to 300.

The Munsiff, G. Ramachandrayya has endowed two acres of wet-land for the maintenance of this institution. There are in addition, two schools, one for boys and another for girls.

The library which was established a few years ago has fallen on evil days as the absentee-landlords are too idle to read any books.

Many young boys and adults persist in spending each Rs. 50 to Rs. 100 per annum upon coffee-hotels soaps and cloths, though they refuse to work. But many

* See Vol. I p. 53. I have met many families of these Bobbili ryots who rent other's lands in Gudivada Taluk of Krishna District. Most of them complained that the rents demanded were too high. They are usually very hard working people and their womenfolk are very industrious, thrifty and resourceful. They sarcastically remarked that if Kammas were asked to live in the poverty-stricken Ganzam District, not much could be heard of the advanced civilisation of their women, most of whom have been accustomed to Pardah.

† Ancient Educational Institutions by N. G. Ranga published in Indian Educator. March-June 1927.

of them soon revert to the ryot's natural habit of thrift after they attain the age of thirty. Some of these idlers have recently organised a 'Dramatic Performance': Three Kammas are running a 'Dispensary and three others are managing two retail shops, realising handsome profits.

Vasantavāda :—This village is an agraharam* and most of the ryots are still Brahmins. It is a very praiseworthy fact that these Brahmins should all be interested in directly cultivating their own lands. In fact they are much more industrious and thrifty than the proud Kammas of the neighbouring villages. One Brahmin, (Samavedam Janakiramayya) had only very few acres of land and he used to go about dressed as if he was a very poor man. But when he died in 1927 at the age of sixty-five he left Rs. 80,000 to his heirs, all invested in financing the ryots of villages subject to frequent famines. He was generous enough to leave instructions that his debtors should be exempted from paying about Rs. 10,000; a nice example to many avaricious and selfish money-lenders who exult in their artificial standard of living,

* An agraharam is a village, presented to one or a few Brahmins in recognition of some service by the ancient Hindu Rajahs or Zamindars. Lands of these villages are assessed at a very low rate.

CHAPTER VIII.

Vol. 2. Three Villages of Dry-land.

General economic conditions.

There is ample proof to show that these dry villages in Guntur District have made great progress in the last century. Prices of the agricultural produce have risen enormously while the value of a ryot's house-sites has appreciated. The prices of lands have also shown a similar tendency to rise. On the other hand the prices of all commodities which ryots have to purchase from out-side have also risen almost to the same extent. Money has become more abundant and consequently more cheap to borrow and ryots whose capacity to borrow was very much lower at one time are now able to borrow large sums for improving their lands.

There are very few ryots who have ventured into business. In Kakumanu a Kamma started a shop to sell cloths and made about Rs. 500 during last year. There are four Kammas who buy tobacco in Uppalapadu to sell it again to Guntur merchants after storing it in anticipation of higher prices. Four ryots of Uppalapadu and Takkellapadu are trying to export their tobacco bought in their villages to England and provided they can make some profits many more will enter this business. † Gardening is not developed in any of these villages because of the shortage of water-supply. Trees are not grown in large numbers in these villages because the ryots are of opinion that trees exhaust their soils and that they come in the way of ploughing the lands properly. Moreover crops do not grow so well under the shade of such trees. Hence such a shortage of green-manure.

Uppalapadu and Takkellapadu of the Guntur Taluk are entirely dependent upon dry crops. The 2,217 souls of Uppalapadu have between them 4,700 acres or a little more than 2 acres per head. There are about 300 land-

holders and each of them has on the average $15\frac{1}{2}$ acres. Takkellapadu has a population of 2,395 each of whom has on the average about $1\frac{1}{2}$ acres. There are in this village about 300 land-owners each of whom has on the average $15\frac{1}{2}$ acres. So both the average person and the average land-owner have less land than what a ryot who is on the margin of decent standard of living must own in order to get an income of Rs. 380 per annum. *

Kakamanu of Bapatla Taluk has a population of 3,140 and its people own about 5,648 acres of land between them or $1\frac{3}{4}$ acre per head. The 400 land-owners of this village own on the average 14 acres of land each. So this average land-holder has also much less land than our imaginary ryot who is on the margin of decent standard of living. The land in all these three dry villages is also very unequally distributed among the ryots and each ryot has his land in different parts of the village and has to walk at least three miles to visit all his fields in any day—features common to wet and dry villages †

Takkellapadu and Uppalapadu.

The total acreage of the village Takkellapadu, is 3,548 and out of that, the total cultivated area is 3,335 acres. This land is distributed among the 293 ryots of that village in the following manner :—

Those ryots who have	The land owned by them
less than 5 acres	192 acres.
from 5 to 10 acres	500 "
10 to 15 "	381 "
15 to 20 "	364 "

* Some ryots of Namburu and Takkellapadu realised very good profits by exporting tobacco to England during 1925. Even during this year two ryots of Takkellapadu have again sent small consignments of tobacco to England. But everywhere there is a crying need for information about the methods of doing business with English firms.

See also "The Development of Tobacco Trade in the Madras Presidency" by N. G. Ranga published in the Journal of Indian Economics June 1926.

† Economic Organisation of Indian Villages Vol I. pp. 29-32.

20 to 30 acres	715 acres
30 to 40 „	323 „
40 to 60 „	260 „
60 to 80 „	60 „
80 to 100 „	540 „
	3335 „

The number of acres owned by those ryots who have between 20 and 30 acres each is almost equal to that owned by ryots who have between 10 to 20 acres.

Those ryots who pay a Land Revenue of less than 5 Rs.	No. of such ryots.
From 5 to 10 Rs.	50
10 to 20 Rs.	63
20 to 30 Rs.	37
30 to 40 Rs.	25
40 to 50 Rs.	15
50 to 60 Rs.	7
60 to 75 Rs.	10
75 to 100 Rs.	4
100 to 125 Rs.	1
125 to 150 Rs.	1
150 to 200 Rs.	3
	282

As many as 215 ryots out of a total number of 282 pay less than Rs. 30 each as Land Revenue and so most of the ryots have less than 10 acres each in this village. The land is very unevenly distributed among these ryots. Out of these 282 ryots of Takkellapadu all but 23 are Kammas. The eight Muslim ryots own 30 acres 9 Panchamas 23, 5 Barbers 14 and one Washerman 4.

Those ryots who have	The land owned by them
less than 5 acres	192 acres.
from 5 to 10 acres	500 „
10 to 15 „	381 „

Takkellapadu and Uppalapadu.

The total area under the Ayacut of Uppalapadu is 4,400 acres but only 3,700 is cultivated while the rest is under the Government control. The ryots of Uppalapadu have bought more than 2,500 acres from the ryots of Takkellapadu, Namburu and other villages, while those of the latter villages bought at least 1,500 acres of Uppalapadu land. So there is a nett area of 4,700 acres of land distributed among the local ryots. There are 283 pattadars (those who hold the title deeds for land) in this village. We learn from the following table that those who pay less than Rs. 10 as Land Revenue form 44% of the total number of Pattadars.

Those who pay a Land Revenue of less than Rs. 5, Less than Rs. 10 but more than Rs. 5.	Number of such ryots.
	60
„ Rs. 20.	65
„ Rs. 30.	67
„ Rs. 40.	43
„ Rs. 50.	22
„ Rs. 75.	18
„ Rs. 100.	5
„ Rs. 125.	2
	1
Total ...	283

We learn from the following table that, out of 235 of the ryots of this village, as many as 141 ryots have less than 20 acres each, the number of those who have between 20 and 50 acres each is 116 and so the bulk of the ryot population has less than 50 acres per ryot in this village.

Those who have less than 5 acres of land.	No. of such ryots.
Less than 10 acres	55
„ 15 „	30
„ 20 „	24
„ 30 „	32
	37

Less than 40 acres	31
„ 50 „	16
„ 75 „	5
„ 100 „	5

Total ... 235 ryots.

Though on the average each of the ryots of this village is said to have 16.6 acres, actually there are more than 109 ryots who own not more than 15 acres each. The above tables show that land is very unequally distributed among the ryots of Uppalapadu and Takkallapadu as in the villages of our former enquiry * and that the number of small holdings is very considerable. In fact, the number of small holdings has been on the increase.

Renting of land in Uppalapadu and Takkellapadu.—

There are very few people in Uppalapadu who lease out their lands and even those few ryots belong to the non-cultivating caste of priests and so they can exact very small rents from their tenants who are all of the same class—Kammas and Telagas. Such priests are paid usually a rent of Rs. 10 per acre. There are only four principal ryots in Takkellapadu who have leased out their lands. Basavayya leased out 30 acres, Bapayya 50, Venkatarao 50, and S. Ramayya 50, making a total of 180 acres in all. The land which is suitable only for growing a commercial crop is rented at Rs. 25 per acre and if it is very close to the village it is rented at Rs. 30 per acre. The land which is specially suitable for tobacco-growing and is close to the village is rented at Rs. 50 per acre. Normally all that a ryot expects to realise from the land rented is cheap and plentiful supply of fodder, about Rs. 2 profit per acre and additional employment for his cattle.

Money Lending:—About 60 years ago there used to be 4 money lenders in Takkellapadu and two in Uppalapadu.

* Vol. I p. 29,

There are at present 16 such rural bankers in the former village and more than 25 in the latter. Sixty years ago, the rate of interest used to be 12 to 24% in Takkellapadu and 15% to 18% in Uppalapadu. At that time people used to borrow small sums, seldom exceeding Rs. 200 to support themselves during famine years. At the present day ryots borrow large sums of money often exceeding Rs. 500 for the purpose of buying or improving land, digging or repairing wells and supporting themselves during bad seasons and the rate of interest does not usually exceed 12% per annum. Peddi Punnaya of Uppalapadu lent a Panchama in 1900 a sum of Rs. 8 at 75% interest. But in 1915 several people borrowed from him sums varying from Rs. 50 at only 12% interest. *

* The following facts are gathered from the old Palmyra records of P. V. Ramanayya of Nidubrolu Village. Ramanayya lent Rs. 21,533 in the course of four years (1893 to 1897) to as many as 156 people. He lent on the average at the rate of about Rs. 138 per person. Of these 156 clients 60 were Panchamas who borrowed Rs. 1,343 or Rs. 22 1-3 per person. Each high caste Hindu borrowed on the average Rs. 201. 9.

The following table indicates much more eloquently the very small capacity of people to borrow at that time :—

No. of people borrowing.	The amount of money borrowed by each person.
40	Rs. 10 and less
19	„ 20 „
21	„ 30 „
25	„ 50 „
21	„ 100 „
9	„ 200 „
14	Rs. 500 „
2	Rs. 1,000 „
2	Rs. 1,500 „
3	Rs. 2,000 and over

Only in two cases has Ramanayya charged Rs. 15% interest. But all the Kammas and Panchamas were invariably charged 12% interest on their debts while the Kshatriyas of the Repalle Taluk were charged only 9% to 10% interest. Evidently Ramanayya had more confidence in the solvency and honesty of Kshatriyas than Kammas and

Though the habit of hoarding money has almost died out in the deltaic villages, it has not yet received any serious check in villages which are dependent chiefly upon dry crops. The ryots of the latter villages have little confidence in the solvency of those of the former villages and so are not induced to lend them money even at very high rates of interest. These ryots have learnt out of their narrow experience that it is profitable to lend only to their personal acquaintances. But even this experience has belied them in several cases because some of the so-called prominent ryots became almost insolvent. The latest reports from these villages go to show that more and more money is hoarded. Thus there is this irony of circumstances that some places are overfull with money and some places pay heavily to get some credit or other.

The influence of Guntur upon rural economy:—The women-folk of Koretapadu specialise in dairy-farming and one can see their women selling milk, ghee or butter-milk in Guntur on any day. Some ryots have 6 to 7 she-buffaloes each and many ryots have made their fortunes on this trade. There are some ryots who maintain their families upon the income they get from two she buffaloes. Some ryots of this village (it is now included within the Municipal limits) sell vegetables also in the Guntur market.

Reddipalem:—Ryots of Reddipalem also pay much attention to this bye-industry and have made their fortunes in it during the last 15 years.

Panchamas of his day. Many Kammas of the present day belonging to the Bapatla and Tenali Taluks do not hesitate to borrow large sums of money from Marwaris of Tenali and Guntur at 40 to 42% compound interest. Ramanayya will turn in his grave if he can hear about the present day rates of interest, charged by the Marwaris. But we must admit that the general rate of interest is only 9% in Nidubrolu and 12% in Uppalapadu and Takkellapadu. There are still places like Kankatapalem and Narasapuram in the Bapatla Taluk where the prevailing rate of interest is seldom above 9 and is usually 6 to 7½%

The ryots of Agatavaripalem sell vegetables in Guntur and earn a rupee a day but unfortunately they are addicted to drink. At one time most of the ryots of this village used to pillage other villages but after the advent of this trade in Guntur they have given up their former practice.

The ryots of Kakani sell straw, grass, vegetables, ghee, butter and butter-milk in Guntur and make money. The ryots of Venigandla also sell vegetables, fruits and a small quantity of butter-milk etc. every day in Guntur. All these villages are within a distance of six miles from Guntur and the people of Yenamadala which is 12 miles away from Guntur go to the town with grass during summer and fire-wood at other times and seek to make their living thereby.

Selling grass is quite a profitable occupation and more than two hundred women earn their wages through this work. Some of them go to the fields, canal banks road-sides or forests at 6 A.M. and cut grass till 10 A.M.; then they take rest until 3 P.M. and go to Guntur between 3 and 5 P.M. to sell the grass. Other women go to cut grass from 2 to 6 P.M. and go to Guntur between 6 to 10 A.M. during the next morning and sell it there. One bundle of grass is worth in August 3 annas to 4 annas but in summer 8 annas. A person has to work for about 8 hours during summer and about 4 hours during the rest of the year to cut the same quantity of grass. Most of these women are Panchamas and a few are Gollas.

Economic progress of these villages:—There is no doubt that these two villages Uppalapadu and Takkellapadu have made great progress in the last fifty years. Govindayya, Bapayya, Village Munisiffs and other prominent people of these two villages have given the information given below:—

Prices of Commodities etc:—The scale of the prices current for food grains etc., in Uppalapadu and Takkellapadu about 40 years ago is given in the following table:—

Commodity or beast	Price 40 years. ago (1886.)	1926 price.
Paddy	Rs 32 per Candy	Rs. 104
Cholam	" 40 "	" 160
Variga	" 28 "	" 96
Maize	" 30 "	" 96
Horse Gram	" 30 "	" 160
Very good bullock	" 40 "	" 300
Ordinary bullock	" 25 "	" 125
To weave 1yd. of cloth	" 1/32 "	" 1/8
Ghee 1 M. M.	" 1 "	" 4
Green Gram	" 26 "	" 128

The prices of land have also risen to a considerable extent in the last 40 years. The land close to the village was then worth only Rs. 40 an acre while it sells at present at Rs. 500 to 800. But about 80 years ago the grandfather of Govindayya paid only Rs. 7 for 14 acres.

Kakumanu.

The Past Economic Conditions:—Forty years ago, most of the land in this neighbourhood was uncultivated and was called the Reserve by the people. The Government used to auction portions of this 'Reserve' from year to year and people bought it at very low prices. In fact the area of the 'Reserve' was always fluctuating as ryots used to cultivate more of the 'Reserve' after a very favourable and prosperous year and less of it after a very bad year. Many ryots were unable to pay the Land Revenue for their own holdings and so their lands were also converted into 'Reserves' until the Land Revenue was paid. Sometimes such land which was taken over by Government used to be put up for auction and those ryots who offered to pay the necessary Land Revenue got it. Very few people had spare money and most of the ryots used to find it extremely difficult to buy cattle and agricultural implements.

At that time there was no cultivation of tobacco, chillies or Variga. Most of the land was under cholam mixed with green and red grams. Famine used to visit these

parts once in every five or six years and so ryots never felt any security about their lives, food or property. People consumed a sort of food prepared with a mixture of Cholam and green gram. But there were times when ryots could not get even this sort of food and had to live upon "Bommedam" a sort of very inferior, unpalatable and cheap cereal.

But in the last 25 years most of the people have come to like rice and the consumption of it has been on the increase. At present most of the ryots consume rice and a little of cholam, while all the prominent ryots consume nothing but rice. Even Panchamas do not like cholam or any other dry cereal and they prefer the very inferior rice to cholam, a change repeated in other parts of Guntur District*.

Prices of Agricultural produce:—The following table shows the rise in the Prices of commodities in Kakumanu.

Name of the commodity	1876	1910	1926 October
	price per candy.		
Paddy	Rs. 33-5.4	Rs. 60 to 70	Rs. 110
Maize	32 to 40	80	128
Variga	32 to 40	80	130
Cholam	36 to 40	80	160
Chillies	20 to 23	40 to 50	130
Cotton	25 to 27		60
Redgram	35 to 37	60 to 70	160
Green gram	30 to 37	60 to 70	160
Coriandar	16 to 20	40 to 50	160
Dry paddy	22 to 25	50 to 60	100
Tobacco	12 to 15	20 to 30	75
Caster seeds	40 to 50	60	160

Variga, maize, chillies and cotton sold 50 years ago at harvest time from Rs. 32 to 37 Rs; seldom at Rs. 40. People used at that time castor oil for lighting purposes and very little oil was exported and the price of castor

seed was very high. Now, there is very little production of castor in this village. For the last three years the culture of ground-nut has been introduced. Some ryots produced tobacco with the seedlings supplied to them by the Imperial Tobacco Co., during 1925-26 and realised very high prices for their produce. The above facts are gathered with the help of Messrs. B. V. Swami and N. Hanumayya who are both over 70 years of age.*

We learn from the following table that the average assessment of Land Revenue per acre is Rs. 3-10-0 in Kakumanu. The land which is assessed at Rs. 5-10-0 and Rs. 4-6-0 is very close to the village and is very valuable when used as house-sites.

Extent.	Land Assessment.	Total Land Revenue.
Ac. Cents.	Rs. A P.	Rs. A. P.
16-41	5—10—0	92— 8—0
73-23	4— 6—0	320— 8—0
1306-13	3—12—0	4898— 7—0
1428-42	2— 8—0	3571—10—0
505 86	1—14—0	949— 1—0
Total 3330-5.		9832—2—0

Disiribution of land among the ryots of Kakumanu.

Those who pay	No. of such ryots
From Rs. 1 to 5	67
From Rs. 5 to 10	81
„ 10 to 20	73
„ 20 to 30	58
„ 30 to 40	30
„ 40 to 50	16
„ 50 to 60	16
„ 60 to 75	12
„ 75 to 100	10
„ 100 to 125	7

*Information regarding the past economic conditions of such villages is gathered in every case from the local ryots who are above 60 years of age. Information thus got, is far more accurate than government records, nationalist essays or impressions of some Englishmen.

Those who pay	No. such ryots
From Rs. 125 to 150	4
„ 150 to 200	6
above 200	1

Total 381.

We learn from the above table that as many as 339 ryots have less than ten acres of land while most of the land is in the hands of a few big ryots most of whom belong to the family of Nannapaneni people.

The following table shows the prices of land of Kakumanu.

Distance of land from the village.		Price per acre of land in		Extent of such land.	Proable rent per acre.
		1906	1926.		
		Rs.	Rs.	Rs.	Rs.
house sites		400	800	100	30
close to village	West	600	1,000	15 acres	50
$\frac{1}{4}$ mile	„	120	600	500	20 to 25
$\frac{1}{2}$ mile	„	100	400	500	12 to 15
one mile	„	50	200	500	10
two, over	„	500	1,000	5	40
close to village	East	150	400	100	25
$\frac{1}{4}$ mile	„	100	200to250	150	15
$\frac{1}{2}$ mile	„	50	150to200	150	10
mile	„	...	10	300	Land
2 miles, over	„	...	10 to 100	700	Revenue only

Renting of land:—The ryots of this village have rented about 509 acres of dry land belonging chiefly to Brahmins. Some ryots have rented 100 acres belonging to other villages. Unfortunately the number of ryots who lease out their lands has been on the increase, because young men among the Kammas have begun to think it beneath their dignity to work in the fields after getting a smattering knowledge of English.

