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BOOK REVIEWS

India's Food Problem and Policy Since Independence, B. M. Bhatia, Somaiya Publications Private Ltd., Bombay, 1970. Pp. ix + 251. Rs. 25.00.

Bhatia puts India's food policy under spotlight. He excels in adopting historical method and critically examines various aspects of India's food policy, namely, prices, imports and public distribution of foodgrains. He feels quite emotionally about the deteriorating food situation and lays the responsibility for the failure to solve the food problem even after three Five-Year Plans with the wrong food and agricultural policies that have been followed all these years. The situation is a bit altered now with successive four good harvests and expectation of a near targetted production of more than 105 million tons of foodgrains this year. Nevertheless, the book carries with it a rapid and concise review of India's food policy.

The year 1880 in the pre-independence era is an important watermark, for, in that year India had reached a position where demand and supply were precariously balanced at the then levels of income and population. In the drought of 1896-97, 4.25 million lives were lost due to starvation! Government's preparedness was better thereafter and though there had been some daily insufficiency of food, there has been no major famine except the Bengal famine of 1943 involving loss of lives to that extent due to starvation. Many will agree with the analysis of Maurice Dobb that 'marketable surplus of agriculture' is the fundamental limiting factor upon the pace of development of countries like India. This is advocating commercial agriculture and applying agricultural surplus theory in the model of economic development. Efforts made during the Plans and in various agricultural programmes are then analysed and various institutional factors such as credit, land reforms examined in the light of the new emphasis which is of the nature of a break-through in agriculture. Have land reforms by reducing the size of the farm contributed to the reduction of marketed surplus? Perhaps not, for, yields on small farms are shown not to be lower. The real devil is the income effect which increases consumption and reduces market arrivals. But we have no reasons to believe this has happened except for the fact that a greater number of mouths ask for a larger quantity of food to eat. However, these are important research questions for empirical analysis. Looking to different variables of the problem one is apt to ask, did depressed prices (under the weight of PL 480 imports) discourage producers producing more? Or was it lag in technology? Farmers everywhere clamour for higher produce prices. What is the way out? Should increased gains be siphoned off through taxation and fiscal measures? Should terms of trade be changed? All these are questions in management, a field to which much less attention has been paid. Bhatia critically examines public distribution and PL 480 imports in relation with the price policy. Failure in procurement led to heavy imports. Between 1956 and 1965, for example, 82.6 per cent of the quantities distributed through the public distribution system were obtained from abroad and not procured internally. Since then procurements have considerably been stepped up. In 1968, 6.60 million tons of foodgrains were procured as against 1.43 million tons in 1964. The Government has given better account and currently adequate buffer stock is being built up, leading us hopefully to near self-sufficiency in food, thanks to new varieties of seed. Possibilities of increasing foodgrains and other production are immense with yet unsatisfied demand for fertilizers,

mechanized agriculture and new credit facilities and above all the changed image of the farmer. The chapter on rainfall and food production is a bit detached. As for policy for the future, Bhatia believes in (a) National Food Budget recommended in 1965 but not given a trial yet, and (b) removal of all artificial restrictions on movements of foodgrains and allow the market mechanism to freely function. The author does not feel concerned as to what will happen to deprivations of a large number of consumers below poverty line.

Nutrition is an important aspect; so also low levels of income in a discussion on food policy, but admittedly the author keeps himself on the main tract without going into this area. The author has written concisely reviewing India's food policy over the last twenty-five years since Independence. His style is lucid, and convincing with arguments. He does not build his judgments on hard facts and sophisticated data but argues cogently on the basis of available secondary data. Both Indian students and readers abroad will find this a useful addition to the reference library.

S. M. SHAH

Socio-Psychological Factors Influencing Industrial Entrepreneurship in Rural Areas : A Case Study in Tanuku Region of West Godavari, Andhra Pradesh, V. R. Gaikwad and R. N. Tripathy, National Institute of Community Development, Hyderabad (A.P.), 1970. Pp. ix + 139. Rs. 6.00.

In Tanuku town of West Godavari district, with a population of less than 30,000 a rich feudatory, Shri M. Harischandra Prasad who initially entered into sugar industry in 1947 could succeed in building up an industrial empire by setting up a number of other establishments in textiles, machine foundry, rice bran oil, flour mills, fertilizer mixtures, animal and poultry feed, and cycle parts. His example is not, however, emulated by other rich agriculturists or tradesmen in the town, and those who moved into industrial entrepreneurship in the area along with him are facing heavy odds. This study, which is undertaken at the instance of a former Director of Industries, Government of Andhra Pradesh, seeks (1) to identify the factors that contributed to the success of Harischandra Prasad, and (2) to suggest steps for promotion of industrial entrepreneurship in rural areas.

The results of the study are based on interviews with Harischandra Prasad and ten other industrial entrepreneurs, drawn from three groups of industries, purposively chosen, and 15 tradesmen. Unstructured interview was the main tool of the study. Besides, schedules with open-ended questions to identify the socio-psychological factors relating to the entrepreneur, and to elicit details relating to industrial establishments of the entrepreneur were canvassed. Reliance was also placed on geneological methods. Files of the Department of Industries were studied to evaluate the type of assistance rendered by the Department. The questionnaires canvassed and the relevant extracts from the files of the Department are given in the appendix.

Based on the study of geneology of Harischandra Prasad and of the growth of his industrial empire 14 factors have been identified for his success. These could be classified into three groups : (1) Desirable personality traits and high degree of motivation, (2) Strong economic base with powerful links with all those

in positions of influence and wealth, and (3) Exposure to modern technology and availability of expert technical guidance and finances at all stages of development. The study of ten other entrepreneurs has revealed that while they are not lacking in desirable personality traits and high degree of motivation, their failure is traceable to absence of strong economic base and lack of expert technical guidance and finances at the crucial stage of development. The files of the Department of Industries have been used to show that the Department is ill-equipped and is unable to provide technical guidance at the crucial stage of development. Based on the depth interviews of businessmen some broad generalizations are drawn. The traders are aware of the scope for industries, consider that industries offer better profits and high status but do not turn into industrial entrepreneurs since they think that industry requires large capital outlay, high managerial and organizational skill and technical knowledge.

The results of the study for policy are quite obvious. Since the entrepreneurs do not lack in desirable personality traits and in a high degree of motivation and need only technical guidance and financial assistance at the crucial stage of development the Department of Industries, which is now a mere 'post office' between the entrepreneurs and technical institutes should be equipped to undertake this task. The authors recommend the creation of (1) an extension-cum-technical advisory cell at district level headed by a senior officer, (2) a technical planning and advisory task oriented body at the State level, and (3) a market research cell at the State level.

The study of factors inhibiting the growth of rural industrialization in general, and the origin and growth of industrial entrepreneurship in particular, is of crucial importance and has diverse aspects of both theoretical and of practical importance. The methodology of the study is therefore of great relevance for the validity of generalizations. The success traits identified in this study are so drawn from one atypical case that their relevance for wider application becomes questionable. The contention that rural entrepreneurs studied have desired personality traits and high degree of motivation needs convincing proof in view of the opinions widely current among a group of scholars that rural rich lack the desired personality traits and a high degree of motivation. Further, a study on the degree to which the exorbitant rates of return on moneylending in the rural areas act as a deterrent to the growth of rural entrepreneurship would have thrown useful light on the problem.

Despite the limitations and the limited scope of the study, the book will be found useful to scholars who wish to pursue research in the area of origin and growth of rural industrial entrepreneurship.

G. PARTHASARATHY

Studies in the Taxation of Agricultural Land and Income in India, T. M. Joshi, N. Anjaniah and S. V. Bhende, Asia Publishing House, Bombay, 1968. Pp. vii + 381. Rs. 35.00.

In the context of raising adequate resources for financing the successive Five-Year Plans, agricultural taxation has received increased attention in recent times. Apart from the immediate and the more pressing problem of raising resources, the economist's interest in the subject has been aroused also by questions of inter-

sectoral equity taxation. The work by Joshi and others is a welcome addition to the growing literature on this important theme.

The work is divided into two parts, Part I dealing with land revenue and Part II dealing with agricultural income taxation. The first three chapters in Part I describe how the various land revenue systems evolved in different regions of India and how the raiyatwari tenure came to be adopted in Madras and Bombay. They also examine in some detail the methods of assessment and collection of land revenue in these States. This section is so packed with historical material that it is uninteresting, and probably unenlightening, to all except the devoted economic historian. The authors would have done better by reducing this section to just one chapter.