The following table gives an idea of the prices of things at different periods in the year.†

Commodity.	Price per candy	
	1925 Dec. harvest	1926 October.
	Rs.	Rs.
Maize	106 10 8	142 3 0
Paddy	80 0 0	110 0 0
Dry paddy	75 0 0	100 0 0
Varagu	106 10 0	128 0 0
Coriandar	70 0 0	140 0 0
Chillies	100 0 0	140 to 160
Ground-nut	30 0 0	

* See Effects of English Education upon Rural Social Organisation with special reference to seven Indian Villages by N. G. Ranga published in Educational Review, March 1927.

Rise of Prices in Nidubrolu.

†The following table shows the rise in the prices of paddy, Bengal gram and other grains in the last 35 years, in Nidubrolu.

Cereals. 1891	1894	1895	1896	1898	1899	1900	1903	1904	1926
Paddy per candy Rs. 35	36	New Rs. 40 to 48. Old Rs. 64	69		May 58 Nov. 72	July & Sept 60	Nov. 36	70	90 Sept. 102
Maize.	59	64		64					
Horse gram	36								Rs. 160 in Sept 190
Bengal gram	58								

Within about 8 months after the crop was harvested the price of the produce has risen by more than 1/3 of it at the harvest time,

Money lending:—Venkataswami of Kakumanu said that he borrowed about 40 years ago small sums of money at 9 to 12% interest. But shipping merchants and others were lent large sums of money at 6% interest. Now the general rate of interest is 12%, though some people whose security is sound are lent at 9%. Before 1910 there were more than 30 money-lenders, each of whom used to lend more than Rs. 2,000, while N. B. Rayudu could lend more than Rs. 100,000. Now there are only 15 rural bankers, including 7 Vaisyas who are all newly introduced to this branch of business in this village. In those olden days, the rural bankers of this village used to lend money to their personal acquaintances in Nidubrolu, Appikatla, Kommuru, and Ballukhanudupalem and to the big shipping merchants of Karamchedu. Now their successors are only able to finance the ryots of their own village.

There are many causes for this decline in money-lending business of this village. N. B. Rayudu's family has been divided up into 15 families each of which has spent more than Rs 10,000 upon houses* and marriages etc.

The above information was collected from the Palmyra records of one of the most prominent ryots of Nidubrolu. In 1894 this ryot agreed to buy the paddy of another ryot who became indebted to him at Rs. 40 per candy towards the clearance of that debt. In all other cases these prices were those which were charged for small quantities of paddy or other grain advanced by this ryot to his servants, coolies or clients. So the actual prices of these grains might be some what less than the prices, given above.

* House-building is one of the most important ways by which ryots spend most of their savings and capital. In Nidubrolu, seven ryots spent Rs 1,00,000 upon their ten buildings. In Pedapalem of Tenali Taluk, five ryots alone spent Rs 70,000 upon their six houses. The ryots of Appikatla, Brahmanakoduru, Thurumella and Amrutaluru have also spent large sums upon their houses. Luckily the ryots of Uppalapadu and Takkellapadu have not yet taken to this disproportionate and unnecessary means of expenditure.

and so the capacity of all these families to lend money has gone down to about Rs. 100,000. There used to be 15 Brahmins who made it their business to promote quarrels among the important ryots of the village and to get them involved in suits in the Law Courts. They were so far successful as to ruin many Kamma families of this village and so most of these latter fell out of the ranks of rural bankers. Also the failure of crops in the last ten years, and the rise in the standard of living, the fall in the prices of agricultural produce in the last six years and the rise in the wages of labour have all contributed to the inability of ryots to save any appreciable amount of money in the last decade. On the other hand the Vaisyas were clever enough not to go to the Law Courts and they did not suffer from the failure of crops to the same extent as the ryots. They have been engaged, in addition, in some business or other and so earned something in addition. Moreover their standard of living has not risen very much. Hence they are at present the most important money lenders of this village.

Crops Grown.

Out of the total Ayacut of 3,654 acres of Kakumanu village, 324'65 acres is under Porambokes, 197'92 acres under Inams and 3132'13 acres under the ryots who hold it directly from the Government. The ryots of this village own 2,000 acres of Ballukhanudupalem, 450 acres of Appapuram, 60 acres of Vallabharaopalem, 100 acres of Garikipadu, 150 acres of Kommuru and 30 acres of Kondapaturu, all their holdings in the first three villages being wet-lands. But ryots of other villages own about 100 acres of Kakumanu village. So the ryots of this village own 5,972'13 acres of land in all, out of which 2,660 acres is under irrigation. The following table shows the distribution of land of Kakumanu and Uppalapadu between different crops.

	In Kakumanu.	Uppalapadu.
Name of the crop-Sajja.	No. of acres	under it
Cholam	706.27	83.23
Coriander	598.81	540.60
Variga	574.88	7.18
Dry paddy	523.41	102.30
Maize	252.72	144.50
Sun-hemp	244.30	140.83
Pilli-pesara	85.70	
Bengal grams	87.92	70.11
Wheat	56.42	
Tobacco	48.88	768.10
Gogulu	34.74	3.00
Kullaganjera	21.93	
Chillies	20.80	554.31
Red-gram	16.10	23.25
Horse-gram	15.73	87.79
Cotton	12.64	
Ground-nut	10.20	175.30
Castor	10.16	
Onions	1.36	1.00
Black-gram	2.31	
Green-gram	2.80	43.30
Vegetables	7.77	22.00
Korra		45.00

The village Karanams admitted that they did not measure the lands under the minor crops like Cotton, Gram which are sown mixed with Cholam and other crops which are principally grown but that they simply estimated the probable area under these different mixed crops. So the Agricultural Statistics of the Government are subject to this qualification that in many cases they are based upon rough estimates.

CHAPTER IX.

ECONOMIC ORGANISATION OF INDIAN VILLAGES.

Three Villages of Kakumanu, Uppalapadu and Takkellapadu.

Economic Conditions of Ryots.

This chapter contains 8 family budgets and 8 agricultural budgets of ryots, together with a discussion on the economics of cattle. Wherever it is convenient, the writer has tried to discuss the affairs of Kakumanu separately from those of Uppalapadu and Takkellapadu together, so as to make it easy for the reader to follow the significance of the statistics given.

Kakumanu is the only village where there are some wet-lands. The agricultural budgets of the ryots of this village show clearly how helpless the ryots of this village would be but for the fact that most of them own a small piece of wet land from which they can expect regular and secure income. Most of the ryots of this village find it very difficult to get enough income from their lands so as to balance their family budgets.

Uppalapadu and Takkellapadu have no wet-lands and the ryots of these villages are entirely at the mercy of the untrustworthy seasons. Most of the ryots who have less than 20 acres of land find it almost impossible to maintain a decent standard of living and to balance their family budgets.

Both Uppalapadu and Kakumanu are specially vulnerable to floods as they are low-lying villages and as the drains pass close by them. Most of the land under the ayacuts of these two villages can easily be irrigated if only the Government takes the initiative. It was proposed at one time to bring about 10 villages including

Kakumanu under irrigation and to irrigate those lands by a canal to be dug from Chebrolu off the Buckingham canal. Uppalapadu and twelve other villages can similarly be benefitted if a canal is dug from Seetanagaram near the Krishna anicut to bring water to this side. It is estimated that the whole scheme when completed will cost about Rs. 50 per acre and the ryots have already got the spot levels ready. The Government will minimise the economic insecurity of the people of these 20 villages if it undertakes to complete these two projects.

Standard of living of Ryots.

We have now with us 8 family budgets of ryots of Uppalapadu, Takkellapadu and Kakumanu. These families have a total annual income of Rs. 4,190-1-2 or Rs. 523-12-1 per family or 99-6-7 per person, But an average ryot of 42 families* of deltaic villages has an annual income of Rs. 194-5-3 and the ryot of the families which have an annual income of less than Rs. 500 each has an income of Rs. 119-1-0. An average hand loom weaver in the Madras Presidency † has an annual income of Rs. 64-7-8 and so he is not very much worse off than our average ryot of these dry lands. While an English worker on the margin of starvation is estimated to need at least 40 oz. of solid food for a day ‡ and an average weaver gets 23·3 oz of solid food per day, an adult in a ryot family gets 19·65 oz of cereals, 1·16 oz of pulses, and 0·58 oz of oils including ghee.

These 8 families have saved only Rs. 707-9-0 during 1925-6 and two of them actually had to borrow to balance their family budgets. An average adult in these 8 families spends Rs. 82-4-7 per annum. The difference between this figure and the earnings of an average person of the same families is due to the fact that while a child is considered equal to a man or woman when the figures of earnings are taken, it is considered equal

* Economic organisation of Indian villages Vol. I, p. 146.

† Economics of the Hand-Loom Weaving Industry by N.G. Ranga.

‡ Has poverty diminished? By Prof. Bowley.

to only half a man or woman when the statistics of consumption are considered. If we apply the same standard of computation for both figures, then an adult has an annual income of Rs. 84-3-3. But it is thought more convenient to adopt these two methods of obtaining these figures because many statisticians have already adopted the method of giving the annual income per person and not per adult.

It was estimated that a ryot on the margin of the standard of decency has to spend Rs. 87-14-3 on his living per annum in the deltaic villages and that the average ryot of these dry villages spends Rs. 5-10-0 less per annum. If we assume that a ryot of these villages who is on the margin of a decent standard of living needs only Rs. 70 per annum, then a family consisting of persons equivalent to 4 adults needs spend Rs 280 per annum. To provide for marriages and other ceremonies, it is estimated that such a family must set aside at least Rs. 25 per annum and it must also save at least Rs. 75 per annum for about 20 years in order to enable two children to start in life at least on the margin of a decent standard of living * So a family consisting of a father, a mother, two sons and two daughters must get an annual income of Rs. 380 in order to maintain itself on the margin of decent living.

Such a family must have at least 25 acres of dry land in order to get so much annual income, provided also that the ryot is prepared to earn at least Rs. 150 per annum through his labour and supervision. But most of the land-owning families of these villages do not own as much land as 25 acres and the general tendency is that, the holdings of the ryots are growing smaller rather than bigger. If there were to be any proposal to fix a limit to the economic holding in the dry lands, this figure of 20 to 25 acres might be considered as a very useful one to start with. It may be necessary to pass some legislation to prevent holdings from becoming smaller than 20 acres and to pro-

* Economic Organisation of Indian Villages. Vol 1.

hibit the ryots from mortgaging their lands to private money-lenders, unless they own more than 20 to 26 acres of dry land.

The impossibility for most of the ryots to possess so much land goes hand in hand with their inability to lower still their present low standard of living and unless some subsidiary industries are organised, they must sink into poverty. Or else they will have to be satisfied with insufficient food. If no such help is forthcoming, then, the number of ryot families which will be reduced to the position of agricultural labourers' will continue to grow very fast as it has been the case till now. Dairy farming, seri-culture, hand-spinning, basket-making, darning and knitting, gardening and selling commodities of general consumption are some of the most practicable and profitable bye-employments.* Men, women and children in a family must be able to earn at least Rs. 200 per annum if most of the families in these villages are to maintain themselves at least on the margin of decent living.

Kakumanu.

Wet-land:—Ramanayya got a net income of Rs. 57-6-6 per acre on his 2 acres, N. Krishnayya Rs. 35-12-0 per acre on his 4 acres and N. P. Veerayya Rs. 43-2-4 per acre on his 3 acres. Though the wet-lands of Kakumanu are in the ayacut of Returu and Appapuram, the agricultural expenses on these lands are smaller than those in Nidubrolu and the surrounding villages and so the Kakumanu ryots are able to realise comparatively good incomes from their wet-lands.

Water is supplied to the wet-lands of this village after all the other neighbouring villages got their water and so, the transplantation is started here very late in the season. Hence there is an abundant supply of labour and the ryots are able to get better work and longer hours in the day out of their workmen who go into the fields

* See also my "Agricultural Industries" and 'Economics of Hand Spinning' published in India Journal of Economics 1927.

at 10 A.M. and work till 6 P.M., than is the case in the purely deltaic villages, such as Amrutaruru.* These ryots do not engage many workmen to prepare the fields before they are transplanted since they use buffaloes to do this work. This is known as "Dammu" and is found to be better and cheaper than the work done purely by men. The labourers of this village get work in the wet-lands of Returu and other villages during the transplantation and harvest seasons in addition to the local work.

Tobacco:—Tobacco has always been grown in Kaku-manu in small quantities for local consumption but the Imperial Tobacco Co., has introduced its improved varieties of tobacco in the last two years. The Company bought the new tobacco at Rs. 70 to 80 per candy as against the Rs. 30 to 50 paid for the local varieties of tobacco. So, the ryots are very anxious to grow more of this new tobacco. The villages of Kommuru and Katrapadu have also made successful attempts in this direction. But the ryots of the villages around Chilakalurpettah have found out, after an experience of more than ten years, that the soil becomes very poor and exhausted if this new tobacco is grown continuously for six years on the same field and that the soil is made unsuitable for other crops. They also realised that such exhausted soils become liable to the attacks of pests even when other crops are grown on them and that the pests damaged the neighbouring fields also. They have also found that these evils could be averted if tobacco is rotated by paddy, grown as a dry crop and cholam, since these two crops enrich the soil to such an extent as to enable it to stand the exhaustion caused by a tobacco crop raised once in every three or even two years on the same field. K. Chinnayya, an experienced and intelligent ryot says that though the local ryots know of the advantages of rotation, they are indifferent because they are more anxious for the immediate monetary benefit and so they grow tobacco in the same fields year

* Vol. I p. 59.

after year. It is because of this bad practice that some new pests have been introduced into this tract in the last four years.

Tobacco is grown on a large scale around Paruchuru, Inkollu and Daggupadu of Bapatla Taluk and both kinds of it is grown in large quantities. The indigenous tobacco is bought by Pandroti merchants who are mostly Mahammadans of Madras and they export it to Madras and the Southern Districts. The Imperial Tobacco Co., does big business in these parts. It has been exporting most of the virginia and other American varieties of tobacco grown here, to Calcutta and also to England.

This company has big purchasing stations at Paruchuru and Chirala and it usually gives out seedlings to ryots who agree to grow the particular tobacco it wants and the Company in its turn promises to buy the tobacco at a certain sum per acre or candy of the stuff. It charges Rs. 6 per acre for the seedlings given, while the ryots like Gopayya of Paruchuru, who have secured their own seeds out of the last year's crop have to pay only Rs. 4 to other ryots who agree to grow the seedlings on their seedbeds with the seeds supplied. Until 1926, the Company used to buy tobacco at a certain price per acre while it was still in the fields. But as it sustained heavy losses two years ago because of the damage caused by heavy rains while the crop was still in the fields, it has decided to buy only the cured and dried leaf at so much money per candy. The ryots do not seem to like this new method of buying their tobacco because they dislike to bear the risks inherent in it. But some ryots are of opinion that it may be better for the grower to sell according to the new method because under the old system, the Agent of the Company valued the crop not after any exact ascertainment but by a rough appraisement, of the quantity in any field.

As far as tobacco is concerned, there are many defects in the system of marketing prevalent in these

parts. There is no such thing as an open market and the ryots are obliged to take all their tobacco to the go-downs of this Company or wait for the arrival of merchants from Chilakalurpettah and Guntur. When there is a rumour that the Company wants tobacco and is prepared to pay a high price, many ryots get into a frenzy and take much more tobacco to the go-downs of the Company than is wanted there and the Agent takes advantage of the situation and offers very low prices. The ryots are obliged to sell their tobacco even when they cannot get the charges for carting it to that place, in addition of course to the proper price of their tobacco, rather than carting it back home. Sometimes there are commission agents at these go-downs who work in co-operation with the clerks and they charge a certain sum per candy of tobacco to let it pass into the go-downs so that the Agent may price it. In fact one Kamma in Paruchuru has made more than Rs. 30,000 in the last four years by taking advantage of such peculiar circumstances and it is even rumoured that the Company came to know of such happenings and changed its staff completely in the Paruchuru go-downs. Even then the fact remains that the ryots have none else to compete with the Company to bid for their tobacco and so the Company can and does dictate its own terms to the ryots. It is necessary for any healthy growth of tobacco-growing that open markets should be established as soon as possible.*

Ground-nut.—Ground-nut was introduced into the neighbourhood of Kakumanu only two years ago. The ryots have already found out that it does not pay so well as other crops, such as chillies, coriandar because the costs of picking in these soils are prohibitive. But it has spread enormously in the neighbourhood of Paruchuru and Daggupadu because the soils there are more loose than at Kakumanu. The ryots of Paruchuru think that ground-nut improves the soil, provided they plough the

* See also "The development of tobacco trade in the Madras Presidency by N. G. Ranga. Published in Indian Economic Journal July 1926.

field well, so that the stumps, nuts and roots left in the fields after harvest may form very good manure to the fields.

The realisation of this fact by the ryots is tending towards not only an increase in the area under ground-nut but also a corresponding decrease in the area under tobacco. In fact the yield of chillies has fallen because of the exhaustion of the soils and the introduction of pests brought about by the cultivation year after year of the exotic tobacco. So the introduction of ground-nut is a real gain to the ryots as they can rotate it with cholam (Mungari) and chillies.*

Variga and Coriandar are the only crops which are manured and though cholam (Hingari) is a very exhaustive crop as it has a surface root system and is a three months crop, it is not manured properly. But ryots leave the fields under fallow for nine months after cholam is grown and seem to believe that the soil can regain its lost properties through constant exposure to atmospheric influences and thorough ploughing.

Income from Agriculture in Kakumanu.

Four ryots of Kakumanu have together 166 acres of dry land and they make on the average Rs. 17-14-2 per acre but they have to pay a Land Revenue of Rs. 3-0-0 per acre and so they get a net income of Rs. 14-14-2 per acre per annum. If we take into consideration the profits made on cattle as well, then the net income per acre may come to about Rs. 15-12-6. In the last ten years, returns from agricultural operations have been so deplorable, that ryots say, in answer to the question as to how much they set in rent per acre, that it is only ten Rupees per acre per annum.

These four ryots realised Rs. 3½ per acre on the average on 44 acres kept under cholam (both Mungari and

* See also Cuddapah District manuel. The author of this manuel wondered whether groundnut could be made to rotate with cholam,

Hingari), Rs. 5-9-2 per acre on 10½ acres under maize, Rs 8-13-1 per acre on 32 acres under coriandar, Rs. 25-4-9 per acre on 37½ acres under dry paddy and Rs. 27-13-3 per acre on 30½ acres under Variga. Cholam, maize and coriandar failed miserably to yield any appreciable returns because the season was very unfavourable to them in 1925-26. But for the successful crops of dry paddy and variga the position of many ryots would have become very critical in that year.