The substantive part of the work begins only in Chapter 4 which deals with the nature and incidence of land revenue. One wonders if the authors should have devoted so much attention to the 'long and old controversy' over land revenue being a rent or tax. Their conclusion that land revenue is a tax might bring them some intellectual satisfaction but does not add to the usefulness of the general discussion. Using the concept of incidence in the traditional sense, it is concluded that the landowners themselves have to bear the burden of land revenue. There is no shifting forward in the form of higher prices for farm produce and there is no backward shifting in the form of lower prices for productive agents. The whole discussion appears a little far-fetched because it is a well-known principle of taxation that when a tax is negligible, it is not worth the trouble to shift it. The remaining chapters in Part I of the book, however, focus attention on more interesting questions relating to land revenue. The authors rightly point out that whatever be the interpretation of the principle of equity, land revenue grossly violates this criterion. In terms of productivity, the performance of land revenue has been totally disappointing. The inflexibility of land revenue as a source of revenue is also well brought out. As far as the economic effects of the tax are concerned, we may readily agree with the conclusion that land revenue as it operates at present does not affect the incentives to produce adversely. Nor does it bring about any diversion of resources use. That land revenue as a source of revenue, or as an instrument of taxation of farm income, has been a miserable failure is now admitted by all; the authors need not have devoted two chapters to examine the most obvious "case for enhancement of land revenue." After examining various alternatives to the present land revenue system including the imposition of an agricultural income-tax (as has been done in some States), the authors opt for modifications within the land revenue system. It is not clear how the authors' statement (on p. 180) that the "agricultural income-tax cannot be successfully levied on Indian agriculture" can be made consistent with the discussion in Part II wherein a case has been made out for agricultural income-tax. The scheme of land revenue reform proposed consists of reclassifying the present land holdings in terms of standard acres and imposing progressive rates of land revenue on the potential net income. The land revenue rates are to be periodically revised according to variations in agricultural prices. The advantage of potential net income from land as a tax base in developing countries has been stressed by many writers. But one is inclined to doubt its practicability in a country as vast and diverse as India. Moreover, the reclassification of holdings into standard acres itself has to be a continuous process. Any system of land revenue which requires periodic revision of rates based on standard acres, current prices, and potential yield, is bound to encounter innumerable difficulties of a technical and administrative nature.

Part II of the book is devoted to a discussion on agricultural income taxation in India. The early chapters deal with the history of agricultural income taxation in each State where it has been in force. This is followed by a brief examination of the salient features of the various agricultural income-tax acts and the rate structure. The appropriateness of the case study of agricultural income-tax in Bihar State where agricultural income-tax plays a very minor role—the tax accounts for less than one per cent of the revenue from State taxes—is questionable. In their appraisal of agricultural income taxation in India, the authors point out that the agricultural income-tax is a direct levy on the tax payers like the income-tax or death duty. It is agreed that since the tax is levied on net agricultural income, it does not enter into cost and hence cannot be shifted. This conclusion, though broadly correct, needs to be supported by more rigorous analysis. The authors rightly point out several defects of the agricultural income-tax such as the arbitrary use of the “best of judgement” system of assessment, the need for “personalising” the tax base, high exemption limits, etc. As for the economic effects of the agricultural income-tax, it has little impact on the rural economy. From the administrative point of view, the tax, according to the authors, leaves much to be desired. In the concluding chapter many valid suggestions for the reform of agricultural income taxation are made. The proposed reforms aim at bringing agricultural income-tax closer to the Central income-tax as far as the essential features are concerned. The logical thing, of course, as the authors rightly point out, is to integrate agricultural and non-agricultural incomes for income taxation and bring them within the purview of the Central income-tax. This, however, would necessitate an amendment of the Constitution. Short of constitutional amendment, the best course under existing conditions would be to incorporate into the agricultural income-tax as many features of the income-tax as possible.

The authors deserve our congratulations for undertaking a painstaking study on a theme of such current importance. The readability of the book, however, could have been greatly improved by eliminating, or in any case, by reducing, the historical part.

E. T. MATHEW

Agricultural Policy and Food Self-Sufficiency, Edited by S. C. Mathur, Associated Publishing House, New Delhi, 1970. Pp. xi + 171. Rs. 21.00.

The attainment of food self-sufficiency has been the cherished goal of many countries especially the developing countries like India. Besides the quantitative and qualitative aspects of the problem, the question of making available food at a cost the average consumer can afford is also important. Ralph W. Cummings, Jr. adds another concept to the food self-sufficiency problem, namely, the production of sufficient amount of food required to maintain a stable relative index of food prices within a market, state or nation with aggregate exports and imports in balance. The achievement of self-sufficiency in food based on these considerations may call for more concerted efforts in this direction and a much greater rate of increase in production. This is particularly true in the developing countries including India as population growth rates are steadily increasing in spite of the family planning programme, and the per capita incomes are on the rise bringing about shifts in demand for more and better quality foods. The problem of food self-sufficiency and the policies oriented towards its attainment cannot lose sight of these considerations.

The book under review, which is an edited collection of published articles by eminent persons both within India and from abroad covers some of the dimensions of food self-sufficiency and the policies thereof. Various aspects of increasing food production are considered by the authors. Policy measures such as land ceilings, price support, production adjustment programmes and other national agricultural legislations besides the selection of areas and farmers for intensive agricultural programmes, etc., are discussed in these articles. The eleven articles included in the book are grouped under three broad categories : Agricultural Structure; Production and Distribution; and Management, Planning and Policy.

David E. Lindstrom discusses the social and cultural barriers to increasing food production in India drawing profusely from the various studies by Indian and foreign sociologists and concludes that even with the popularization of the High-Yielding Varieties Programme (HYVP) the chances of attaining food self-sufficiency are still few. D.S. Chauhan and Willem Holst also confirm Lindstrom's conviction that social and institutional barriers prevent the achievement of the technically feasible limits of production in spite of the HYVP. Chauhan puts a large part of the blame for non-achievement of food self-sufficiency on inadequacy of efforts and administrative incapacity. He perhaps rightly points out that the PL 480 food contracts served as disincentive to Government to undertake effective steps to increase food production. In sharp contrast to Lindstrom's argument, Cummings, Jr. pleads that cultivators in India are as adoptive as their counterparts in developed countries and that the real problem is that proven technologies producing high yields "have not hitherto been available to Indian conditions." Cummings, Jr. argues that while a bold price policy is a necessary condition for agricultural development, it is not in itself sufficient. Alongside bold efforts at building the infra-structure of research, supply lines, market, irrigation, *i.e.*, the creation of what Mosher calls "progressive rural structure" is essential for promoting and sustaining agricultural development.

P. N. Mathur argues that because of variability in production conditions from farm to farm uniform package of practices recommended for each farm will not entirely meet the requirements for optimizing agricultural production. He pleads for covering only the big farmers rather than the small ones by the extension programmes on consideration that the effort spent on convincing a small farmer is "disproportionately large in relation to the area covered," particularly in view of the limited resources. In his argument Mathur disregards the social implications especially when concerted attempts are being made for the betterment of small farmers. However, Otto Schiller makes a case for vertical and horizontal integration on medium sized farms (inter-farm co-operation) for their efficient operation although for small farmers under five acres he pleads for co-operative form of operation. From the past experience of the working of these co-operatives one is invariably led to doubt the feasibility of Schiller's suggestions.

Selective approach to increase agricultural production even within the IADP areas, according to Mathur, yields quicker and better results for the limited resources. His approach concurs with Mosher's concept of choosing areas with immediate growth potential (IGP areas) and future growth potential (FGP areas) for development on high pay-off considerations. (Mosher is not a contributor to this book).

Institutional reforms particularly land reforms as a means of increasing food production in India are stressed by Eiji Kobayashi, but it is doubtful how far Japanese experience can be reproduced in India. Further, land reforms will not result directly in increases in production but will provide the framework for agricultural growth. Kobayashi's arguments for breaking up of large holdings through ceiling legislation are in exact contradiction to Mathur's approach of selective approach to maximize returns to extension efforts. M. R. Haswell, on the other hand, vehemently argues that mere transfer of parcels of land from big land holders to land hungry tenants and under-employed landless labourers does not by itself promote increased productivity.

S. C. Mathur falls in line with Chauhan when he argues that much improvement in food production level could be achieved simply through better administration and planning of existing resources. He suggests a scheme of compulsory acreage allotment; for example the large farmers should be compelled to put 60 per cent or more of their acreage under the crop chosen for the region. It is doubtful to what extent this suggestion could be implemented. Referring to S. R. Sen's suggestion to demarcate each State or district based on their susceptibility to drought, Mathur suggests formulation of agricultural and irrigation policies by the State.

Holst shows that even though the achievement and maintenance of foodgrains self-sufficiency are technologically feasible on the basis of advances in agricultural sciences, in practice success would depend upon a continuing programme of research, adequate incentives to farmers, assured supply of essential inputs and development of rural infra-structure, besides an extremely well-co-ordinated resource planning, timely investment and policy decisions to assure both the availability and effective utilization of necessary agro-industry inputs.