Unpopularity of manual work:—More and more young men among the Kammass of Kakumanu are becoming disinclined to work personally in their fields and that is why we find so many ryots who, though they have only 20 acres or less each, employ each a servant to whom they pay Rs. 120 per annum. But if a ryot, who has twenty acres, does most of the daily routine work and employs workers only during the busy seasons, he can hope to make at least Rs. 200 on his lands and save Rs. 150 on his own labour and supervision. Thus, such a ryot can make Rs. 350 per annum provided the season is favourable*. But he has no savings against bad times, since he cannot save much out of his usual earnings from his land and labour. Though the tendency to lease out one's lands is not growing in its intensity as quickly as that of dislike to manual work, the number of families which are unable to realise even Rs. 240 from 20 acres is on the increase and the result is that there are more than 200 Kamma families in this village which are obliged to supplement their scanty incomes from lands by daily wages. The evil of equal division of property among the members of a family and the existence of unprofitably small holdings dispersed in different parts of the ayacut of a village are much more burdensome in their incidence in this village than in the neighbouring villages because of the rapid rise in the population of this village.

Panguluri Ramanayya of Kakumanu.

Ramanayya has 2 acres of wet land and 18 acres of dry land. He raised cholam on 3 acres, dry paddy on 5

* See p. 24.

acres during the Mungari season, and 6 acres under Coriandar and 5 acres under Variga in the Hingari season.

The following is his agricultural budget for the year 1925-26 :—

(1) Paddy

Income			Expenditure		
	Rs.	A.		Rs.	A.
Paddy 2 candies	190	0	Manure ...	8	0
Straw 3 cart-loads ...	30	0	Cartings spreading...	12	10
Sun-hemp ...	10	0	Squaring the field ...	1	8
			Seeds ...	3	0
			Manure ...	3	0
(Land Rev. Rs. 20)			Carting manure ...	4	8
			Preparing the field ...	6	0
			Ploughing ...	4	0
			Transplantation ...	5	6
			Weeding-12 workers.	4	0
			Reaping-14	4	8
			Heaping-2	2	0
			Harvesting-6	6	6
			Cattle work	8	0
			Carting paddy etc		
			home	14	0
			Sunn-hemp seeds	2	0
			Reaping sun-hemp	3	0
			Storing charges	3	5
Total income	230	0	Total expenses	95	3

Net Income per acre Rs. 134 13

(2) Cholam —3 acres.

Income			Expenses		
	Rs.	A.		Rs.	A.
Fodder	40	0	Ploughing	9	0
			seeds	2	4
			Seeds of a fodder		
			creeper	1	8
			reaping	4	8
			heaping	0	12
Total income	40	0	Total expenditure	18	0

Net income Rs. 22 0

(3) Dry paddy 5 acres.

Income			Expenditure		
	Rs.	A.		Rs.	A.
1½ candies ...	141	4	Ploughing ...	15	0
Straw 3 cart loads	30	0	Seeds 35 M. M. ...	7	0
			Red-gram seeds ...	0	4
			Cotton seeds ...	0	8
			weeding 20 workers	4	4
			Reaping 25 „ ...	7	2
			heaping 10 „ ...	2	14
			Harvesting ...	6	0
			Cattle work ...	2	0
			Heaping, carting ...	3	0
Total income ...	171	4	Storing the produce.	1	8
Net income ...	121	12	Total expenditure ...	49	8

(4) Coriandar 6 acres.

Income			Expenditure		
	Rs.	A.		Rs.	A.
Candy of coriandar	105	0	Ploughing ...	48	0
Fuel cart-load ...	1	0	Seeds ...	7	0
			Maize seeds ...	0	4
Total income.	106	0	Reaping, heaping... ..	10	0
			Harvesting, cattle... ..	3	0
Net income ...	36	12	Carting, storing ...	1	0
			Total expenditure ...	69	4

(5) Variga 5 acres.

Income			Expenditure		
	Rs.	A.		Rs.	A.
1½ candies ...	160	0	Ploughing ...	40	0
Straw 3 cart-loads.	30	0	Seeds ...	3	0
			Maize seeds ...	0	8
Total ...	190	0	Reaping, heaping. ...	9	2
			Harvesting ...	7	0
			Manure ...	25	0
			Heaping, Storing... ..	3	0
Net income ...	102	6	Total expenditure.	87	10

Total agricultural income Rs. 417 11 0

Land Revenue on dry land „ 60 0 0

Net income 357 11 0

*Cattle budget.

Ramanayya had 2 oxen, one cow, 2 she-buffaloes and a calf.

Income			Expenditure		
	Rs.	A.		Rs.	A.
Manure ...	10	0	Horse gram ...	10	0
Carting to and from fields ...	32	8	Depreciation ...	44	0
Ploughing ...	165	0	Straw ...	30	0
Dried cow dung ...	40	0	Fodder ...	30	0
Ghee etc. ...	35	0	Sun-hemp ...	10	0
Appreciation ...	40	0	Straw, fodder ...	60	0
			Servant ...	120	0
Total ...	322	8			
Net income ...	18	8	Total expenditure.	304	0

Ramanayya had a total annual income of Rs. 376-3-0

He has two daughters of 12 and 10 years of age, a son of 14 years and his wife in his family who are equivalent to 3½ adults* for food consumption. The following is his family budget :—

	RS.	A.	P.	RS.	A.	P.
Cereals (1600 lbs.) ...	113	0	0			
Red Gram (133½ lbs) ...	8	0	0			
Black Gram 30 lbs. ...	2	0	0			
Ghee etc., 30 lbs. ...	30	0	0			
Vegetables ...	10	0	0			
Condiments and spices	24	0	0			
Total food			...	187	0	0
Kerosine oil ...	3	4	0			
Castor oil ...	4	0	0			
Cocoanut oil ...	4	0	0			
Fuel ...	24	0	0			
Total fuel and lighting ...			...	35	4	0

* I have shown reasons for accepting the following table in Vol. I, p. 69 as regards the cattle.

Appreciation in Value.				Depreciation.			
		Rs.			Rs.		
				Bullock	...	15	0 0
Cow	...	20	0 0	Cow	...	6	0 0
				He-buffalo	...	5	0 0
She-buffalo		10	0 0	She-buffalo	...	4	0 0

		Rs. A. P.	Rs. A. P.
Dhoties 2	...	4 0 0	
Upper cloths	...	3 0 0	
Sarees 3	...	18 0 0	
Bodices 6	...	2 4 0	
Son's Clothing	...	4 0 0	
Daughters' Clothing	...	10 0 0	
Total Clothing	...		41 4 0
Subscriptions	...	1 0 0	
Festivals	...	3 0 0	
Medicine	...	2 0 0	
Tobacco	...	20 0 0	
Soapnuts	...	2 0 0	
Barber	...	3 8 0	
Washerman	...	3 0 0	
Potter	...	1 8 0	
House repairs	...	2 0 0	
Total miscellaneous expenditure			38 0 0
Total annual expenditure	...		301 8 0
Net Savings	...	74 11 0	

Each adult in his family got a daily allowance of 20 oz. of paddy and Cholan ; 1·78 oz. of pulses and 0·12 oz. of oils, making a total allowance of 21·9 oz.

Ramanayya was able to spend only Rs. 118 2/7 upon each adult in his family. He was thus able to save only Rs. 74-11-0 after cultivating 20 acres of land and scrupulously economising in his family expenditure.

Inaganti Krishnayya of Kakamanu.

Krishnayya has forty acres of dry land and he raised cholam on 6 acres, dry paddy on 6 acres in the Mungari season and Variga on 9 acres, Maize on 2½ acres, Coriandar on 8 acres and left 8½ acres for fallow. The following is his agricultural budget.

* A woman is considered to be equal to a man in food consuming capacity and a child which is below 16 years and above 5 years of age is equal to half adult. Vol. I, p. 157.

(1) Dry paddy.

Income.	Rs. A.	Expenditure.	Rs. A.
1½ candies of paddy	120 0	Ploughing ...	12 0
6 carts-straw ...	48 0	Seeds ...	8 0
Cotton-failed ...	3 0	Weeding ...	8 0
Red-gram failed ...	—	Reaping ...	7 8
		Harvesting ...	6 4
		Carting ...	1 8
Total ...	171 0	Total ...	43 4

(2) Cholan-crop failed.

	Rs. A.		Rs. A.
Fodder ...	35 0	Ploughing ...	12 0
		Seeds ...	4 0
		Reaping ...	6 8
		Carting ...	1 8
		Total ...	24 0

(3) Variga.

	Rs. A.		Rs. A.
2½ candies of Variga	238 0	Manure 60 carts ...	45 0
6½ carts-straw ...	65 0	Carting it ...	16 0
Cholan ...	24 0	Ploughing ...	72 0
		Seeds ...	9 0
		Reaping ...	11 0
		Harvesting, carting ...	8 0
Total ...	327 0	Total ...	161 0

(4) Maize Hingari.

	Rs. A.		Rs. A.
120 M.M. of Cholan	24 0	Ploughing ...	16 0
Straw ...	6 0	Seeds ...	2 0
		Watching ...	7 8
		Harvesting ...	2 8
Total ...	30 0	Total ...	28 0

(5) Coriandar.

	Rs. A.		Rs. A.
1½ candies ...	146 0	Ploughing ...	64 0
Fuel ...	14 0	Seeds ...	8 0
		Harvesting ...	10 0
		Carting ...	2 0
Total ...	160 0	Total ...	84 0

		Rs. A.
Total agricultural Income	...	723 0
Total	„ Expenditure	340 4
Net	„ Income	382 12
He had to pay a Land Revenue of		118 0

Though Krishnayya ploughed his fallow-field, it did not cost him much as he ploughed it whenever there was time during any day of ploughing on the other fields. On the whole, he got a net income of Rs. 9-0-0 per acre of his holdings or Rs. 11-15-4 per acre of the land which he actually cultivated in 1925-26.

Cattle.

Krishnayya had two oxen, 2 she-buffaloes, making a total of 4 animals.

	Rs. A.		Rs. A.
Ploughing	174 0	Straw, fodder	149 0
Manure	45 0		
Carting	19 0	Horse-gram	10 0
Ghee etc.	40 0		
Harvesting	10 0	Depreciation	38 0
Appreciation	20 0		
Total		Total	Rs. 197 0
Rs. 308 0		Net income	Rs. 111 0

But Krishnayya had to pay Rs. 100 to his annual servant and so he was able to save only Rs. 11 on the account of cattle.

The following is his family budget.

Krishnayya got an annual income of Rs. 275-12-0 in 1925-26. There were in his family his mother, wife and a son of 12 years of age, making a total equivalent of 3½ adults for food consumption.

Expenditure:—

	Rs. A. P.	Rs. A. P.
Cereals. (5400 lbs) ...	140 0 0	
Red gram (133 1/3 lbs) ...	10 0 0	
Vegetables ...	12 0 0	

Expenditure:—	Rs.	A.	P.	Rs.	A.	P.
Condiments, spices ...	20	0	0			
Sugar etc. ...	4	0	0			
Total food			...	186	0	0
Kerosine oil ...	7	0	0			
Cocoanut oil ...	2	0	0			
Fuel ...	20	0	0			
Total fuel etc.			...	29	0	0
Dhoties 2 ...	5	0	0			
Upper cloths ...	4	0	0			
Shirts 2 ...	4	0	0			
Sarees 5 ...	20	0	0			
Bodices ...	3	0	0			
Son's clothing ...	4	0	0			
Total clothing			...	40	0	0
Barber ...	4	0	0			
Washer-man ...	4	0	0			
Earthen-vessels ...	1	0	0			
Festivals ...	2	0	0			
Total miscellaneous expenditure				11	0	0
Total annual expenditure ...				266	0	0
Supposed savings			...	9	12	0

In fact Krishnayya was only able to balance his budget. During normal years he expects to save at least Rs. 150 per annum but in this year under review his fallow-field, cholam crop and red-gram crop did not yield any income.

Each of the adults in his family got a daily allowance of 22.5 oz. of rice and Variga and 1.67 oz. of dhal, making a total allowance of 24.17 oz of solid food.

Nallamotu Krishnayya son of Papayya.

Krishnayya has 4 acres of wet lands and 34 acres of dryland. He has to pay Rs. 40 on his wet-land and Rs. 135 on dry land towards Land-Revenue.

He raised dry paddy on $6\frac{1}{2}$ acres and Cholam on 5 acres in the Mungari season and in the Hingari season he grew variga on $8\frac{1}{2}$ acres, maize on 5 acres, cholam on 4 acres and Bengal gram on an acre, and $2\frac{1}{4}$ acres were left fallow as there was too much water in the field. He planted chillies in two acres but the plants were killed by too early rains and so he sowed maize in that field. The following is his agricultural budget :—

(1) Wet land 4 acres.

	Rs.	A.		Rs.	A.
Income :			Expenditure :		
$3\frac{1}{4}$ candies ...	280	0	Manure 40 carts ...	40	0
7 cart loads of straw ...	56	0	Carting ...	40	0
Sun hemp ...	12	0	Squaring the field ...	4	0
			Seeds ...	5	0
			Up-rooting, trans- plantation ...	11	0
			Weeding ...	3	0
			Preparing the field ...	12	0
			Ploughing ...	6	0
			Reaping, Heaping... ..	8	0
			Harvesting, cattle, carting ...	30	0
			Storing ...	1	8
			Sun-hemp expenses... ..	5	0
Total ...	348	0	Total expenditure	165	8

(2) Dry paddy $6\frac{1}{4}$ acres.

	Rs.	A.		Rs.	A.
$3\frac{1}{4}$ candies ...	260	0	Ploughing	32	8
7 cart-loads of straw ...	70	0	Seeds	8	8
			Weeding	6	4
Total ...	330	0	Reaping	8	0
			Heaping, harvesting	13	8
			Cattle work	10	0
			Carting, storing	6	0
			Total ...	84	12

(3) Cholan 5 acres.

Income.	Rs.	A.	Expenditure.	Rs.	A.
This crop failed			Ploughing	25	0
fodder ...	30	0	Seeds	5	0
			Reaping	5	0
			Total ...	35	0

(4) Variga 8½ acres.

	Rs.	A.		Rs.	A.
3 candies	300	0	Ploughing	68	0
8 cart loads of straw	80	0	Manure	40	0
			Seeds	5	8
Total ...	380	0	Harvesting, reaping	25	0
			Carting, cattle	18	0
			Storing	3	0
			Total ...	159	8

(4) Maize 5 acres.

	Rs.	A.		Rs.	A.
Candy of maize ...	100	0	Ploughing ...	40	0
Straw ...	8	0	Seeds ...	3	0
			Watching	7	8
			Harvesting	15	0
			Cattle carting	7	0
Total ...	108	0	Total ...	72	8

(5) Bengal-gram 1 acre.

	Rs.	A.		Rs.	A.
Crop failed 40			Ploughing ...	8	0
M. M. only ...	10	0	Seeds ...	2	0
Fodder ...	1	0	Reaping harvesting.	2	0
Total ...	11	0	Total ...	12	0

(6) Cholan.

	Rs.	A.		Rs.	A.
Crop failed 4 cart loads			Ploughing ...	32	0
of fodder ...	48	0	Seeds ...	4	0
			Reaping etc.	4	0
			Total ...	40	0

Total agricultural income	...	...	12,55	0
Total " expenditure	...	...	569	4
Net income	...	...	685	12
Land Revenue	...	...	175	0
Net income from lands after all expenses are met	...	...	510	12

Cattle Budget.—Krishnayya had 4 oxen, 2 she buffaloes and two calves and 2 cows and a calf.

Income		Rs. A.		Expenditure		Rs. A.	
Appreciation	...	59	8	Depreciation	...	80	0
Ploughing	...	211	0	Fodder, straw etc...	...	300	0
Manure...	...	80	0	Paddy husk	...	12	0
Carting...	...	52	0	Servant	...	120	0
Harvesting	...	56	0				
Fuel ...	...	24	0				
Ghee etc	...	120	0				
Total	...	603	0	Total expenditure.	...	512	0

Net income from cattle ... 91 0

Krishnayya had therefore a total annual income of Rs. 601—12—0 in 1925-26. There were in his family his brother, mother, wife, sister-in-law and 2 children of 2 and 5 years of age respectively, making thus an equivalent of 5 adults for food consumption.

N. Krishnayya.

Expenditure on food etc.		Rs. A.	
Maize Cereals (rice, variga, cho-			
lam	...	140	0
Dhal 200 lbs.	...	12	0
Other pulses	...	4	0
Vegetables	...	20	0
Condiments, spices	...	24	0
Sugar etc. Ghee etc. (60 lbs.)	...	53	0
Total food	...	...	253 0
Kerosine oil	...	12	0
Cocoanut oil etc.	...	6	0
Fuel	...	24	0
Total fuel, lighting	...	...	42 0

			Rs.	A.	
Sarees 8	...	...	56	0	
Bodices	...	...	6	0	
Dhoties	...	...	16	0	
Upper cloths	...	...	12	0	
Shirts	...	...	9	0	
Children's clothing	...	...	5	0	Rs. A.
Total clothing		...	...	104	0
Travelling	...	...	25	0	
Tobacco	...	...	24	0	
Festivals	...	...	6	0	
S u b s c r i p t i o n s	...	...	3	0	
Barber	...	...	5	0	
Washerman	...	...	6	0	
Earthen vessels	...	...	2	0	
House repairs	...	...	4	0	
Soap nuts	...	...	3	0	
Total miscellaneous expenditure		...	...	78	0
Total annual income		...	...	601	12
Total annual expenditure		...	...	477	0
Net saving		...	...	124	12

Krishnayya could not have saved anything, had it not been for the fact that he had some irrigated land and his dry paddy crop was very profitable. Normally he is able to save Rs. 200 per annum. But bad seasons and late supply of water have resulted in poor yields in the last ten years. Each adult in his family got a daily allowance of 20·2 oz. of rice, variga and maize and 2·2 oz. of pulses, making a total allowance of 23·4 oz. of solid food.

Nannapaneni Peda Veerayya of Kakumanu.

Veerayya has 3 acres of wet-land and 74 acres of dry land and he pays a Land Revenue of Rs. 270. He kept 20 acres under Dry-paddy, 22 acres under cholam, 3 acres under maize, 18 acres under coriandar and 3 acres under Bengal-gram and left 7 acres under fallow. The following is his agricultural budget for 1925-26.

(1) Paddy. 3 acres.

Income	Rs. A.	Expenditure	Rs. A.
2½ candies paddy	225 0	Ploughing	6 0 0
4 cart-loads of straw	32 0	Seeds	6 0 0
		24 carts of manure	24 4 0
Total ...	257 0	Carting it	24 4 0
		Transplantation	4 3 0
		Preparing field	7 0 0
		Reaping, heaping	8 7 0
		Harvesting 7workers	8 7 0
		Carting paddy etc	8 0 0
		Storing paddy	1 0 0
		Total ...	97 9 0

(2) Dry paddy 20 acres.

Income	Rs. A.	Expenditure	Rs. A.
5 Candies of paddy.	460 0	Ploughing ...	40 0
10 Cart-loads of straw	100 0	Seeds ...	20 0
Cotton ...	15 0	Cotton Seeds ...	2 0
		Harvesting etc...	5 0
		Carting paddy etc.	5 0
Total Rs. ...	575 0	Total ...	72 0

(3) Cholam 22 acres.

20 cart-loads of		Ploughing ...	44 0
fodder ...	200 0	Seeds ...	9 0
		Reaping ...	22 0
		Carting ...	10 0
		Total ...	85 0

(4) Variga 8 acres.

4 Candies of variga...	400 0	Ploughing ...	64 0
6 Cart-loads of straw...	60 0	Seeds ...	8 0
		Sowing ...	2 0
Total Rs. ...	460 0	Manure ...	20 0
		Harvesting ...	15 0
		Carting ...	4 0
		Total ...	113 0

(5) Coriandar 18 acres.

	Rs.	A.		Rs.	A.
5 Candies	...	350 0	Ploughing	...	144 0
Fuel	...	20 0	Seeds	...	15 8
			Reaping, heaping	...	25 0
Total Rs.	...	370 0	Harvesting etc	...	15 0
			Total	...	199 8

(6) Maize 3 acres.

$\frac{1}{4}$ candy	...	50 0	Ploughing	...	24 0
Straw	...	8 0	Seeds	...	2 0
			Reaping, heaping	...	10 0
Total	...	58 0	Total	...	36 0

(7) Bengal-gram 3 acres.

160 Madras Measures	...	40 0	Ploughing	...	24 0
			Seeds	...	2 0
			Reaping etc.	...	4 0
			Total	...	30 0

Total agricultural income Rs. 1,960 0 0

Total „ Expenditure „ 633 1 0

Net agricultural income „ 1,326 15 0

Land Revenue „ 270 0 0

Cattle Budget—Veerayya had 6 oxen, 4 cows, 3 she-buffaloes and two calves in 1925.

Ghee etc for own use.	100 0	Depreciation	...	126 0
Appreciation	... 110 0	Straw	...	400 0
Ghee sold	... 240 0	Paddy husk	...	100 0
Ploughing	... 346 0	Horse-gram	...	50 0
Manure	... 44 0	Servants 3 3	...	300 0
Carting	... 44 4			
Harvesting	... 20 0			
Total	... 904 4	Total	...	976 0

Net loss from cattle = Rs. 71 12 0

So Veerayya had a total annual income of „ 985 3 0

There were in his family his wife, mother, a nephew and his wife, a daughter of 12 years of age, and 4 children of 5 to 12 years of age thus making an equivalent of 7 $\frac{1}{2}$

adults for food consumption. The following is his family budget :—

		Rs. A. P.	Rs. A. P.
Cereals 3200 lbs	...	240 0 0	
Vegetables	...	30 0 0	
Pulses 160 lbs	...	12 0 0	
Condiments and spices...		36 0 0	
Ghee etc. 120 lbs	...	100 0 0	
Total food		...	418 0 0
Kerosine oil	...	12 0 0	
Other oils	...	6 0 0	
fuel	...	36 0 0	
Total fuel, lighting		...	54 0 0
Dhoties 12	...	24 0 0	
Upper cloths	...	10 0 0	
Sarees 12	...	70 0 0	
Daughters' dress	...	6 0 0	
Son's dress	...	4 0 0	
Shirts	...	10 0 0	
Bodices	...	6 0 0	
Total Clothing		...	130 0 0
Festivals	...	10 0 0	
Subscriptions	...	5 0 0	
Travelling	...	5 0 0	
House repairs	...	10 0 0	
Barber	...	6 8 0	
Washerman	...	6 0 0	
Earthen vessels	...	2 0 0	
Shoes	...	4 0 0	
Children's education	...	48 0 0	
Tobacco	...	24 0 0	
Total miscellaneous expenditure			120 0 0
Total annual expenditure		...	722 0 0

So, net annual savings in 1925-26. were Rs. 263-3-0 But Veerayya expects to save at least Rs. 500 per annum if rains fall in proper time.

Each of the adults in his family gets a daily allowance of 18. 70 'oz of cereals and 0.94 oz of pulses, thus making a total of 19.64 oz of solid food. Venkayya bought $3\frac{1}{2}$ acres for Rs. 2500, a house-site for Rs. 800 and spent Rs. 4,500 on litigation out of his savings in the last 15 years. He has no investments to his credit at present.

Cattle :— Of the four ryots of Kakumanu whose agricultural budgets were secured, only N. Veerayya lost Rs. 71-12-0 on the account of cattle while all the others made a certain amount of profit. P. Ramanayya got a net income of Rs. 18-8-0, I. Krishnayya Rs. 111 0 0, and N. Krishnayya 91-0-0. A special feature of the cattle budgets of the ryots of villages dependent upon dry crops is that income from ploughing looms much larger and more important than in the case of similar budgets of deltaic ryots.* This is either because these ryots are more careful than their fellow ryots in the deltaic villages and feed their cattle more economically by making the same quantity of straw and fodder go a longer way than in the deltaic villages or because their expenditure upon straw and their income from manure are very much lower than in the case of deltaic ryots. Though I. Krishnayya had 40 acres as against 20 acres of Ramanayya, he made through ploughing only Rs 174 as against Rs. 165 of Ramanayya, It might be because that he was unable to plough his land with a single pair of oxen as intensively as he ought to have done while Ramanayya was able to cultivate his lands well with only a pair. On the other hand, N. Krishnayya had two pairs of oxen for his 38 acres and was able to make only Rs. 105-8-0 per a pair while N. Veerayya made Rs. 115-5-4 per pair of his three pairs of oxen employed to cultivate 77 acres. Though the charges for ploughing differ according to the different crops raised on different fields of a ryot, for instance Rs. 2 per acre of paddy, cholam, dry

* Vol. I, pp. 63-66.

-paddy fields as against Rs. 8 per acre of variga and coriandar fields—it must be admitted that Ramanayya got a better return from his cattle for ploughing than any of the other three ryots. The ryots of this and the surrounding villages are of opinion that an ordinary ryot can cultivate at least 20 acres of dry land with an ordinary pair of bullocks while a very efficient ryot can easily work 25 acres without impairing the efficiency of the animals. Whereas the ryots of wet-lands can only give a rough idea of how much land can be cultivated by a pair of bullocks, these ryots have a saying “Araka bhumi” by which they understand that a pair of oxen can cultivate 20 to 25 acres of dry land.

N. Hanumayya says that best bullocks could be had at Rs. 100 a pair about 50 years ago while such a pair costs at present as much as Rs. 700. In those remote days only Zamindars were able to buy such fine bullocks for prize animals. Whereas the average bullocks used to cost Rs. 50 to 60 per pair, they now cost Rs. 500. Thus the prices of oxen have gone up much more steeply than those of food grains*. In spite of this, the ryots of this village are unable to rear oxen because of the shortage of the supply of fodder and shelter and are obliged to buy annually 50 animals from Repalle, Narsaraopet and Ongole Taluks. There are about 400 bullocks in Kakumanu. Very few ryots take any pleasure in breeding good cattle and there is not even a ryot in this village who takes any interest in possessing beautiful, and powerful bullocks. Annual cattle shows are held in places like Nandyal and Kurnool in the Ceded Districts. But ever since the Ongole cattle show was stopped there is not even one show held in the Northern Circars.

Dairy Farming:—There are about 200 cows and 400 she-buffaloes in Kakumanu. The ryots as well as the labourers have one or two she-buffaloes each, while the Kamma ryots alone have cows. The local supply of cows suffices the local needs and so no cows are bought from outside. But

* Vol. 1, P. 10,

about fifty years ago there used to be as many as 1000 cows in this village and some ryots like Nannapaneni B. Rayudu, had 40 cows each. There are many causes for this unfortunate situation. At that time there was much unoccupied and uncultivated Government land in Kakumanu, Appapuram, and Garikipadu and land was abundant with rich grass. Ryots had to pay only 4 annas per cow to let their cattle graze on such extensive pastures. It was only during the rainy season that the ryots found it a bit difficult to get enough fodder for their cattle and even there, they were able to send their cattle to the Palnad Hills provided they paid only 4 annas per cow per annum to the Government and 2 annas per cow per month to the Lambadis who looked after the cattle. The present rates are Rs. 1-6-0 per cow to the Government and 4½ annas per month per cow to the Lambadis.

Ryots of this village have found it almost impossible in the last ten years, to keep as many cattle as they formerly used to do, owing to the failure of crops and the consequent shortage of fodder. Almost all the Government land has been granted at nominal prices to people of different towns, and of the neighbouring villages. Its owners are unable to cultivate it and so they lease it out to the ryots of Appapuram and Garikipadu at indeed very low rents. Some of these lease-holders promise to pay only the Land Revenue to the actual owners of the land and are often unable to pay even that much. Yet the whole of this land is ear-marked and so the ryots of Kakumanu and other villages are not allowed to let their cattle graze on it. It is this policy of granting lands indiscriminately to all kinds of people who cannot be expected to cultivate them directly, without any regard to the economic needs of the villages concerned, which has brought the ryots of Kakumanu, Appapuram and Garikipadu to this impasse.

The following table shows the variation in prices of different cows and she-buffaloes.

* See Chapter on Pedapalem.

Kind of animal.	Price of an animal.	
	40 years ago.	During 1926 October.
	Rs.	Rs.
Best cow giving 3 seers ...	40	150
Cow giving 2 seers ...	...	125-140
Ordinary cow ...	20	60 to 70
Best she-buffalo, giving 2½ to 3 seers ...	20	100
Ordinary she-buffalo ...	15 to 16	60 to 70

In fact there are no cows in Kakumanu which give 3 seers of milk each and there are only 4 cows which give 2 seers each twice a day. Merchants go from Madras to this and the neighbouring villages to buy cows and she-buffaloes and on the 8th October, 1926 such merchants bought four she-buffaloes in Kakumanu for Rs. 400.

Most of the ryots of Kakumanu do not sell curd or butter-milk either because they think it beneath their dignity to do so or because they have nothing left after their own needs are satisfied. But there are many people in the village among whom most of the Brahmins and Vaisyas and a few Kammas are included, who require curds and butter-milk and so the Gollas of Kondapaturu go here to sell these things which they get from their sheep. Ten Madras Measures of curds is exchanged for 20 Madras Measures of paddy (Rs. 3-2-0) and 10 Madras Measures of butter milk fetch 10 Madras Measures of paddy (Rs. 1-9-0).

Ghee is sold in Kakumanu by most of the women who have one or two she-buffaloes and among these, 30 are Telagas, 20 Kammas, 30 Mahammadans, 55 Panchamas and 15 Vaisyas. Three Vaisyas of Kakumanu, and one of Pusuluru and a Mahammadan of Kommuru buy ghee from these people and sell it in Gunturu, a town which is about 25 miles from Kakumanu. Ghee is sold at 4 giddas (45 tolas) per Rupee, for eight months in the year (April to November) and at $4\frac{1}{2}$ giddas (50.625 tolas) during December, January, February and March, when there is a very good supply of ghee. These merchants export from kakumanu about ten tins of ghee per month on the average. Each tin, containing 8 Madras Measures ($1\frac{1}{2}$ maunds) costs them from Rs. 30 to 32 in Kakumanu but it is sold in Guntur at Rs. 33 to 36. They make on the average a profit of Rs. 1-8-0 per tin. In addition to this export, ryots in the village buy ghee worth about Rs. 400 per annum during the marriage seasons. Panchamas and Mahammadans do not consume ghee in their daily food and they try to save some thing by selling all their ghee.*

Uppalapadu and Takkellapalu :—Tobacco is a very old crop in these two villages but some exotic varieties of it have been introduced mainly by Imperial Tobacco Company, though of late Messrs. Naidu and Pillai have begun to encourage the cultivation of these varieties. During 1924-25 the Company agreed to buy the green leaf in the field at so much per acre, so the ryots made some money on their tobacco. But in 1925-26 when it tried to introduce the same system of buying as was introduced in the Paruchuru centre, the ryots of these two villages refused to grow any tobacco under that system. The cultivation of this exotic tobacco can become quite profitable provided the ryots can secure proper prices for their produce. Last year four ryots of these villages made Rs. 21-6-8 per acre on their 15 acres under tobacco. †

* See also Vol. I, pp. 66-71

† The 1926-27 Crop was very successful. Many ryots realised Rs. 75 net income per acre.

Chillies is a very ancient crop in these parts but it failed to yield anything during the last year, as the season was too unfavourable †. If the cultivation of exotic tobacco and ground-nut were to become general then the area under this crop will inevitably decrease, unless the ryots choose to lessen the area under cholam.*

During 1925-6, our four ryots have lost Rs. 6-14-0 per acre on 6 acres under dry paddy and Rs. 3-5-9 per acre on 28 acres of cholam because there were floods in the early part of the South-West monsoon. But they made Rs. 27-13-9 per acre on 14½ acres under variga, Rs. 19-1-0 per acre on 10½ acres under maize and Rs. 23 per acre on 7·82 acres under ground-nut. It must here be mentioned that ground-nut promises to become a very important crop in these two villages and that already one ryot has devoted 65 acres of his land to the growing of it, the present season being very favourable, this crop may be a greater success this year than in 1925-1926. The eagerness with which the ryots of these villages have taken to the cultivation of tobacco of exotic varieties and ground-nut is evidence enough to prove that the ryots of these parts are quite alive to the monetary side of their work and are prepared to make experiments provided there is not too great a risk involved in their enterprise. †

The four ryots of these villages made only Rs. 12-6-0 per acre on their 87 acres of land, out of which they had to pay a Land Revenue of Rs. 2-4-0 per acre so that they

* The 1926-27 crop was very successful. Many ryots realised Rs. 75 net income per acre.

† The 1926-27 Crop was very much better than that of 1925-26. A ryot who raised this crop on 65 acres, realised a net profit of Rs. 8,000 or nearly Rs. 150 per acre. Many ryots have decided to devote much land to this crop in 1927-28. But everything depends upon the rainfall and it must be remembered that such a favourable year as 1926-27 had occurred only once in the last six years.

got a net income of Rs. 10-2-0 per acre. This result accords with the general rate of rent paid to the ryots by their tenants. The figure comes up to Rs. 13-15-5 per acre, if we add also the profits made on cattle.

Manure—The ryots of these villages manure chiefly the fields on which they grow chillies, tobacco, variga and Bengal-gram. They use human manure, cattle dung and sheep manure and sometimes that of pigs as well. They do not use manure for cholam crop at all. They seem to think that ploughing has almost as much manurial effects as any of these manures and so they insist upon ploughing lands thoroughly. Except for cholam in which case Rs. 7-8-0 is charged per acre, all the other crops are charged at Rs. 12 per acre for ploughing. If any of the crops fail in its very early stages, and the ryot wants to sow some other seed in that field the owner of the bullocks should plough the field again free of charge and thus the risk of bad seasons is partly borne by the man who hires out the services of his bullocks and plough.

Dantula Nagayya of Uppalapadu.

Nagayya has 8 acres of dry land. He kept 2 acres under Cholam, $2\frac{1}{2}$ acres under Hingari Cholam, $\frac{1}{2}$ acre under dry paddy, 1 acre under Variga, $\frac{1}{2}$ acre under maize, 66 cents under groundnut, 1 acre under tobacco, and $\frac{1}{2}$ acre under chillies. The following is an account of his agricultural budget.

1 (a) Cholam. 2 acres.

Income	Rs.	A.	Expenditure	Rs.	A.
(b) Hingari Cholam. 2 acres			(a) and (b) together		...
The crop was a complete failure	...	...	Ploughing	...	15 0
			Seeds	...	4 0
			Sowing	...	0 8
			Total	...	19 8

(c) Hingari cholam, $\frac{1}{2}$ acre.

Income	Rs.	A.	Expenditure	Rs.	A.
10 M. M. Cholam ...	10	0	Ploughing ...	2	0
Straw ...	4	0	Seeds ...	0	4
			Labour ...	1	0
Total ...	14	0	Total ...	3	4

2 Dry paddy, $\frac{1}{2}$ acre.

	Rs.	A.		Rs.	A.
The crop was a complete failure ...	...	...	Ploughing ...	6	0
			Seeds ...	1	0
			Sowing ...	0	4
			Total ...	7	4

3 Variga, 1 acre.

	Rs.	A.		Rs.	A.
6/16 candy ...	36	0	Ploughing ...	12	0
Straw ...	10	0	Seeds ...	1	0
			Reaping and harvesting ...	3	0
Total ...	46	0	Total ...	16	0

4 Maize, $\frac{1}{2}$ acre.

	Rs.	A.		Rs.	A.
3/16 candy ...	18	0	Ploughing ...	6	0
Straw ...	4	0	Seeds ...	0	8
			Harvesting ...	2	0
Total ...	22	0	Total ...	8	8

5. Groundnut, 66% acre.

	Rs.	A.		Rs.	A.
10 Maunds ...	15	0	Ploughing ...	8	0
			Seeds ...	2	0
Total ...	15	0	Picking etc. ...	3	0
			Total ...	13	0

6. Tobacco 1 acre.							
Income		Rs.	A.	Expenditure		Rs.	A.
Tobacco	...	60	0	Ploughing	...	12	0
Fuel	...	5	0	Seeds	...	8	0
				Stripping and Drying			
Total	...	65	0	etc.	...	3	0
				Total	...	23	0

7 Chillies, $\frac{1}{2}$ acre.					
Rs. A.				Rs. A.	
The crop was a complete...				Ploughing	6 0
failure	...	...	...	Seeds	3 0
				Labour	1 0
				Total	10 0
Total agriculture income				...	162 0
Total agriculture expenditure				...	100 8

Net income from cultivation 61-8-0 or 7-11-0 per acre of his holdings.

He had to pay a Land Revenue of Rs. 14 per annum.

During a very unfavourable year, the agricultural expenses covered a considerable part of the total gross income from lands and in this case they ate up about 60%. During normal years, Nagayya expects to realize at least Rs. 150 net income and in 1926-27 he was able to get nearly that amount.*

Cattle Budget:—Nagayya has two she-buffalos.

Income		Rs.	A.	Expenditure		Rs.	A.
Appreciation	...	20	0	Depreciation	...	8	0
Butter milk and ghee.	60	0		Straw	...	20	0
				Fodder	...	10	0
Total		80	0	Total	...	38	0
Net income on cattle		...				42	0 0

* Sometimes, two or more crops are grown together at the same time and so a certain amount of double counting becomes inevitable and therefore the cropped area as shown in these budgets is larger than the actual area of land of a ryot.

Nagayya sells paddy husk to the ryots of the village and makes about Rs. 6 per month for 8 months in the year thus realising Rs. 48 per annum.

He works as an agricultural labourer for other ryots for three months in the year and earns about Rs. 30. His wife and daughter collect green manure worth Rs. 10 and fuel worth Rs. 10 per annum. So he had a total annual income of Rs. 187 8 0 in 1925-26. But had the climatic conditions been more favourable and had his village been less subject to floods than in 1925-26, he could have got at least Rs. 25 per annum per acre. In that case, his annual net income from land would have come up to Rs. 234 0 0.

Nagayya got an income of Rs. 187-8-0 in 1925-26. He has a son of 15 years, four younger children and his wife in the family who are together equivalent to $4\frac{1}{2}$ adults for food consumption.

The following is his statement of annual expenditure.

	Rs. A. P.	Rs. A. P.
Cholam & paddy 1600 lbs.	100 0 0	
Ghee 30 lbs. ..	10 0 0	
Dhal 41.8 lbs.	4 0 0	
Meat and fish 60 lbs.	6 0 0	
Vegetables ...	6 0 0	
Condiments and spices ...	10 0 0	
Butter Milk. ...	10 0 0	
Total food	...	146 0 0
Kerosine oil	4 8 0	
Cocoanut oil	3 0 0	
Castor oil	3 0 0	
Fuel ...	12 0 0	
Total fuel & lighting etc.	...	22 8 0
4 pairs of dhoties	8 0 0	
Upper cloths	3 8 0	
Skirts etc. for the daughter	8 0 0	
2 Sarees ...	8 0 0	
Bodices ...	3 0 0	
Total clothing		30 8 0

		Rs.	A.	P.	Rs.	A.	P.
Festivals	...	6	0	0			
Snuff	...	2	0	0			
Soap nuts	...	3	8	0			
Barber	...	2	0	0			
Washerman	...	2	8	0			
Casmetics	...	1	8	0			
Potter	...	1	0	0	18	8	0
Total annual expenditure Rs. 217 8 0.							