Any discussion on food self-sufficiency in India will not be complete without the inclusion of a discussion on population problem. Similarly, inclusion of the economic aspects of the HYV of crops which have brought the prospect of attainment of 'self-sufficiency' in food within the foreseeable future would have been worthwhile. Policy is an area wherein different individuals can have divergent viewpoints on a given issue. The author has attempted to bring in one volume the viewpoints of eminent economists on different aspects of agricultural policy and attainment of food self-sufficiency in India.

R. RAMANNA

Studies in Rural Development, D. L. Narayana, Regional Planning Forum Executive, Sri Venkateswara University, Tirupati (A.P.), 1970. Pp. x+234. Rs. 10.00.

The book under review is an outcome of the village surveys conducted by Sri Venkateswara University College Planning Forum between the years 1960 and 1962. The volume covers various aspects like food production potential, indebtedness, community development, advancement of agriculture, village leadership and family planning on the basis of detailed data collected by a team of students and staff members through survey method from three villages situated in the vicinity of Tirupati. The enquiry was completed in three days' time in two villages and in two days in the third village.

The book opens up with a good account of the famines and economic geography of Rayalaseema region of Andhra Pradesh which serves as a general background for the following village studies. The acute famine situation in the region is well brought out by the various statistics presented in the first chapter. The incidence of famine in Rayalaseema has doubled in the present century from one famine for every 12 years to one for every 6 years. The frequent occurrence of famine and drought is the prime cause of backwardness of the region, depressing its economy to stagnation and utter poverty. Creation of permanent assets to improve the economy of the region has been suggested in the place of provision of gratuitous relief and wage employment for laying and repair of roads, which have been found to be not serving 'any useful purpose in the absence of a suitable machinery for the maintenance of such works.'

The poor economic conditions of the people inhabiting the drought prone Rayalaseema region are well brought out by the following chapters based on case studies of three selected villages in the neighbourhood of the well-known pilgrim town of Tirupati. Over 30 per cent of the families in Paidipalli village are without any land while about 60 per cent of the rest own less than two acres of dry land. Only 4 of the 159 families own *pucca* houses, the rest living in thatched huts. The Harijans of Durgasamudram village are the poorest among the various caste-groups cultivating 0.25 acres of dry land per family of 5 members. Their average annual family income is only Rs. 376 as compared to the village average of Rs. 604 and this is in spite of the highest labour participation reported by them. Two-fifths of all the families have an annual income of less than Rs. 300; another one-third between Rs. 300 and Rs. 600.

The book contains a number of minute observations on the rural society, which give valuable insight into the functioning of the society at village levels. In Durgasamudram village, the area available for reclamation of culturable wastes is very limited and "there is heart burning among Harijans that they could not get the opportunity to reclaim it as the upper castes are in an advantageous position by virtue of social status and influence." How needless tensions can arise between two rural communities due to misunderstanding and lack of knowledge is well brought out by an observation on page 98. The poultry kept by the Harijans used to collapse after visiting neighbouring fields treated with pesticides; but this led to wild allegation that the ryots (who incidentally belong to high castes) are putting poison in the fields to kill the fowls of Harijans! Another keen observation on page 126 makes interesting reading. "An important factor that accounts for the harmonious working of village institutions at Durgasamudram is the co-operation and understanding between the two leading communities. The most favourably placed Reddi community enlisted the support of the next important Balija community by giving it the village panchayat presidentship, whereas it has occupied the chairmanship of the village co-operative society." In Cherlopalli village, one caste-group is not inclined to obtain co-operative credit as it has to go to the local director of the large-sized society, who belongs to another dominant caste for forwarding their applications.

The problems of organizing village surveys and social service projects by planning forums in the light of their objectives are dealt with in great detail in the last chapter supplemented by the questionnaires and schedules employed in the various surveys. This chapter may be found to be of particular value to the large

number of planning forums in the country in organizing similar village projects of survey and social work. The omission of the contents page and footnotes is conspicuous. The book is a good example of what useful work can be accomplished by team work even within very limited budget. The book is a useful addition to the studies on Indian villages and rural development.

C. MUTHIAH

Dry Farming in Mysore State, National Council of Applied Economic Research, New Delhi, 1970. Pp. ix + 156. Rs. 22.50.

One of the side-effects of the 'green revolution' being witnessed in some parts of the country is the increased concern for the problems of dry farming areas. This is as it should be because large parts of the country falling in arid and semi-arid tracts are unable to take direct advantage of the new strategy of agricultural development for which assured water supply is the critical requirement. Besides, they will have to bear with permanently depressed agriculture due to recurrent droughts and famines. On the top of these, paucity of information about their problems and potential hinders evolution of a meaningful development strategy for such areas. In this context the present study which tries to assess the scope and approach for improving agriculture in the dry areas of Mysore State is a welcome one.