	Rs.	A.	P.
Total Annual income.	187	8	0
Estimated Deficit	30	0	0

Actually Nagayya borrowed only about Rs 25 during 1925-26 to balance his family budget. Even then he was not able to pay the interest at 12% per annum on his Rs 300 debt which was contracted for the purpose of performing the marriage ceremonies of his daughter and son. The expenses of the marriages came to Rs. 150 and the dowry to his son-in-law amounted to Rs. 200. According to Nagayya, he could with benefit spend another Rs. 60 per annum upon his family if his income were big enough. Each of the adults in his family got a daily allowance of 15.6 oz. cereals, 0.44 oz of pulses, 0.60 oz. of meat and fish and 0.3 oz of oils, which thus make a total of 16.94 oz. of solid food.

Ala Buchi Rayudu of Uppalapadu

Rayudu has 12 acres of dry land and he has also rented 1½ acres of Inam. In 1925-26, he kept 2 acres under dry paddy (Yelamadam) 4, under cholam ; 2, under variga 3 under maize ; 1, under tobacco; 1 under sajja and 60 % acre, under groundnut. The following is an account of the profit and loss of the above crops.

(a) Dry paddy, 2 acres

Income	Expenditure	RS.	A.
No income, as the crop failed owing to unseasonable rains.	Ploughing ...	24	0
	Seeds ...	3	0
	Sowing ...	0	4
	Total ...	27	0

(b) Cholam, 4 acres

The crop was a complete failure.	Ploughing ...	30	0
	Seeds ...	4	0
	Sowing ...	0	8
	Total ...	34	8

(c) Variga, 2 acres.

$\frac{3}{4}$ Candy ...	75	0	Ploughing ...	24	0
$1\frac{1}{2}$ Cart-loads of straw	30	0	Seeds ...	2	0
			Sowing ...	0	4
			Reaping and harvesting	5	0
Total ...	105	0	Total ...	31	4

(d) Maize, 3 acres.

$\frac{1}{2}$ Candy ...	50	0	Ploughing ...	36	0
Straw ...	20	0	Seeds ...	3	0
			Sowing ...	0	8
			Reaping harvest.	6	0
Total ...	70	0	Total ...	45	8

(e) Tobacco, 1 acre

Tobacco ...	60	0	Ploughing ...	12	0
			Seedlings ...	12	0
			7 workers for sowing	3	0
			Stripping the primings	2	3
			Reaping and stitching.	4	4
			Total ...	33	7

(f) Sajja, 1 acre.

Income	Rs.	A.	Expenditure	Rs.	A.
80 M. M. of sajja.	20	0	Seeds ...	0	4
Straw ...	10	0	Ploughing ...	12	0
			Reaping ...	1	5
Total ...	30	0	(5 workes) ...		
			Total ...	13	8

(g) Ground-nuts, 66 cents.

2 Candies ...	60	0	Ploughing ...	8	0
			Seeds ...	6	0
			Gathering ...	10	0
			Total ...	24	0

Net agricultural income from 13½ acres	115	9	0
Rent Rs. 10 0 0	}	Rs. 48	0 0
Land Revenue „ 38 0 0			

Net income from lands	...	67	9	0
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Cattle.

Rayudu has two bullocks, two she-buffaloes, a cow and a calf.

Income	Rs.	A.	Expenditure	Rs.	A.
Ploughing ...	146	0	Depreciation ...	44	0
Appreciation ...	40	0	Straw ...	100	0
Carting straw ...	20	0	Cotton seeds }	90	0
Carting straw from fields ...	4	0	4½ Candies }		
			Total expenditure.	234	0

Butter milk etc.	60	0
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Total income	270	0
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Net income from cattle	...	...	Rs. 36	0
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His total net income from land and

Cattle =	...	...	...	„ 103	9
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The year 1925-26 was particularly unfavourable to the ryots of Uppalapadu because the fields were flooded in the Mungani season, and there was dearth of rain in the Hingari season. So, cholam and dry paddy crops were completely spoiled by these unfavourable conditions. Normally this ryot hopes to realise at least 20 net per acre. But during 1925-26 he was able to get only Rs. 67-9-0 net for his 13 acres.

Rayudu has one grown-up son and two sons of 10 and 7 years respectively, his mother, wife and himself in his family, thus making the equivalent of 5 adults for food consumption.

The following is a statement of his annual expenditure.

		Rs. A. P.	Rs. A. P.
Sajja, Maize and Variga, 880 M.			
M. (2933 1/3 lbs)...	...	125 0 0	
Ghee, 60 lbs. ...	...	20 0 0	
Dhal 12½ M. M. (41.8 lbs). ...	...	4 0 0	
Vegetables. ...	...	14 0 0	
Condiments and spices ...	...	24 0 0	
Total food	...		187 0 0
Cocoanut oil ...	...	2 0 0	
Castor oil ...	...	2 0 0	
Kerosine ...	...	6 0 0	
Fuel ...	...	12 0 0	
Total fuel, lighting etc.	...		22 0 0
Dhoties, 6 pairs ...	...	18 0 0	
Upper cloths, 3 pairs ...	...	7 8 0	
3 shirts ...	...	6 0 0	
4 sarees ...	...	18 0 0	
Bodices ...	...	3 0 0	
Total clothing.	...		52 8 0
Travelling ...	...	2 0 0	
Soap nuts ...	...	2 0 0	
Cosmetics ...	...	1 0 0	
Washerman ...	...	2 8 0	

				RS. A. P.	RS. A. P.
Barber	...	...	...	2 0 0	
Festival	...	...	...	2 0 0	
Total miscellaneous expenditure			...		11 8 0
Total annual expenditure			...		273 0 0
				Rs. A. P.	
Total annual income.				103 9 0	
Total expenditure.				273 0 0	
Total deficit				169 7 0	

Rayudu has made a debt of Rs 400/- in the last four years and he had to borrow Rs. 170/- during the last year alone so as to balance his family budget.

Each adult in his family got, on the average a daily allowance of 23·4 oz of sajja, variga and rice, 0·47 oz of ghee and 0·36 of dholl, thus making a total allowance of 24·23 oz of solid food.

MOPARTI GOVINDAYYA OF TAKKELLAPADU.

Govindayya has 33 acres of dry land and the following is his agricultural budget for 1925-26.

(a) Tobacco, verginia, 8 acres.

Income.		Expenditure.	
	Rs. A.		Rs. A.
Sold to the Imperial Tobacco Co. ...	500 0	Manure.	100 0
		Sowing.	24 0
		Stripping & pringing	26 0
		Picking the leaves	48 0
		Strings	14 0
		Heaping	8 0
		Ploughing	96 0
		total	316 0

(b) Chillies, 7 acres.

The crop was a complete failure.	Manure	...	60 0
	Seeds 25 M. M.	...	8 0
	Ploughing	...	70 0
	Sowing	...	24 0
	Total	...	162 8

(c) Bengal gram, 2 acres.

Bengal gram. ...	45 0	Manure	...	10 0
Fuel ...	2 0	14 M. M. seeds	...	4 8
		8 Workers	...	3 0
		reaping	...	2 0
Total ...	47 0	Total	...	19 8

(d) Variga, 5 acres.

1½ candies ...	150 0	Manure	...	25 0
Straw ...	20 0	Seeds	...	4 0
		Reaping & heaping	...	10 0
		Harvesting	...	5 0
Total ...	170 0	Total	...	44 0

(e) Maize, $3\frac{1}{2}$ acres.

Income		RS.	A.	Expenditure		RS.	A.
1 $\frac{3}{4}$ candies	...	150	0	Manure	...	10	0
Two carts loads of straw	...	15	0	Seeds 8 $\frac{1}{2}$ M. M.	...	3	0
				Ploughing	...	42	0
				Reaping & picking	...	15	0
				Harvesting	...	2	0
Total	...	165	0				
				Total	...	72	0

(f) Sajja, 3 acre 8.

6 $\frac{1}{16}$ candies	...	60	0	Ploughing	...	6	0
3 cart loads of straw	...	12	0	Seeds	...	6	0
				Seeds of horse gram.	...	1	0
				Sowing	...	1	8
				Manure	...	10	0
				Reaping & harvesting	...	7	0
Total	...	72	0	Total expenditure	...	31	8

(g) Dry paddy, $1\frac{1}{2}$ acres.

6 $\frac{1}{16}$ candies	...	30	0	Manure	...	5	0
Straw	...	8	0	Ploughing	...	6	0
				Seeds 10. M. M.	...	2	0
				Reaping & heaping	...	4	8
Total	...	38	0	Total expenditure	...	17	8

(h) Cholan, 10 acres.

The crop was a failure.				Ploughing	...	60	0
Fodder 8 cart loads.	80	0		Reaping	...	10	0
				Total	...	70	0

Total Agricultural income Rs. 1072 0

Total Expenditure. 733 0

Total net income from land 339 0

So Net income per acre was

10 4

Cattle.

Govindayya has 3 oxen, two calves, 8 cows, 4 she-buffaloes, two buffalo calves and 200 sheep, of which one cow and two young buffaloes died during the year.

Income	Rs.	A.	Expenditure	Rs.	A.
Apprecia- (a) cattle	180	0	Deprecia- (a) Cattle	103	0
tion (b) Sheep	200	0	tion (b) Sheep	200	0
Manure ...	120	0	Cotton seeds ...	150	0
Ploughing ...	280	0	Paddy husk ...	10	0
Ghee & butter milk	200	0	Straw ...	100	0
Carting manure			Do. purchased ...	100	0
and etc. ...	50	0	Servants 3. ...	400	0
Sheep manure ...	200	0	Forest dues ...	50	0
Sales of sheep ...	200	0			
Total ...	1,430	0	Total ...	1,113	0
Net income from cattle and sheep ...				317	0
Total net income from land and cattle				656	0
Income from the labour of three family mem- bers ...				400	0
Total ...				1056	0
Land Revenue ...				75	0
Net annual income ...				981	0

The annual income of Moparti Govindayya in 1925-26 was Rs. 981—0—0. There were three grown-up sons, a young boy of 12 years, mother, daughter-in-law, wife and himself. So, there were the equivalents of $7\frac{1}{2}$ adults in his family, for food consumption.

The following is his expenditure during 1925-26.

	Rs.	A.	P.	Rs.	A.	P.
Paddy 3 candies (3200 lbs. of rice) ...	325	0	0			
Dhal 166 2-3 lbs. ...	12	0	0			
Ghee 266 2-3 lbs. ...	100	0	0			
Butter milk ...	50	0	0			
Vegetables ...	24	0	0			
Condiments and spices ...	40	0	0			
Total food— ...				551	0	0
Kerosine ...	3	0	0			
Coconut Oil ...	3	0	0			
Fuel ...	24	0	0			
				30	0	0
Dhoties 12 pairs ...	36	0	0			
Upper cloth 6 pairs ...	15	0	0			
12 Shirts ...	18	0	0			
Sarees 4 ...	16	0	0			
Bodices ...	3	0	0			
Festival clothing ...	6	0	0			
Total clothing ...				94	0	0
Presents to relatives ...	15	0	0			
Travelling ...	10	0	0			
Subscriptions... ..	4	0	0			
Barber ...	2	0	0			
Potter ...	2	8	0			
Washerman ...	4	0	0			
Soapnuts ...	5	0	0			
Total miscellaneous expenditure.				42	8	0
Total expenditure ...	717	8	0			
Annual income ...	981	0	0			
Net savings ...				263	8	0

Each adult in this family got 18·7 oz. of rice, 0·97 oz. of lentils and 1·55 of ghee, making thus a total daily allowance of 21·23 oz of solid food.

Govindayya has a debt of Rs. 1,500 at 12% interest. He was able during 1925-26 to save only a little more than was necessary to pay off the interest for that year on his debt. But usually he can get about Rs. 20 per acre for his 33 acres and so he may get about Rs. 330 more than what he realised in 1925-26. In that case, he will be able to save about Rs. 400 even if he were to spend another Rs. 100 per annum on his family budget. On the whole, it may take about 8 years for him to liquidate his debt. This ryot bought in the last ten years 17 acres of land and 200 sheep with his savings and the Rs. 1,500 he borrowed. His prosperity or adversity depends entirely upon rainfall which has become very unreliable in these parts.

Moparti Tatayya of Takkellapadu.

Tatayya has 34 acres of dry land in addition to which he has rented 5 acres for Rs. 50 per annum. The following is his agricultural budget:—

(a) 5 acres fallow.			
Income		Expenditure	RS. A.
		Ploughing ...	60 0
(b) Cholam, 10 acres			
The crop was a complete failure ...	a complete failure ...	Ploughing ...	40 0
		Seed ...	10 0
		Total ...	50 0
(c) Sajja and dry paddy, 3 acres			
6/16 Paddy ...	37 8	Ploughing ...	36 0
Straw ...	16 0	Seeds ...	6 0
		Labour ...	3 0
Total ...	53 8	Total ...	45 0
(d) Variga 6½ acres.			
3½ Candies ...	350 0	Seeds ...	6 8
Straw 5 Cart-loads	60 0	Ploughing ...	70 0
		Sowing ...	1 0
		Reaping ...	11 6
		Harvesting ...	2 0
Total ...	410 0	Total ...	90 14

(e) Groundnut, 7 acres.

Income	Rs.	A.	Expenditure	Rs.	A.
Sold the crop			Manure ...	100	0
on the field for ...	350	0	Seeds ...	42	0
			Ploughing ...	28	0
			Watching the crop.	14	0
			Total ...	184	0

(f) Tobacco 5 acres.

5 candies	...	250	0	Manure	...	20	0
fuel ...	...	20	0	Ploughing	...	60	0
				Seedlings	...	60	0
				Sowing	...	15	0
				Stripping	...	10	0
				Stitching	...	20	0
				Thread	...	2	0
Total	...	270	0	Total	...	187	0

(g) Maize 3½ acres.

1 Candy	...	100	0	Ploughing	...	42	0
Straw, 2 cart-loads		20	0	Seeds	...	3	8
				Reaping	...	5	0
Total	...	120	0	Total	...	50	8

He sowed chillies in 7 acres but when the crop failed he kept the land under Variga, so he lost on that account:—

Seeds	...	10	0
Sowing	...	20	0
Watching	...	6	0
Total	...	36	0

Total Agricultural income Rs. 1203 8

Expenditure. ... 643 6

Net income ... 560 2

Thus he incurred an expenditure of Rs. 16 per acre upon the 40 acres he cultivated and got a net income of Rs. 14 per acre.

But he had to pay Rs. 50 towards rent
70 Land Revenue,

Total ... 120

Cattle budget:—Tatayya had four bullocks, 4 she-buffaloes and 2 calves.

Income	Rs. A.	Expenditure	Rs. A.
Appreciation ...	40 0	Depreciation ...	76 0
Ghee and butter milk. ...	90 0	Straw-own ...	96 0
Ploughing ...	276 0	Straw purchased ...	150 0
Manure ...	70 0	Cotton seeds ...	120 0
Carting straw from the East ...	25 0	Servant ...	120 0
		Total ...	562 0
Total ...	501 0	Loss from cattle ...	61 0

Nett annual agricultural income from land and cattle Rs. 379-2-0 in 1925-26.

Owing to the unseasonable rains, this ryot had to devote 53% of his gross income from land towards the expenses of cultivation. He ought to have got at least Rs. 20 net on each acre of his holdings if climatic conditions were more favourable than in last year.

Tatayya got an annual income of Rs. 379-2-0 in 1925-26. He got about Rs. 300 as interest on his Rs. 3,000 which he has invested. There are two grown-up sons, a daughter of 10 years of age, wife and himself or the equivalent of $4\frac{1}{2}$ adults for food consumption.

The following is his annual expenditure:—

	Rs.	A.	P.
Paddy 2 candies (2133 $\frac{1}{3}$ lbs.)			
...	230	0	0
Lentils, 50 M.M. (166 $\frac{2}{3}$ lbs.)	12	0	0
Ghee, 12 $\frac{1}{2}$ M.M. (150 lbs.)	50	0	0

		RS. A. P.	Rs. A. P.
Vegetables ...	...	18 0 0	
Condiments and spices ...	...	30 0 0	
Butter-milk ..	...	20 0 0	
Total solid food	...	...	360 0 0
Kerosine oil, 2 tins	...	6 0 0	
Castor oil (48 lbs.)	...	10 0 0	
Coconut Oil ...	...	2 0 0	
Fuel	...	18 0 0	
Total fuel and lighting etc.,			36 0 0
6 pairs dhoties	...	15 0 0	
4 pairs upper cloths	...	8 0 0	
16 Shirts ...	...	24 0 0	
Sarees one pair	...	8 0 0	
Daughter's dress	...	4 0 0	
Bodices 4	...	1 8 0	
Festival clothing	...	4 0 0	
Total clothing	...		64 8 0
Festivals	...	6 0 0	
Presents to relatives	...	20 0 0	
Washerman	...	6 0 0	
Barber	...	6 0 0	
Cosmetics	...	2 0 0	
Soapnuts	...	3 0 0	
Travelling	...	4 0 0	
Total miscellaneous expenditure.			47 0 0
Total expenditure	...		507 8 0
Total Annual income (Rs 379 2 0 + 300)			
...	...	679 2 0	
Total expenditure		507 8 0	
Net savings	...	171 10 0	

Thus, Tatayya was unable to balance his family budget with the income from his land and cattle and was obliged to make use of the interest on his investments.

The cholam crop which failed completely during 1925-26 would have got him at least Rs. 100 net, had it been a normal crop. This ryot bought 16 acres of land during the last twenty years, got two of his sons and his daughter married at an expense of about Rs. 2,500, and saved Rs. 3,000 in addition.

Each of the adults in this family got a daily allowance of 20·8 oz of cereals, 1·62 oz. of pulses and 0·48 oz of oils, making thus a total of 21·90 oz of solid food.

UPPALAPADU AND TAKKELLAPADU

Cattle :—

The author has often discussed the problem of cattle with many experienced ryots of these two villages (besides those of some deltaic villages*) and has come to the following conclusions.

A cow or an ox, a she buffalo, or a he-buffalo lives on the average for about 10 years. A she-buffalo begins to give milk at the age of 4 years and cow when she is 6 years. An ox is ready for harness when it is four years old. A very good pair of bullocks costs Rs. 500 while an ordinary pair is worth Rs. 300. A bullock cart is worth from Rs. 140 to Rs. 160. The repairing charges of cattle-shed are, if it has a tiled roof Rs. 25 and if it has a thatched roof, Rs 3½. The tiled roof may be repaired once in every six years but the thatched roof requires repair every year. The "Gorru" cost Rs. 16, Guntaka Rs. 5, plough-holder and the plough cost Rs. 9-4-0 and the belts for the cattle Rs 3 and these instruments last at least for 15 years. So the depreciation charges for cattle etc, are calculated to be as follows :—

Depreciation charges per annum of

Bullock	...	...	...	Rs. 15
Cow ...	...	...	...	„ 6

* See Vol. I p. 69.

She-buffalo	...	...	...	„	4
Agricultural implements	...	...	...	„	2
					—
				Total Rs.	27
					—

Appreciation in value per annum from

Cow	...	...	...	Rs.	20
She-buffalo	...	...	...	„	10
					—
				Total Rs.	30
					—

Uppalapadu ryots breed cows just for the purpose of getting bullocks. Almost all the cows in that village are born there. Only about 20 bullocks are bought every year by the ryots of this village from other villages. Govindayya had two bullocks to work on, and 200 sheep to manure, his 33 acres. Tatayya who had only 39 acres to cultivate, maintained two pairs of bullocks and he lost Rs 69 on their account. We can safely infer that it clearly pays well to keep some sheep, that a pair of oxen can cultivate 20 acres of dry land without causing any loss to their owner and that these ryots do not get as much revenue from their cows and she buffaloes as they ought to. The ryots of these villages can easily find more employment for their oxen and for themselves, if only they go to Guntur and get orders to transport commodities from different places to that town. But they have not yet become accustomed to commercially using their cattle. About 50% of the she-buffaloes of the village have been bought from other villages while the rest are bred there. The death rate among the young buffalo-calves is very great because these young animals seem to be specially liable to succumb to the diseases that visit them in every cold season, when most of them are born. Though there is a very good market in Guntur for dairy produce, and there is quite a sufficient supply of fodder in normal years and though the ryots have had excellent traditional

knowledge of feeding the cattle, these ryots do not specialise in breeding any cattle. From the four Agricultural budgets given in this chapter we find that Rayudu realised a profit of Rs. 36-0-0 on cattle though he had only 13½ acres to cultivate and that Govindayya got a net income of Rs. 317-0-0 from his cattle.

Dairy Farming :—There is a big and growing market for milk, buttermilk and ghee in the growing town of Guntur which is only 3 and 4 miles from Takkellapadu and Uppalapadu, respectively. It is very strange how these two villages have been so little affected by their urban neighbourhood. There are only 10 people in Takkellapadu who sell milk and four people who sell ghee to the people of Guntur. Of these, only three are Kammas. There are ten families of Golla caste who purchase milk, butter-milk and ghee in Uppalapadu from about 30 Kamma families there and together with the milk etc., they themselves produce, sell them daily in Guntur. Though in places like Ponnur, consumers themselves go to the villages to buy these things directly from the ryots, it has become an established custom in Guntur for the vendors of milk etc., to take their produce to the town and sell it at the houses of the consumers. The ryots of Itanagarapadu used to do the same thing in Tenali about ten years ago but now they refuse to allow their women to go to the town to sell milk etc., and they engage some middle-men to market their produce. It is mistakenly considered improper in these two villages for a Kamma woman to sell milk or ghee directly or indirectly to the people of Guntur and so only very few women who are either too poor or careless about the public opinion dare sell their dairy produce to Guntur people. It is a great pity that such an opinion should prevail especially when dairy-farming is a very profitable subsidiary employment to ryots.

A Kamma widow of Uppalapadu by name Mahalakshmi bought a she-buffalo in 1924 for Rs. 70 and she realised on it Rs. 80 net by 1925. Her sister and herself

had in addition a fairly good supply of butter-milk and ghee for their own use. The animal gives 2 seers of milk at a time or 4 seers per day. There is another she-buffalo in Uppalapadu which gives 5 seers of milk per day and its milk contains $12\frac{1}{2}\%$ fat in it. A she-buffalo of this village or Takkellapadu gives usually only $1\frac{1}{2}$ seers of milk at a time or $2\frac{1}{2}$ seers per day. It is clear that the capacity of these animals to give milk can be increased if careful and efficient methods of feeding are followed. The country around Guntur and particularly in the neighbourhood of Thakkellapadu and Uppalapadu is rich in very good grass and there are as many as ten kinds of it which are very useful in raising the milk yielding capacity of she-buffaloes. Fodder of horse gram, maize and green-gram is also very useful and it is in plenty in these villages. Fodder of Cholan, Budama Variga sun-hemp and of husks of green gram and horse gram is in great supply and is specially used here for cows and she-buffaloes. So these villages are the best suited to develop a real dairy-industry.

The ryots of these villages drive their cattle to the Palnad forests under the care of the Lambadies.* They have to pay per head only 12 annas to the forest authorities, 3 as. per month per head to the Lambadies for looking after an animal and 4 as. to the man who drives the animals to and from the forests.

The following prices are current in Guntur for dairy products. Milk is sold at 4 annas per seer (28 oz.), from January to July and at 3 to 4 annas per seer between August and December. Curd is sold at 2 as. per seer between August and December and at 3 annas between January and July. Ghee is sold at 4 giddas ($2\frac{2}{3}$ lbs) a rupee between August and December and at 3 giddas (2 lbs) between January and July. (while in Madras only $1\frac{3}{22}$ lbs. of ghee can be had per rupee). There is usually a greater supply of milk etc. between August and December than between January and July.

*The Lambadies are a hill-tribe who specialise in cow-herding.

Prices of cows and she-buffaloes—The price of a cow ranges from Rs. 25-0-0 to 100-0-0 in Uppalapadu but a cow of average milching capacity costs Rs. 50-0-0. These cows are primarily bred for the purpose of breeding bullocks. In this village, a she-buffalo costs from Rs. 25-0-0 to 50-0-0 and an ordinary one is worth Rs. 40-0-0. In Takkellapadu a she-buffalo costs from Rs. 25-0-0 to 60-0-0 and an average one is worth Rs. 45-0-0. There is shortage of water in these parts and consequently there are very few trees grown in the fields. There is not sufficient shade for the cattle, hence the ryots cannot breed the cattle in large numbers.

CHAPTER X.

ECONOMIC CONDITIONS OF LABOUR.

Introduction—Most of the agricultural labour needed in Uppalapadu is supplied by the local Panchamas who number about 150. Mohammadans and Panchamas work as general workers on the fields in Takkellapadu and Kakumanu. The conditions of these labourers are decidedly better now than before. About 25 years ago, the Panchamas of Kakumanu used to wear only a loin cloth and were little better than serfs whereas they are now quite assertive and wear nearly as good clothes as those worn by many Kanamas.

Workers are paid mostly in kind in Kakumanu while they are paid in cash in Uppalapadu and Takkellapadu. The payment in kind is more advantageous to the rural workers because they are then more immune from the effects of the fluctuations in the prices of food grains than when they are paid in cash. The ryots of Uppalapadu realise this disadvantage for themselves and so they are unwilling to pay their workers in kind.

The rural workers are subject to two or three short spells of unemployment in every year and they find no work at all for at least 4 months and are under-employed for two months more, in the year. Their women can get work for scarcely four months. The amount of unemployment can be minimised to some extent if Labour Exchanges are established and labour is moved to the places where there is work. Labour in these villages, is very mobile but it does not know where and how additional work can be secured. For instance, the Nellore ryots need labour to transplant their paddy fields but the workers of Kakumanu who went there on their own, found that their savings of a months' labour were not sufficient to pay their railway charges. But if the Nellore ryots had paid those fares, the Kakumanu workers would have found it profitable to go, whereas, on the other hand, the ryots would have got

more satisfactory and on the whole, cheaper, labour for their lands. *

The standard of leaving of the rural workers is also rising very rapidly, as can be seen from the 4 family budgets given in this chapter. There is a great desire among them to do business or to venture into some subsidiary employment or other. There are 25 looms in Kakumanu among the Panchamas and there used to be 50 at one time. These Panchama weavers work in the fields when there is agricultural work and weave when there is no such work to do.

The following table shows the average annual demand for labour in Kakumanu.

Kind of work	Time when such work is needed.	No. of days during which it lasts.	Wages per day for	
			Men	Women.
Weeding.	Aug. Sept.	10	Madras	Measures.
Reaping maize.			1½ (P)	1¼ (P)†
Harvesting maize.	October.	10	2	1 (V)†
Transplanting chillies.	„	15 to 20	2 (V)	1½ (V)
Reaping paddy	December	15 to 20	2	2
Reaping cholam.				

* See Vol I. P. 183 Many thousands of Vaddes. Upparas and Kammass most of whom are ryots, go from Ongole Taluk to the deltaic taluks during every summer, in search of work. The earnings of these workers depend upon the demand for their work. For instance, many thousands of workers of Ongole Taluk flocked to the deltaic taluks during 1926-27 because of the outbreak of famine in their taluk. So the transplantation, harvest and the squaring of fields were finished in the deltaic villages in much shorter time and more cheaply. Consequently, the workers suffered a great loss. While a husband and wife saved Rs. 60 in 6 months during 1925-26, they realised a net saving of only Rs. 10 in 1926-27. Since they were no rains in Ongole Taluk till June 1927, they were waiting for the transplantation season of the deltaic villages to start again.

† (V) Stands for Variga. (P) Stands for Paddy.

Kind of work	Time when such work of needed.	No. of days during which it lasts.	Wages per day for	
			Men	Women.
Reaping dry paddy.	Dec. Jan.	15 to 20	2	2
Coriandar pulling	From Jan to March	60	2	2
Variga				
Maize				
Bengal gram.				
Red gram.	End of Mar.	10	...	2
Cotton.	"	5	2	2
Cotton picking.	February	4 annas	...	3 annas
Harvesting chillies.	"	10	2	2
Harvesting Hingari crops.	March	3	2 (V)	
Weaving, making bricks etc.	Summer	40	2 (V)	
Paddy trans-plantation, spade work.	July	15	2	2

We learn, from the above table, that generally a worker who is fortunate enough to be able to work at all times, can find work for 208 to 223 days in the year and that a woman has work for 169 to 184 days. A family of husband and wife can find work for 377 to 407 days or 188 to 203 days for each of them on the average. Between transplanting chillies and the reaping season of the Mungari crops there is usually no work at all. But if rains fail and the Mungari crops do not yield anything but straw then labourers may find additional employment on the land in this period.

Annual servants.—* About twenty years ago there used to be more than 300 annual servants in Kakumanu while

* See Vol. I. P. 181.

there were only 150 in 1926. The salaries paid to such servants have been on the increase for a long time as is shown by the following table.

Salary paid in the periods of.

Kind of worker.	1876-1902.	1902-1910.	1926.
Very efficient.	Rs. 24.	Rs. 32.	
Ordinary servant.	Rs. 10 to 15.	Rs. 20.	Rs. 60 to 70.
Average worker.			Rs. 50.
Cattle-driver.		Rs. 10 to 12.	Rs. 20 to 25.

Workers who will come under the very efficient old order are not to be found in any of these villages. A servant who was considered as only a very ordinary worker about forty years ago, is now taken to be the most efficient man because the standard of efficiency of a worker and his bodily strength and willingness to work have gone down. These workers are fed by their employers.

In spite of such abnormal rise in their wages, fewer and fewer Panchamas are anxious to become annual servants because their standard of comfort and their idea of self-respect have changed for the better in the last 50 years. Also many of them have become Christians and so they are growing more and more restive under the domineering drive of ryots. It is curious how these Panchamas prefer to live an independent day-labourer's life to that of an annual servant, though, as can be seen from the labourers' family budgets given below they have to suffer much privation from the effects of unemployment.

Because of the Hindu habit of equal division of property among the members of a family and the consequent unprofitably small strips of land, more and more people are becoming unable to support themselves upon their holdings † and it is why there are more than 200 Kamma

† See Vol. I pp. 31-32.

families in Kakumanu which try to supplement their incomes from land by working for others as day labourers. Both men and women work. Thirty Kammas of this village are now employed by other Kammas of the village as annual servants. Thirty more Kammas belonging to other villages work as annual servants in this village and there are besides, 30 Mahammadans, and 20 Panchamas who are employed for the year.

Though the disinclination of the workers to serve as annual servants has influenced the rise in the wages paid to the annual servants, the growing disinclination of more and more ryôts personally to work and supervise the operations in their fields is the chief cause for this phenomenal rise in the wages of such workers.* Indeed the annual servants have gained in the matter of self-respect also because the employers are afraid of bossing over their workers as they were won't to do, lest the workers should leave their service.

(1) Nelapati Kotaya.

Kotaya has wife and two children of 8 and 2 years of age in his family who are equivalent to $2\frac{1}{2}$ adults. The following is his labour budget :—

Kind of work.	Number of days worked.	Amount of cereals earned.
		Madras Measures of paddy.
Preparing the paddy fields.	15	30
Weeding ...	15	30
Harvesting maize ...	10	18½
Reaping cholam ...	10	25
Reaping paddy ...	20	40
Squaring the fields ...	30	...
Transplanting chillies ...	20	50
Harvesting paddy ...	60	180
Reaping tobacco ...	15	...

* See Vol. I P. 11, and p. 182.

Kind of work.	Number of days worked.	Amount of cereals earned.
Heaping straw ...	15	37 $\frac{1}{2}$
Fencing straw heaps ...	10	18 $\frac{1}{2}$
Weeding in summer ...	30	75
Gathering fuel ...	30	...
	280	505 Madras Measures of paddy.

Kotaya got Rs. 15 for squaring the fields, Rs. 7 $\frac{1}{2}$ for reaping tobacco and Rs. 78-12-6 for the paddy paid in kind. His wife was unable to work during most of the year as she had to look after the children. Kotaya found employment for eight months in 1925-26. The fuel gathered by his wife was worth about Rs. 12. He had a she-buffalo upon which he made a profit of Rs. 26 during 1925-26. So his total annual earnings amounted to Rs. 139-4-6.

Each adult of his family got a daily allowance of 26·8 oz of cereals.

The workers of Kakumanu get chutnies and vegetables freely from their customary employers. They consume very little fish and meat because they cannot afford such expensive things.

The following is his annual family budget :—

His family consumed 300 Madras Measures of cholam and 160 Madras Measures of rice.

		RS. A. P.	RS. A. P.
Cereals (1533 $\frac{1}{2}$)	...	100 0 0	
Condiments and spices	...	7 6 0	
Fish ..	...	1 0 0	

		Rs.	A.	P.	Rs.	A.	P.
Kerosine oil	...	1	8	0			
Cocoanut Oil	...	0	8	0			
Fuel	...	12	0	0			
Total fuel and lighting					14	0	0
2 dhoties	...	3	0	0			
Upper cloths	...	1	8	0			
2 sarees	...	6	0	0			
4 bodices	...	1	4	0			
Children's clothing	...	1	0	0			
Total clothing	...				12	12	0
Subscriptions to missiona- ries	...	1	0	0			
Barber	...	0	4	0			
Festivals	...	0	8	0			
Soapnuts	...	0	4	0			
Total miscellaneous expenditure.					2	0	0
Total annual expenditure	...				137	2	0
Total Annual income	...				139	4	6
Supposed savings	...				2	1	6

Kotaya did not save anything at all during 1925-26 but he had to borrow Rs. 8 in the Previous two years to meet his family expenses. He must have spent something on toddy during festival times.

(2) Gara Papaya (Ajaria.)

Papaya has his brother and wife in his family. He has one acre of wet land and one and a half acres of dry land. He got a net income of Rs. 75-3-0 from his land during 1925-26. The following is his labour budget :—

Kind of work.	Number of days worked.	Cereals earned.
		Madras Measures.
Squaring the fields ...	20	50
Sowing seeds ...	4	10
Preparing the fields ...	14	35
Transplantation, wife ...	15	30
Pulling seedlings ...	30	60
Dry paddy reaping ...	10 }	40
Do. wife ...	10 }	
Reaping paddy ; both ...	15	60
Variga do. } wife ...	30	60
Maize do. } self ...	45	90
Do. do. self ...	90	135
Summer work ...	40	80
* Asami's work ...	30	...
Picking fuel ...		
	353	650 Madras Measures of paddy.

The fuel picked by his wife was worth about Rs. 12. The paddy and other cereals in which he and his wife were paid for their labour was worth Rs. 101-9-0. So, Papaya had a total annual income of Rs. 188-12-0 in 1925-26. His wife and himself together were employed for only 353 days in the year but his wife found work for only 85 days.

Papaya was adopted by his relatives in Kakumanu and so he got the lands mentioned above which are worth about Rs. 1,000 and a house worth Rs. 200. There was a debt of Rs. 700 at 9 per cent interest attached to the property. He paid Rs. 50 during 1925-26 towards the interest on this debt. His brother was employed as an

* Asami means the customary employer.

annual servant during the year 1926-27 at Rs. 12 per annum plus food and so he hoped to save at least Rs. 75 during that year.

The following is his family budget.

	RS. A. P.	RS. A. P.
Cereals 339 M. M. (1130 lbs)	75 4 0	
Vegetables ...	4 0 0	
Condiments and spices	7 0 0	
Total food	...	86 4 0
Kerosine oil ...	3 0 0	
Castor oil ...	0 8 0	
Coconut oil ...	1 8 0	
Fuel ...	12 0 0	
Total fuel and lighting	...	17 0 0
Sarees 2 ...	8 0 0	
Bodices 5 ...	1 14 0	
Dhoties 2 ...	3 0 0	
Shirts 2 ...	3 0 0	
Upper cloths ...	2 0 0	
Brother's dress ...	4 0 0	
Total clothing	...	21 14 0
Travelling ...	2 0 0	
Subscriptions ...	1 12 0	
Soapnuts ...	0 8 0	
Cosmetics ...	0 8 0	
Earthen vessels ...	1 0 0	
House repairs ...	0 8 0	
Medicine ...	0 4 0	
Bribes to P. W. D.	0 4 0	
Total miscellaneous expenditure		6 12 0
Total annual income	188 12 0	
Total annual expenditure	131 14 0	
Net savings	56 14 0	

APPENDIX II.

The Colonisation Policy of H.E.H., the Nizam of Hyderabad.

After I have sent to the printers, the first part of this volume in which I have discussed the possibilities for colonising the Nizam's Dominions, I received a copy of the Colonisation Rules of the Development Department of H. E. H. the Nizam. I have thought it only fair to the Nizam's Government to give the following extracts from the paper sent to me. From these extracts, it is easy to gather that the Nizam's Government has awakened itself to the necessity for and the advantages of colonising the vast areas of unoccupied but cultivable land and that it is quite prepared to grant large areas of land on very easy and attractive terms. But the whole problem revolves itself upon the question as to how these colonisation rules are administered. It is easy to understand why not many British Indian Subjects have not applied for land, because they are too much afraid of the red-tapism of the subordinate officers of that Government. Moreover these people are suspicious that the police and Revenue Officers may at any time get them involved in inconvenient cases—both criminal and civil. It must, however, be admitted that two concerns organised by some capitalists of Bombay have been granted large areas of land by the Nizam's Government and that these companies have ambitious schemes of developing huge plantations. We must also notice that no policy has yet been evolved out by this Government to secure a portion of this unoccupied land for the aboriginal tribes like Koyas and Lambadis, whose ultimate interests must be safeguarded by the Government. The development of large capitalistic estates is not really in the ultimate interests of the people. I learn from the Press that Dr. Harold Mann is appointed by the Nizams

The following table shows the amount of employment available for and the wages paid to the agricultural labourers of Uppalapadu :—

Kind of employment.	Number of days of work.	Wages.	Special allowance*	Remarks.
Sowing Sajja ...	15	4 Annas.	...	Sowing Sajja.
Sowing Paddy ...	15	5 "	...	Paddy is done in the same period (15 days.)
Sowing Tobacco ...	45	6 "	...	For 30 days these two operations are carried on simultaneously.
Carting Cholam ...	45	6 "	...	
Transplanting chillies ...	30	8 "	...	
Squaring the fields ...	45	4 "	2 meals a day,	Carried on simultaneously for 30 days.
Ploughing (Guntaka) ...	30	3 "	...	
Ploughing (sowing etc.,) ...	30	4 "	1 meal a day.	Carried on simultaneously for 15 days.
Weeding ...	15	4 "	...	
Stripping tobacco primings 3 times.	45	6 "	...	

Reaping Tobacco	Harvesting	30	Rs. $1\frac{1}{2}$ per	...	At the same time for 30 days.
Ground-nut,	Reaping and	30	100 bdl.		
carting cholam.		30	0-12.0 per		
			day 8 as.		
			6 as.		
Pulling tobacco roots ...	...	20	5 $1\frac{1}{7}$ Annas.	...	At the same time for 15 days.
Fencing straw heaps	...	15	4 "	2 meals a	
				days.	
Carting cholam etc., for stocking it.		30	4 "	2 meals a	
				days.	
		470 days.			135 days.

*Vol. I Chap 5. It is a noteworthy fact that these special allowances are a special feature of dry villages. Even in the villages of our former survey, this practice was widely prevalent when dry cultivation was the rule.