The study is based on intensive investigations of physical (*i.e.*, soil-moisture, etc.) and economic conditions¹ of two chronically drought affected talukas, *viz.*, Pavagada (Tumkur district) and Bagewadi (Bijapur district) in the dry belt of the State.

On the basis of the study of soils, topography, ground water resources, rainfall and cropping patterns in the two talukas, the study has assessed the agricultural potential and has recommended development programmes (separately for two talukas) with development focus on (i) extension of irrigation, (ii) adoption of soil conservation measures, and (iii) changes in the cropping patterns.

It is observed that the extent of irrigation through exploiting ground water potential can be increased in Pavagada from 13 per cent of the cropped area at present to 18 per cent. In Bagewadi on the other hand, not much can be added to the present extent of irrigation (only 3 per cent of the cropped area) particularly because of the poor quality of water.

Hence in most parts of the dry areas, conservation of available moisture through contour bunding and its efficient utilization through adapting the cropping pattern to the availability of moisture is the only alternative for improving agriculture. The study recommends a ten-year contour bunding programme to cover 90,000 and 110,000 hectares in Pavagada and Bagewadi respectively.

1. The study team included an hydrologist, a soil scientist and an economist. Physical details were collected through on the spot investigations and are presented in the appendices. Economic details were collected through a survey of 15 villages and 225 households in each taluka selected for the purpose.

To ensure optimum utilization of available moisture, the study suggests intensification of cropping by replacing the existing long duration and low yielding crops by new short duration and high-yielding crops in such a way that drought spell (which normally occurs during mid-June to mid-August in Pavagada and during July-August in Bagewadi) is escaped, *i.e.*, the drought period coincides with the slack period between two short duration crops.

The study envisages that implementation of these recommendations would entail an investment of Rs. 82.4 million (both on public and private accounts), for Pavagada and Rs. 198.3 million for Bagewadi over ten years. One wonders how these magnitudes stand in relation to overall resource availability for agriculture in the State as a whole. In fact this raises a fundamental problem of investment priorities within the farm sector, *i.e.*, when different farming regions and sub-regions with varying factor endowments and hence varying pay-off potential compete for scarce resources, where do, in fact, the dry areas (with apparently low pay-off potential) stand in the matter of investment priorities?

The study indicates the economic soundness of the above-mentioned investment magnitude by working out capital-output ratios. Assuming that all the recommendations including new crops (with their stipulated yield levels), so far never tried in the area, are successfully adopted, the capital-output ratios have been worked out. They are 1 : 8 for Pavagada and 1 : 1.1 for Bagewadi. Extremely favourable situation in the former to some extent is because of 'irrigation factor' which obviously represents a situation different from the one indicating the economics of dry farming alone.

A significant gap in the study is the almost complete neglect (except for a brief and indirect mention on pages 34 and 106) of the livestock sector in the dry areas. In fact, it is difficult to meaningfully evaluate the economics of dry farming without consideration of livestock farming because of (1) complementarity of certain conservation measures and livestock farming on one hand, and (2) potentiality of livestock farming to ensure efficient utilization of deficient natural resource base in the dry areas on the other. These factors in fact improve the competitive position of dry areas for investment priorities.

N. S. JODHA

Agricultural Development and Small Farmers : A Study of Andhra Pradesh, Gogula Parthasarathy, Vikas Publications, Delhi, 1971. Pp. 123. Rs. 16.50.

The implementation of the new agricultural strategy with fairly good results in several parts of the country has aroused concern among economists and policy-makers about whether and the extent to which the small farmers would benefit by adoption of the new technology which pre-supposes availability of adequate factor endowments with prospective adopters and which entails sizably larger cash outlays than the traditional technology. In order to have objective assessment on the question, the Planning Commission sponsored studies in different parts of the country. The publication under review is the outcome of one of these studies, which was entrusted to G. Parthasarathy of the Andhra University.

The study seeks to throw light on three important aspects : (1) the significance of "small farmers" in terms of number and area in each of the districts of Andhra Pradesh, (2) the degree by which the problem of small farmers is aggravated by an added problem of tenancy in each of the districts, and (3) the relative level of agricultural development in each of the districts, the factors responsible for relatively higher or lower level of agricultural development and the choice of programmes for benefit of small farmers in districts with varying levels of agricultural development.