The total number of days on which there is some sort of work in this village is 335 days or little more than eleven months. But if there is any dearth of rain or too much rainfall, a worker cannot hope to find work for more than 9 months in the year. Such was the fate of most of the agricultural workers of these two villages during 1925-26. Taking the operations of squaring the fields and ploughing (guntaka) them for example—if there is a late rainfall in any year, then, more labour is spent on squaring the fields than on ploughing. If there is an early and good rainfall, the reverse is true. On the whole, workers find it impossible to get employment for more than two months during the rainy season and the summer. For transplanting chillies and tobacco and for carting cholam home, ryots used to pay about ten years ago only 4 annas and give a midday meal per day per worker while at present a wage of 6 to 8 annas without any food is paid.

The following table shows the amount of employment available for a woman worker in Uppalapadu and Takkelapadu:—

Kind of work.		Period for which it lasts	Wage paid per day.
Weeding in August	...	15 days.	3 as.
Transplanting chillies	...	30 "	4 as.
" tobacco	...	15 "	1½ to 2 as.
Weeding	...	15 "	3 as.
Reaping paddy	...	15 "	4 as.
Reaping cholam	...	20 "	4 to 5 as
Shipping primings	...	8 "	4 as.
Reaping tobacco	...	30 "	4 as.
Harvesting groundnut	...	30 "	4 as.
Harvesting chillies	...	15 "	4 as.
Transplanting paddy in the east	...	60 "	5½ as.

253 days.

Thus a woman worker who has no other work to attend to can find work for about $8\frac{1}{2}$ months in the year. But as we can see from the two family budgets of the workers given in this section, many women do not get a chance to go to the deltaic villages and earn the high wages paid there during the transplantation season.* So, most of the Panchama women find full-time employment for only $8\frac{1}{2}$ months in the year and a Panchama husband and wife get work on the average for only $8\frac{3}{4}$ months in the year each.†

Shortage of labour:—It may sound very strange to talk about the shortage of labour soon after discussing the amount of unemployment in these two villages, Uppalapadu and Takkellapadu. But it is a fact that the local supply of labour falls short of the demand during October and December when the harvesting season is in full swing. Groundnut, Cholan, Variga and Bengal Gram are ready for harvest in December and early part of January. Harvesting of Sajja and dry paddy, needs workers in September and October and in the same period, falls the transplantation of chillies.

At these two periods of September—October and December—January, labour comes from Guntur, Venigandla, Namour and Kakani and it suffices. But in February, when chillies crop has to be harvested, the surplus labour of these villages is not enough. And so, workers are brought from Gudivada, Nandielugu, Jagarlamudi,

* See Vol. I P. 7 and P. 183.

† The Vadde women of Ongole Taluk, who assist their husbands in brick-laying or digging, are often able to earn 6 annas per day, while their husbands get 8 annas a day. But this work is much more arduous than the agricultural work in Uppalapadu. Though some Kamma men and women of Ongole Taluk are also employed in digging the earth and squaring the fields, this kind of work is specially carried on by Vaddes and Upparas. Thus, there is in addition to the usual immobility of labour, the practice of a particular group of castes practically specialising in and monopolising certain kinds of employment in which other castes do not take much interest through it pays them better to do so,

Jampani and other villages of the Tenali Taluk. The employers keep the workers in their cattle-sheds and supply them free of charge, fuel and preserved chutnies and tobacco. Just as many women workers of villages, like Uppalapadu are unable to go to the deltaic villages and work in the transplantation season, so also the workers of the deltaic villages are ignorant of and hence are unable to take advantage of, the possibility of additional employment in harvesting dry crops. If employment exchanges can be established to enable workers to move to the places where work can be found, the rural unemployment can be minimised.*

Annual Servants:—Boys of 10 years of age and above are employed to look after the cattle and are paid Rs. 15 each in addition to food in Takkalapadu and Upplapadu. Servants of 20 years of age and over, are paid Rs. 30 plus food in Takkalapadu while their fellow workers of Uppalapadu are usually paid Rs. 50 per annum plus food. There are 160 annual servants in Takkalapadu out of whom 135 are Sudras and 15 are Panchamas. Of these Sudra workers, again 10 are Kammas of the village. There are, in addition, 30 Kammas of that village who get employed as coolies. These 40 Kammas are reduced to this unenviable position of farm servants or a coolies because of the equal division of property, and consequent unprofitably small strips of land and also unfavourable agricultural seasons.† The number of the Sudra annual servants has been on the increase in the last 15 years in these 2 villages because the ryots are growing less inclined to work and supervise personally, during the

*Vo. I PP. 59, 182 and 183. Also 'The Problem of Unemployment in the Andhra country' written in Telugu by the author and published in the Andhra Patrika during July, 1924. The author has demonstrated in that series of articles, the necessity for the establishment of national labour Exchanges which be used compulsorily by all ryots and agricultural workers. He advocated the utility of and the necessity for the initiation of a scheme of 'Rural Unemployment Insurance Fund'.

† See P. 80.

agricultural season. The annual servant is usually given a certain quantity of paddy per day so that he may live upon it. He is in addition paid some money per annum out of which he has to pay for his clothes and for the upkeep of his family. It will be seen from the table given below that the quantity of paddy given, has not shown any great variation in the last 35 years. But his earnings have had a steady rise. In the following table it is expressly stated so if there is any allowance of paddy. M. M. stand for Madras Measures.

The facts given below are gathered from the palmyra records of P. V. Ramanayya of Nidubrolu.*

Kind of worker.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1902.
Kamma worker.	Rs. 52				Rs. 20 & food.	Rs. 22 & food.	Rs. 22 & food.	Rs. 25 & food.	
Pan-chama	1½ M. M.	Rs. 26		Rs. 42	22 & 1½ M. M.		Rs. 22 & 1½ M. M.	Rs. 21 & food.	Rs. 22 & food.
Another Pan-chama	1 M. M. & S.		1 M. M. & S.		¾ M. M. & S.		Rs. 18		Rs. 20 & 1 M. M.

*It is not incorrect to say that till now most of the Indian economists have not made use of the useful knowledge of old men and women. In fact, a critic has taken the author to task in the Columns of the Swarajya a national daily of Madras, for having relied upon the information supplied to him by three old and experienced women, for the discussion of the conditions existing about 80 years ago. (Vol. I pp. 20-24). But the author makes bold to say that this source of knowledge is much more reliable and useful than the wild statements made by sentimental nationalists and by those economists who take their inspiration from these enthusiastic nationalists. The Government Records are not so valuable as the knowledge obtained from old people and the author makes another departure from the time-honoured methods of enquiry by trying to read the past as best as he can from old palmyra-records.

The following information was gathered from the records of Peddi Satyanarayana of Upplapadu.

Name of the Annual Servant.	Year	Salary			Remarks.
		Rs.	As.	Ps.	
V. Somayya ...	1921	16	0	0	to look after cattle. He gets
Ch. Buchiyya ...	1921	64	0	0	now Rs. 40.
Dh. Venkanna ...	1922	40	0	0	
Ch. Buchiyya ...	1922	66	0	0	Experienced
V. Raghavayya	1923	60	0	0	
Ch. Buchiyya ...	1923	64	0	0	Too old
D. Ramaswami	1924	55	0	0	
Y. Kotaya ...	1924	26	0	0	15 years old.
K. Ramaswami	1925	34	0	0	Specially trained
M. Venkayya ...	1925-26	65	0	0	To look after the cattle
					Paid in the beginning. Ploughs his acre of land with employer's plough and bullocks.

A sudra worker by name P. Seshayya was paid Rs. 20 in 1897, Rs. 22 in 1899 and Rs. 25 in 1900 and this shows that he was paid more as he grew older and more efficient. During the present year (1927-28), a sudra worker who is half as efficient and industrious as Seshayya is given Rs. 60 per annum, plus food and clothes. So the wages of a sudra worker have more than trebled in the last 34 years. On the other hand, a Panchamma worker is paid at present Rs. 40 per annum and is given an allowance of 1½ M.M. of paddy per day and so his wages have only doubled in the last 35 years. But the prices of things

have also risen at almost the same speed as the wages of the annual servants. A servant was able to get a pair of dhoties for Rs. 2 in 1901 while he has to pay Rs. 4 at present. The shirt of a sudra servant was worth only 15 annas in 1902 while it costs now at least Rs. 2.

Butchiyya was eventually asked to leave the service in 1925, and he was afterwards employed by a Vaisya ryot who rented more than 40 acres from a relative of Satyanarayana. He was paid Rs. 100 per annum in 1925-26 and his lands were freely cultivated, by his employer because he was one of the most honest workers and was a very efficient servant. Between 1921 and 1924 the salary of a servant who looked after cattle rose from Rs. 16 to 26. The salary of an annual servant has also been on the increase.

The following statistics about the earnings of the workers who work on harvesting and shelling groundnut are collected from the account books of the same gentleman, P. Satyanarayana of Uppalapadu.

1. Shelling groundnut.—1926 June, $1\frac{1}{2}$ as per M. M. of groundnut.

A Mohammadan Woman	...	Annas	6.
A young girl of 10 yrs.	...	"	1
Kotamma, a Panchama	...	"	$1\frac{1}{2}$
Another Panchama Woman	...	"	$1\frac{1}{2}$
4 Workers,	...	"	$9\frac{3}{4}$

About $2\frac{1}{2}$ Annas per worker on the average.

2. Harvesting Groundnut:—26 workers picked $35\frac{1}{2}$ tins and were paid Rs. 7-3-3 or $4\frac{1}{2}$ annas per worker on the average.

No. of workers.	Earnings per worker.
1 •	8 Annas.
4	7 "
2	6 "

No. of workers.	Earning for worker.
4	5 Annas.
3	4 „
7	3½ „

3. Harvesting Groundnut :—38 workers picked 47½ tins of groundnut and were paid Rs. 10-6-0 or 4½ annas per worker.

No. of Workers.	Earnings per worker.
1	8 Annas.
1	11 „
7	7 „
14	3 „
4	2 „
5	1 „

From the above two tables it can be seen that industrious workers can earn more than twice as much as ordinary workers.*

(3) Peddipagu Venkanna of Uppalapadu.

Venkanna is a Panchama worker. He has a brother, two grown-up sons, a daughter and wife in his family, and these 6 persons work to maintain the family. The following is their labour budget:—

Kind of work.	No. of workers Male (M) or Female (F).	No. of days worked.	Rate of pay- ment. M.M.	Total earnings.
Weeding ..	F. 2	30	2 M.M.	RS. A. P. 28 2 0
Ploughing ...	M. 1	180	1 M.M. Meal for 2 putas.	50 12 0

*Most of the women workers were able to earn only 3 annas per day while many could not earn more than 2 annas. Those women who employ themselves in spinning at home and who earn thereby 2 annas per day are not very much worse off than these women workers of Uppalapadu and Takkellapadu. See also "Agricultural Industries" and "Hand Spinning" by N. G. Ranga, published in Indian Economic Journal 1926-27.

Kind of work.	No. of workers Male (M) or Female (F).	No. of days worked.	Rate of Pay- ment. M.M.	Total earnings.
Reaping Sajja.	M. & F. 3	6	...	7 8 0
Weeding Sajja.	F. 1	6	...	1 2 0
Chillies sowing.	3 M. & 1 F.	15	5 as. per male; 4 as. per female.	17 13 0
Tobacco-sowing.	3 M. & 1 F.	15	5 as M. 3 as F.	16 14 0
Weeding in Chilli and Tobacco fields.	M. & F. 3	10	3 as. each.	5 10 0
Groundnut and Reaping cholam.	3 M. & 2 F.	60	4 as. each.	75 0 0
Maize reaping.	2 M. & 1 F.	10	3 $\frac{1}{2}$ as. each.	6 9 0
Watching the fields.	M. 1	60	10 Rs. per month.	20 0 0
Harvesting tobacco.	2 M & 2 F.	15	4 as. each.	15 0 0
Squaring the field in summer.	M. 3	30	4 as. each.	22 8 0
Harvesting Chillies.	M & F 4	15	3 as. each.	11 4 0

326 14 0

The fuel gathered from the fields by his
wife and daughter ...

24 0 0

Total annual income ... 352 14 0

His two sons had been working as annual servants and in 1924-25, they were fed and paid each Rs. 50 per

annum. With money thus earned in the last six years this worker was able to clear all his debts by 1925. But he advised for reasons of his own, his sons and others in his family to work as day labourers and not to accept annual service under a ryot. When last seen, he admitted that he was finding it very difficult to balance his family budget. The six members in his family found work on only 1014 days or 169 days per member per annum. His daughter was too young (14 years) to be employed always and his wife had to keep the house, prepare food etc., and so only the males (4) used to work whenever employment was offered. Venkanna said that his family consumes inferior rice at morning and evening meals for about 8 months in the year and cholam for the remaining four months, especially during summer. Venkanna admitted that the members of his family get only one meal a day during the rainy season (3 months) when there is scarcely any work in the fields. Venkanna's past employer testified to the fact that this worker once ate 24 giddas (4½lbs) of Sajja food at every midday meal. But he is at present obliged to go with only one insufficient meal a day for some months in the year.

The following is a statement of his annual expenditure :—

	RS.	A.	P.	Rs.	A.	P.
Cereals 2833.33 lbs. ...	200	0	0			
Ment and fish 60 lbs. ...	6	0	0			
Vegetables ...	5	0	0			
Condiments and spices ...	10	0	0			
Total food ...				221	0	0
Kerosine ...	4	8	0			
Cocoanut oil ...	1	8	0			
Fuel ...	24	0	0			
Total fuel, lighting ...				30	0	0

	Rs.	A.	P.	Rs.	A.	P.
Dhoties ...	18	0	0			
Upper cloths ...	10	0	0			
Shirts 3 ...	4	8	0			
Sarees for wife & daughter.	14	0	0			
Bodices ...	3	0	0			
Total clothing ...				49	8	0
Festivals ...	2	0	0			
Cosmetics ...	1	0	0			
Pots ...	1	0	0			
House repairs ...	3	0	0			
Soapnuts ...	1	8	0			
Subscriptions ...	3	0	0			
Travelling ...	1	0	0			
Toddy ...	6	0	0			
Tobacco ...	10	0	0			
Total miscellaneous expenditure ...				28	8	0
Total annual expenditure ...				329	0	0
Total Annual income ...				350	14	0
Estimated savings Rs...				21	14	0

In fact Venkanna was not able to save anything at all during 1925-26. He must have spent another Rs. 25 upon toddy, tobacco etc. Each adult in his family got a daily allowance of 19.1 oz. of cereals and 0.43 oz. of meat, making a total allowance of 19.53 oz. of solid food.

(4) Tadigiri Naganna of Uppalapadu.

Naganna is a Panchama worker and has wife and a daughter of 6 years of age in the family. The following table gives particulars of his employment;—

Kind of work.	No. of workers. Male or Female	No. of days worked.	Rate of payment Madras Measure.	Total earnings.
				Rs. A. P.
Weeding ...	M. & F. 2	10	3 as. per each.	3 12 0
Reaping Dry Paddy.	Do.	10	4 as. per each.	5 0 0
Reaping Cholam.	Do.	20	6 as. per M. 5 as. per F.	13 12 0
Tobacco Strip-ping.	M. 1	20	8 as. per M.	10 0 0
Reaping chillies.	F. 1	15	4 as. per F.	3 12 0
Squaring the field's in summer.	M. 1	60	5 as. per M.	18 12 0
Transplanting Chillies.	2	20	6 as. each.	15 0 0
Sowing chillies.	2	30	5 as. each.	18 12 0
During rainy season Weeding in chillies and Tobacco fields.	2	10	3 as. each.	3 12 0
Reaping maize.	2	10	$\frac{3}{4}$ M.M. or 3 as.	3 12 0
Carting Cholam fodder.	1	10	8 as. per day.	5 0 0
Gathering fuel.	F. 1	60	...	15 0 0

Total wages Rs. 116-4-0 only. 116 4 0

Naganna owns $\frac{1}{2}$ share in a small field of $\frac{1}{2}$ acre and during 1925-26, its tobacco crop yielded an income of Rs. 20. He got vegetables worth Rs. 12 free, from his customary employers. So he realised a net income of

Rs. 148-4-0. Both Naganna and his wife found work for only 385 days during 1925-26 and so each of them was employed on the average for only 192 days or less than 7 months in the year. Each of them was therefore able to earn only Rs. 58 2-0 per annum. If Naganna chooses to serve as an annual servant, he will be paid Rs. 50 per annum in addition to being fed. In that case, his wife will probably earn through her labour about Rs. 40 per annum and so she may have Rs. 110 for the use of the family excluding Naganna instead of Rs. 116-4-0 as at present including him for food. There are the equivalents of $2\frac{1}{2}$ adults in his family for food consumption. The following is a statement of his annual expenditure :—

		RS. A. P.	RS. A. P.
Cereals 900 lbs.	...	90 0 0	
Vegetabse	...	12 0 0	
Condiments & spices	...	5 0 0	
Total food	...		107 0 0
Kerosine	...	1 8 0	
Coconut oil	...	0 12 0	
Fuel	...	15 0 0	
Total fuel and lighting	...		17 4 0
Dhoties 4	...	6 0 0	
Shirts 2	...	2 0 0	
2 sarees	...	8 0 0	
Bodices	...	2 0 0	
Child's dress	...	1 0 0	
Total clothing	...		19 0 0
		Total Rs...	143 4 0
Miscellaneous expenditure	10 0 0		
Total annual expenditure.	153 4 0		

Naganna was however able to balance his family budget.

APPENDIX I

Vol. I. Deltaic Villages.—1925—1928.

My enquiry into the economic condtions of seven deltaic villages was first made during 1924 and 1925. Certain changes have come over some of these villages since that time. I take this opportunity to give a brief account of such changes among them as are considered to be of some interest to students of economics. In the light of such a study, we shall be in a position to judge for ourselves to what extent the tendencies indicated, the facts narrated and the conclusions arrived at, in my first volume are warranted by the basic economic and social phenomena of the organisation of the deltaic rural community.*

In Nidubrolu, there are at present (April 1928) sixteen Coffee-Hotels whereas there were only two in 1924-25. While formerly these coffee-hotels used to depend for their business mostly upon railway passengers, they are now largely patronised by the Kamma youngmen of this village. It had become a fashion for these young people to go to the Railway Station where these coffee-hotels are and to take their Morning and After-Noon Teas, which cost at least annas 12 per person. Some of these youngmen have taken to Badminton and they spend Rs. 2 each per month on it. These youngsters are thus spending at least Rs. 1000 a month on such luxuries, though they do not earn anything.

*In this connection, it is instructive to read the chapter on "certain facts concerning the economic condition of Pedapadu" included in this volume. The economic evolution of the deltaic villages seems to follow almost the same lines both in the west Godavari and Guntur Districts and for that matter even in the Punjab, as 'The People' edited by Lala Lajpat Rai has pointed out in its review of my first volume,

Some of them have developed a taste for prostitutes and half a dozen youngmen have squandered at least Rs. 25,000 upon them in the last four years. The moral sense of the villagers has gone down to such an extent that they indirectly approved two youngmen living with prostitutes in their own village. There seems to be no social odium attached to such people to deter others following their example. Ten youngmen, who inherited from 5 to 10 acres of wet land each, have squandered away their properties by keeping women and the village is so much the poorer for it. In fact, many parents are obliged to pay off the debts, made by their sons at the Coffee-Hotels lest the youngmen should rebel and go to Guntur in search of prostitutes.