The study is divided into three chapters : Chapter I provides the methodology, Chapter II contains the discussion on districtwise analysis of agricultural development and small farmers in Andhra Pradesh; the last chapter contains five case studies based on investigations in a few villages in different parts of Andhra Pradesh. A useful statistical Appendix is provided at the end of the book.

Parthasarathy begins the study by discussing the various alternative definitions of "small farmers." He favours identification of small farmers on the basis of the minimum requirement approach. He considers net income of Rs. 1,200 per year per household, which a "family holding" is expected to generate, as the minimum requirement of a household and has, with the help of an elaborate exercise, based on districtwise secondary data on output per acre and farm harvest prices, worked out the holding size in each of the districts which would produce gross farm income of Rs. 2,400, which, according to Farm Management Surveys, would be needed to earn farm business income of Rs. 1,200. All holdings below the holding required to earn gross farm income of Rs. 2,400 are treated as small holdings.

The level of minimum requirement, adopted by Parthasarathy, would be considered on the low side by many. At the current level of prices, Rs. 1,200 can hardly be considered adequate to meet the minimum annual requirement of a household unless only bare subsistence is connoted by the term "minimum requirement."

Also, the above procedure has one important limitation of which the author is aware. The minimum level of income of a household is expressed in terms of farm business income; non-farm income is not considered. This exclusion is difficult to justify because a large majority of small farmer households derive sizable incomes from such sources as dairy, wages, etc. The author's argument that those households have substantial non-farm incomes are likely to be only those of "off farmers" is not very convincing. One may console oneself that the above limitation in the procedure partly compensates for the rather low level of minimum requirement of a household (in terms of farm business income) fixed by the author!

In order to know the percentage of small farmers, the author has used the 1961 Census data in which 20 per cent sample of cultivators was covered. However, in the case of most districts, the upper limit of the area worked out by the author for demarcating small farmers had to be adjusted either upwards or downwards in order to suit the size-group classification adopted in the 1961 Census. For example, in the case of East Godavari district, the area required to generate

a gross output worth Rs. 2,400 is 3.62 acres but since the size-group available in the 1961 Census is 2.5 to 5 acres, the author had to fix 5 acres as the upper limit to demarcate small farmers. Since such adjustments, in either direction, became necessary in many cases, there is really no knowing as to what must have been their effect on the percentages of small farmers worked out in the study.

Despite the low level of minimum requirement fixed for identification of small farmers, the proportions of small farmers worked out by the author are staggering. The percentage of small holdings ranges from 64 to 92! In 11 out of 20 districts in the State the percentage is over 75; five out of these 11 districts are in the Telangana region.

However, some of these holdings would be such which could not survive as independent farm units even with superior techniques and capital assistance. The author calls such holdings "below basic," *i.e.*, which can earn a gross income upto Rs. 800, and hence for the upliftment of operators of such holdings measures other than provision of capital assistance and adoption of superior techniques have to be devised. The percentage of such "below basic" holdings to total holdings in different districts ranges from 23 to about 63; in 13 districts the percentage is above 40; in five it is above 50. These are the type of farmers who are now proposed to be covered by the programmes designed for marginal and sub-marginal farmers.

Assuming that the average area operated by a farmer was equal to or lower than the mid-point of the size-group to which he belonged, the author has worked out the area operated by small farmers on one hand and all farmers on the other; this provided a basis to ascertain the significance of the small farmers in terms of area. Nearly 24 to 96 per cent of total area in different districts was with "small" farmers; farmers whose holdings were "above basic" but "below family" held 15 to 71 per cent of the total area.

How is tenancy likely to affect the future of small farmers? Like some other observers of the Indian agricultural scene, Parthasarathy fears that the adoption of the new technology and mechanization which promise attractive results to "adopters" will give rise to a new entrepreneurial class of farmers on a large scale, which will displace the tenant farmers; the pace of displacement of tenants will be quickened if any bold effort is made to implement the tenancy legislation. Another possibility envisaged by the author is that the new entrepreneurial class will assume greater responsibility for provision of non-traditional inputs, and, in return, will alter the terms of tenancy—mainly in terms of conversion of fixed rents into share rents. Another observation of the author that "in certain areas the big farmer is found to be displacing the small cultivator by leasing in his land" is equally pertinent.

This sombre assessment becomes even gloomier when Parthasarathy informs us that the problem of tenancy is more serious (*a*) in the case of farmers with holdings between basic and family, and (*b*) in prosperous areas like the deltas of Godavari. If the fear about displacement of tenants comes true, a not inconsiderable number of small farmers who, because of their present holding size

(above basic but below family), hold out hope of becoming viable with necessary assistance, may slip into the ranks of hopeless farmers with 'below basic' holdings.

In order to suggest the type of measures that are required to help the small farmers survive as independent business units, the districts of Andhra Pradesh are classified into three groups which are at (a) high stage, (b) intermediate stage, and (c) low stage of agricultural development, according to whether the gross output (i) per acre, and (ii) per worker of a district is higher or lower than the corresponding average for the State as a whole. This classification brings out the sharp disparities in agricultural development between the coastal south districts (all but one of which were found to be in high stage of agricultural development) and Telangana districts (all but one of which were found to be in the low stage). The coastal north and most of the Rayalaseema districts were found to be in the intermediate stage of development.

Policy measures to help small farmers in these three groups of districts will necessarily have to be quite different. Parthasarathy makes the following important suggestions in this regard. General measures to develop social and economic overheads are required in the districts at a very low level of development, though small farmers would be able to benefit from these measures only to the extent that resource ownership and use coincide. In the districts at intermediate stage of development, specific and selective measures (*e.g.*, satisfactory provision for input supplies, credit, marketing) to benefit the small farmers are necessary. Provision for the requisite capital to facilitate the transition from subsistence to commercialized economy becomes another important policy step in these areas. In the areas which are at high stage of agricultural development, the small farmers can best be helped by giving adequate institutional support to enable them to make the necessary adjustment in the operation of their farm economy, by taking measures to forestall the ill-effects of spread of mechanization, and, by providing facilities to take to activities ancillary to agriculture, such as dairying.

The above policy measures are also indicated by the five case studies which discuss the problem of small farmers in relation to some aspects of agricultural development such as mechanization, shift to commercialized agriculture, shift to high-yielding varieties crops, etc. The case studies are interesting in themselves. However, two limitations from which they suffer may be pointed out. Firstly, four of the five studies have been conducted in districts which are classified as being in the high stage of agricultural development. Only one which discusses the question of small farmers and co-operatives has been conducted in the Visakhapatnam district which is considered to be in the intermediate stage of development. Thus the problems of small farmers in areas at low or intermediate stage of agricultural development are not discussed at the micro level. Secondly, the case studies cover a very small number of purposively selected villages and farmers. Their generalization value, therefore, remains limited.

The book is a valuable contribution to the growing literature on the study of small farmers because it provides quantitative dimensions of the problem in different parts of Andhra Pradesh and also because the discussion is comprehensive covering most of the relevant aspects of the problem of small farmers in relation to agricultural development.

Cost of Marketing Cotton, M. G. Pavaskar and V. Radhakrishnan, Department of Economics, University of Bombay, Bombay, 1970. Pp. viii +55. Rs. 6.00.

This small but valuable book contains some information which may disturb those who still believe in the trader-always-deceives-farmers philosophy. For, it comes up with a finding that the farmer's share in the cotton prices is as high as 90 per cent and that it is almost stable at that level. The share of trader, on the other hand, is not more than 3 per cent and is more fluctuating. These findings are based on a study of prices of cotton and cotton seed prevailing in some regulated markets of Khandesh (Maharashtra) and prices of cotton lint in Bombay during the two years of 1962-63 and 1967-68. These findings are very significant because the authors are cautious in the use of figures and treat with care various assumptions that had to be made.

This high share in the case of cotton could be explained by variety of factors. Unfortunately, the authors have not gone deep into them. It is necessary to examine them in detail. It will also be worthwhile to follow up this study by measuring price spreads for a larger number of markets widely distributed over space. Although the results of such an analysis are not likely to be very different from those of the present study, the evidence so collected will be much more conclusive in indicating where our ideologies and pet theories need a radical revision. The importance of such studies lies not merely in the better share of farmers which they reveal; equally important is the observation that the plight of traders is not as enviable as one would like to believe. As a matter of fact, there seem to be a number of problems associated with trading and processing of agricultural produce of which we are not sufficiently aware. It is also likely that we are confounding them by our policies of State trading, price controls, movement restrictions and increasing co-operativization. It is necessary to understand these problems not only in the interest of the trading class but also in order to identify the spheres in which public control is necessary. It is for this reason that the reviewer welcomes this study and hopes that it would be followed by a critical examination of the problems which it raises.

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