On the other hand, there is a visible tendency among small-holders to try to find some avenue for additional work which will fetch them some little money. These people have tried to import dolls etc, from Pondicherry and sell them at the local festivals but unfortunately they have failed to realise profits. A few have been carting paddy etc. from here to Guntur and other places. Only one Kamma has taken up Taluk Board contract work. Though Messrs. Chandramouli and Narahari, both agricultural graduates of the St. Andrews University, Scotland, have many a time spoken to many ryots about the possibilities for emigration into the Nizams Dominions, none of the many poor ryots of this and other villagers has had enough courage and enterprise to leave their villages. Therefore, the village of Nidubrolu is becoming poorer day by day. More and more people are spending large sums of money on unnecessary expenditure while no new sources of income are opened for them.

As for Brahmanakoduru, many youngmen have realised the folly of their inordinate and disproportionate expenditure and so they have curtailed their expenses and are trying hard to balance their budgets. The serious

drain of the village resources to which was encouraged by the large number of students who went to Guntur and other towns about six years ago has considerably subsided owing to the fall in the number of students seeking advanced English education. But there are no significant signs of any abatement in the total indebtedness of the village.

Appikatla is one of the few villages in these parts, which try hard and often successfully to overcome the evil effects of paddy cultivation and the resultant compulsory unemployment. As was noticed in the first volume, many ryots cart for hire, paddy etc. to Chirala and Guntur and concrete, stones etc for road making and they try thus to get some additional income. There are, at present twelve local Board Contractors, who are all ryots of this village and they are trying to supplement their agricultural incomes by the profits made in this work. Men and women of the ryot class of this village work hard and most of them are very frugal in their daily expenditure. The ryots of Iteru are also equally frugal and careful but none of them has yet taken to any other work besides their agricultural work.

Amrataluru and Therumella people are almost in the same economic position as in 1925 and no new employments have been created for any of the ryots. Mr. K. Narahari B. Sc. (Agr.) has gone to a place near Bhadrachalam, not far from Nellipaka, to bring about 200 acres of wild land into cultivation and if he succeeds in his enterprise, many small-holders of Thurumella are prepared to emigrate to those regions.

The progress of education, has, however been very much encouraged by everyone in these villages. The High Schools in Thurumella, Inturu and Nidubrolu and the Higer Grade Elementary Schools of Appikatla and Amrataluru, and the Girls Schools of Amrataluru, Nidubrolu, and Brahmanakoduru have all been contributing largely to increase the literary of the people of these vil-

lages. In fact it is no exaggeration to say that 80% of the children of school going age are now in schools in all these villages.

Banking facilities :—Amrutaluru, Appikatla and Nidubrolu have at present Co-operative Credit Banks. The Nidubrolu Bank has a lending capacity of Rs. 1,50,000 and it has more than, 600 members on its list. Out of these, 300 members belong to the ryot class and the rest are of the depressed classes, including weavers. It is very well managed and there are no disputes among its members. Though the Appikatla Bank is also in a prosperous condition, its members constantly fall out with each other over elections and it has had a chequered career. The greatest hindrance to the speedy progress of these banks in these villages is the lack of sufficient supply of business skill. Only recently did the Madras Co-operative Federation start a Training School for Co-operators. But Mr. J. K. Chowdary, M. L. C. and President of Guntur District Board seems to be anxious to start a correspondence school

The expenditure of an average ryot-family of these seven villages upon travelling, has increased considerably in the last three years owing to the increase in the number of shuttle trains between Repalle and Guntur, Bezwada and China Ganjam. Though the moving about of these people in their own district has increased to a surprising extent, they are more than ever averse to going out of their district even for marriage alliances. This increase in travelling is on the whole a loss to the village economy of this District for the present.

The ryots of these villages have also been spending large sums of money upon festivals, conferences of castes and congresses of the National congress. More than two hundred people went from these villages to the Cocanada congress of 1923 and the Madras Congress of 1927 and spent at least Rs. 5,000 on each of the two occasions. The Govada, Appikatla, Ponur and Mangalagiri festivals yearly absorb Rs. 7000 of these villages.

The Agricultural, Industrial and Sanitary Exhibition organised in Nidubrolu on a grand scale by Mr. P. V. Krishnayya, President of the Bapatla Taluk Board, has served in bringing home to the ryots of more than twenty villages, the importance of improved implements of cultivation, scientific manures, latest water-pipes, and small engines of internal combustion. Mr. J. K. Chowdary the former President of the Bapatla Taluk Board has organised a Health week throughout the Taluk in 1927. The Kamma conference, held in 1926 in Bejwada, has also held an Agricultural Exhibition organised by Mr. Bapi Needu, B.Sc. (Cornille). Mr. B. Ramayya, B. Sc. (Edinburgh) Deputy Director of Agriculture, has tried with much success to popularise chemical manures, and better methods of cultivating paddy in the Repalle, Tenali and Bapatla Taluks and consequently even illiterate ryots have begun to talk of sulphate of Ammonia as if it is one of their ordinary commodities.

I will now indicate some of the important changes that have occurred in the lives of some of the ryots whose budgets have been given in the first volume:—

Nidubrolu:—(1) Inturu Ankamma—He lost his wife recently and so he incurred an expenditure of Rs. 200. He is trying to do some business or other but his partnership in Dolls' Sales has not fetched him any profits. Vol. I, p. 72.

(2) K. Subbayya Chowdary has entered into a partnership with another, in Local Boards contract work and he realised a profit of Rs. 200 during 1926-27. But this year, he could not make any profit. Unfortunately for him, his wife is prone to go in for unnecessary expenditure p. 72

(3) K. Appayya has successfully lowered his standard of living. He is now trying to clear his debt. He is earning something by carting paddy etc., for others. He has bought a cart and two bullocks. He is unwilling to go to the Nizam's Dominions because he has three

very young children and it is very difficult to look after them properly in a strange place. p. 73.

(4) K. Narayana has taken to drink and prostitutes. He lost all but Rs. 1,500. He is broken in health and is absolutely unfit to do any useful work. p. 78.

(5) Tummala Kotayya has wasted about Rs. 2,000 upon litigation. He has been one of the frequenters of Coffee-Hotels but he is generally very thrifty. p. 81.

(6) Kosaraju Veerayya has become one of the public workers of the village and he is rendering very great service to the people by working the Nidubrolu co-operative Bank very successfully. p. 84.

Iteru:—(1) Manne Venkayya has recently lost the Munsiffship and so it has become very difficult for him to balance his budget. p. 90.

(2) Manne Pitchayya has been appointed the village Munsiff. He spent about Rs. 400 to secure this job. 103.

Brahmanakoduru :—(1) D. Venkata Subbayya has one more baby now. He finds it very difficult to get his children educated. Some of the youngmen of this village were persuaded by Mr. D. S. Narayana, B.A. to clear Subbayya's debts and to find him a small employment, so that he may find it easier to maintain his family. p. 109.

(2) D. Lakshmi Narayana and his brother have partitioned their property and they both get much less aggregate net agricultural income than when they were joint. p. 115.

(3) D. Butchayya has leased out most of his lands. He spent about Rs. 400 during 1927 when his wife fell ill. p. 115.

(4) D. Kotayya went to Madras in 1927 with a view to do some business but he lost about Rs. 2,000. Then he fell ill and spent Rs. 200 to get well again. p. 117.

Amrutalur:—(1) Jyesta Krishnayya is in a much worse condition than he was in 1915. p. 123.

V. Venkata Ramayya has performed the marriage of his daughter and spent Rs. 200 for the occasion. He has bought a pair of bullocks and a cart. He is still indebted heavily. p. 125.

Thurumella:—(1) K. Krishnayya is in the same position. He is thinking of emigrating to some part or other of the country.

(2) K. Venkatappayya is anxious to follow Mr. Narahari in search of land. p. 127.

Appikatla:—(1) I. Ankamma has spent Rs. 500 on the marriage of his son. p. 132.

(2) A. N. Appayya has spent Rs. 500 upon litigation but made a profit of Rs. 1,000 out of it. . He is a very enterprising, though unscrupulous ryot. p. 132.

The other ryots about whom no remarks are made here, are all getting on well in the same way and so we need not pause to speak of them again here. The above account shows how rarely a ryot gets a chance to take to new employment or to emigrate to other parts and to enhance appreciably his income in any way. It also demonstrates the fact that these ryots spend large sums of money upon marriages, doctors, litigation and experiments made in business.

APPENDIX II.

The Colonisation Policy of H.E.H., the Nizam of Hyderabad.

After I have sent to the printers, the first part of this volume in which I have discussed the possibilities for colonising the Nizam's Dominions, I received a copy of the Colonisation Rules of the Development Department of H. E. H. the Nizam. I have thought it only fair to the Nizam's Government to give the following extracts from the paper sent to me. From these extracts, it is easy to gather that the Nizam's Government has awakened itself to the necessity for and the advantages of colonising the vast areas of unoccupied but cultivable land and that it is quite prepared to grant large areas of land on very easy and attractive terms. But the whole problem revolves itself upon the question as to how these colonisation rules are administered. It is easy to understand why not many British Indian Subjects have not applied for land, because they are too much afraid of the red-tapism of the subordinate officers of that Government. Moreover these people are suspicious that the police and Revenue Officers may at any time get them involved in inconvenient cases—both criminal and civil. It must, however, be admitted that two concerns organised by some capitalists of Bombay have been granted large areas of land by the Nizam's Government and that these companies have ambitious schemes of developing huge plantations. We must also notice that no policy has yet been evolved out by this Government to secure a portion of this unoccupied land for the aboriginal tribes like Koyas and Lambadis, whose ultimate interests must be safeguarded by the Government. The development of large capitalistic estates is not really in the ultimate interests of the people. I learn from the Press that Dr. Harold Mann is appointed by the Nizams

Government to investigate into the possibilities for agricultural and industrial development of the State. I hope he will consider carefully the various suggestions put forward in the fourth chapter of this volume to facilitate the colonisation of the country.

Extracts from the paper of H. E. H., the Nizam's Government.

Preliminary enquiries had shown that in Protected and Proposed Forests and Gut and Perampoke lands there were 35 to 40 lakhs of uncultivated areas in the Dominions which were fit for cultivation. After consultation with the Revenue and Forests Departments it has now been found desirable to give for the present between 7 and 8 lacs of acres for cultivation and colonisation, and it is accordingly hereby so notified for information of the public,

People in British India emigrate to remote countries in search of land etc. With the view to attract people from outside to come and settle and thereby accelerate the progress of colonisation and cultivation in the Dominions, Colonisation rules had been prepared embodying such concessions as had not prevailed here before. They were sanctioned by H.E.H. the Nizam, in Firman dated 18th Shawal 1340 H., and full publicity was given to them.

In spite, however, of having waited for considerable time, outsiders in sufficient numbers have not applied for land; there are 649 applications from outsiders and 2,843 applications from inhabitants of the Dominions. Again only 72 of the former have actually paid up the deposit money as against 625 persons of the Dominions. Thus both as regards the number of applicants and the number of persons who have paid up the prescribed deposit the number of persons of the Dominions much exceeds the number of outsiders.

The expectation that large number of outsiders will apply for land has not been sufficiently realised, and it does not therefore appear advisable to introduce, in con-

travention of the custom and practice of the Dominions, permanent settlement and thereby create a double system. It has been also ascertained from different sources that as all the lands were to be assessed at a uniform rate without regard to their class and quality, the measure has not met with popular favour.

Another point was, that if a Colonist after bringing and settling the tenant should turn him out without any cause, the tenant had been given no remedy against the ejection. Modified rules were accordingly submitted to H.E.H. the Nizam who has been graciously pleased to sanction them in Firman dated 24th J—I 1342 H. and they are published herewith.

MODIFIED COLONISATION RULES SANCTIONED BY HIS EXALTED HIGHNESS THE NIZAM.

As a result of the enquiries made, extensive areas of land of the following classes are available for Colonisation purposes :—

1. Such portions of Forest areas other than protected as are suitable for agricultural and Colonisation purposes.
2. Such portions of Shikargah as are fit for agricultural and Colonisation purposes.
3. Gut number and Perampoke areas of 50 or more than 50 acres.
- (d) No area with timber valued by the Forest Department at more than Rs. 20 per acre shall be declared.

III. His Exalted Highness' Dominions, excluding the Berar, extend over 82,000 sq. miles with a population of 13 millions. Without Colonisation it is impossible to develop enormous and extensive tracts that are lying waste and profitless to the State and the public alike. For economic and other reasons the aim of the Development Department shall be to colonise these tracts by settling colonists on them but there will be nothing to prevent the Develop-

ment Board from making similar settlements with His Exalted Highness' servants and subjects without any distinction of caste or creed. There shall be no hard and fast rule in this connection but the Development Board will be responsible for carrying out the main policy underlying the Colonisation Scheme.

IV. Colonisation areas shall be formed into Blocks of varying sizes from 50 acres upwards with judicious and equitable distribution of good and bad lands, of facilities of irrigation and of proximity to railway lines and roads. When Blocks are formed the fullest publicity will be given to them with all necessary particulars and description.

V. (a) All applications for settlement shall be made on the Form prescribed therefor and shall be addressed to the Secretary to Government in the Development Department and shall be placed by him before the Development Board for consideration and decision. Settlement shall be made with approved applicants only, the Development Board exercising full and free discretion in their selection.

(b) All applications for settlement shall specify the number of acres applied for and shall be accompanied with a deposit of Rs. 2 per acre, credit for which shall be given to the applicant when the settlement is made. In case the application is not approved of or is withdrawn by the applicant before the settlement is made, the deposit shall be refunded to him less the cost of remittance.

VI. (1) Blocks will be settled in perpetuity conferring on the Colonist full and complete occupancy rights in the entire holding.

-
- (2) It shall descend to his heirs and successors by the law of primogeniture as laid down in the bye-laws unless the holder varies the inheritance with sanction of Government.
 - (3) Each Block will form an Estate by itself and shall not be partible.
 - (4) It shall also not be alienable except by the sanction of Government, but the holder will be free to settle tenants at will on the Estate or lease it, or a part thereof, for a term of years for agricultural, industrial and commercial purposes. The mutual rights and relations between the Colonists and the tenants will be regulated by the Revenue Laws of the State.
 - (5) The Estate shall not be attachable in execution of a decree of the Civil Court without the previous sanction of Government.
 - (6) For the first four years, from the date of the grant, no land revenue shall be charged by Government on the Estate but from the 5th year a charge of one anna per acre on the entire Estate will be commenced to be levied, with an increase of one anna per acre every subsequent year till in the 20th year the land revenue reaches the amount of rupee one per acre per annum of every Estate. Thereafter there will be an enhancement of annas four per acre every year till in the 24th year the maximum of Rs. 2 per acre of every Estate is reached. This rate shall continue up to the end of 30 years. At the end of this period the Estate will be subject to the usual settlement rules.

- (7) The Colonist will have the full and free right to improve his Estate without any interference and such improvements as he makes, the benefit thereof will accrue to him.
- (8) Such wells, coontas, tanks, anicuts and earthwork in a state of dis-repair as may be in existence in the Estate at the time of the grant shall vest in him, and he shall enjoy free and unhampered use thereof. He shall also have the freedom to make in these such changes as he may consider desirable but without prejudice to the lawful interests of any one,
- (9) All timber in the Estate will vest in the Colonist from the date of the grant and he will be free to cut, fell and deal with them as he likes. So also as regards trees that may be grown or may be reared by him after the grant. As regards such Mahwa, Palm and Date trees as the Colonist has not cut, felled or dealt with otherwise he will have the free enjoyment of the produce thereof but not in contravention of the Excise Laws or Rules of Government.
- (10) All Machinery, implements of agriculture, manures, seeds, plants, shrubs, cattle, fire-arms, ammunitions and explosives for blasting purposes imported by a Colonist for legitimate operations in his Estate will be exempt from Customs Duty for the first twenty years from the date of grant.
- (11) The Government will retain all legal mining rights in the Estate but in cases of sand, clay, lime and building stone the Colonist will have full freedom to quarry them for

the improvement of his Estate without any interference on the part of the authorities.

- (12) The Game Law will not apply within the area of the Estate to a Colonist or his Agent. All Game shot, trapped and ensnared by the Colonist or his Agent in the Estate will be the property of the Colonist and he will be free to deal with it as he likes.
- (10) Excepting Mosques, Temples and religious buildings a Colonist will have full freedom to erect all kinds of buildings, tenements and structures in his Estate without having to receive permission thereof from the authorities.
- (11) In selected and approved cases where sufficient and satisfactory security is forthcoming, Takawi advances may be made to a Colonist subject to Government rules.
- (12) It shall be obligatory on the Colonist to either himself permanently reside in his Estate or keep a duly appointed Agent in permanent residence in the same.
- (13) A Colonist or an Agent duly appointed by him residing in his Estate shall discharge all the duties of a Police Patel in that Estate and the Village Police Patel shall cease to have jurisdiction therein from the date of grant, The office of the Police Patel of an Estate will be honorary and without remuneration.
- (14) A Colonist shall at his own cost appoint his own Estate Kavalkar (Chowkidar) and shall be responsible for his maintenance.

Reviews

I.

Economic Organisation of Indian Villages Vol. I, Deltaic Villages: By Mr. N.G. Ranga, B. Litt, (Oxon).

This interesting book is the first of a series appropriately styled the "Andhra Economic Series." The author, who has been trained in social investigation in England, has sought to apply the latest methods of realistic economics to the investigation of rural conditions in the deltaic areas of the Andhra country. Selecting some seven villages in the Bapatla and Tenali taluks as fairly typical of the economic conditions of the deltaic area, he has made a special feature of investigating the farming costs of the ryots, and the standard of living and the status and condition of labour.

Mr. Ranga being himself a member of the agricultural community has had excellent opportunities for not merely collecting information but also for checking and appraising the reliability and the significance of the figures he has obtained, and his University training has doubtless made him take a strictly scientific attitude towards the problems he has set himself to study. The result is admirable—all the more so for the very little help he could have had from the machinery of Government.

The study reveals the amount of biting penury which is visible in even villages which are by no means deserted. How weak the stamina of the ryot is and how helpless he is to improve his position are brought out with a clearness that must appeal even to those who speak blithely of the progress achieved in raising the condition of the peasantry. The work which Mr. Ranga has taken upon himself must be taken up by others as well and prosecuted with equal clarity and sanity.

Perhaps we may permit ourselves the freedom of making suggestions for improving the results of so admirable a method of investigation. Mr. Ranga has, except in places, expressed economic conditions in terms of money, but in view of the recent vacillations in prices, he would have done better to have stated yields, wages, etc., in terms of commodities. Mr. Ranga has obviously taken from the ryots the figures for farm costs from their recollection in most cases. Though the Indian peasant is by no means inaccurate in his book keeping and though he keeps all his books in his head, yet Mr. Ranga might have done better to have made at least some select peasants keep such accounts for one season and collected and checked the information so obtained. The railway evidently runs in close proximity to the villages of Mr. Ranga's study, but we have no estimate of its influence for good and evil. Perhaps no institution in a village is a clearer index to its economic condition than its shop but Mr. Ranga practically passes it over in silence. These villages seem to have forged ahead in the non-Brahmin movement, but how far a local justification there might have been for it in economic conditions has not been brought out ; we do not know even how many Brahmins the villages contain. A number of English-educated young men seem to be vegetating in the villages but how far their presence in the villages is of economic gain or loss has not been appraised adequately. The evidence adduced by Mr. Ranga does not seem at all to confirm his conviction that eight acres of wetland are enough in ordinary circumstances to yield a net income of Rs. 500 per annum ; it would really be startling if it were so. We should have expected Mr. Ranga to give us a complete table of incomes for all the ryots and based his estimate thereon, and we believe that this result of his would stand negatived if he attempted to draw up a comprehensive table.

The Hindu, Madras,

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61	23	Begin a new sentence with 'They' after people	
61	27	Brahmanakoduru	Brahmanakod
65	12	supervision	suporvisiou
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71	20	insert 'of the' after true and before Andhra peasant	
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