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Vol XXXIX
No. 1

ISSN 0019-5014

JANUARY-
MARCH
1984

INDIAN JOURNAL OF AGRICULTURAL ECONOMICS



INDIAN SOCIETY OF
AGRICULTURAL ECONOMICS,
BOMBAY

BOOK REVIEWS

Changing Foodgrain Markets Structure in India, H. S. Aulakh, B. R. Publishing Corporation, Delhi-52, 1983. Pp. vi+312. Rs. 120.00. (Distributed by D. K. Publishers' Distributors, New Delhi-2.)

This book is a revised version of the author's thesis submitted for the award of Ph.D degree to the University of Punjab in 1976. The study analyses the impact of changes in the level of production of foodgrains (wheat, gram, maize and paddy) and the government marketing operations (zonal restrictions on the free movement of foodgrains, procurement operations in respect of wheat and rice, and State trading in wheat) on foodgrain market structure, conduct and performance during the period 1957-58 to 1970-71. The primary data used in the study came from 157 marketing firms scattered over 12 foodgrain markets and 145 farmers from 21 villages.

The book has ten chapters. The first chapter is an Introduction in which the role of State intervention and private trade is described. It also provides a description of the government operations in foodgrain markets in Punjab through procurement, regulation of inter-State trade and State trading of foodgrains. An extensive review of literature on market structure, conduct and performance is available in Chapter 2. The design of the study, particularly selection of markets, traders, villages and farmers is described in Chapter 3 along with the operational details of data collection and analysis. The next six chapters contain the analysis of (1) characteristics of the study area, (2) nature of competition in the foodgrain market, (3) impact of increased foodgrain production on market structure, (4) impact of zonal policy on foodgrain market structure, (5) impact of procurement policy on market structure and (6) State trading in foodgrains and its impact on market structure. The last chapter provides a summary of the findings.

The study showed that there was hardly any restraint to the entry of the firms into *katcha arhtiyas'* foodgrain business. On the buyer's side, the typical pattern in foodgrain markets was that of a few large buyers purchasing the major share of total business with a relatively large number of small firms handling the remaining business. Though the results indicated that foodgrain purchases were concentrated in a few hands, it did not mean collusion among the small number of big firms because of the competitive attitude of the firms. On the seller's side, the large number of producer-farmers came from widely scattered geographical areas around the markets and they were completely unorganized. Thus, the author concludes that the market structure, by and large, was competitive in operation.

It was observed that the *katcha arhtiyas* performed a useful function in the foodgrain markets. Any efforts of the government to popularise the co-operative marketing societies will have only limited success unless they catered to the diversified needs of the farmers.

The farmers' disposal pattern indicated that the small farmers sold a relatively larger proportion of their marketed surplus during the post-harvest period than others. The changes in the post-harvest sales of wheat, maize and paddy on the different farm size situations were largely due to the increase in the levels of production of foodgrains. The changes in post-harvest arrivals of foodgrains were explained by the changes in the levels of production. The study also indicated that the problem of distress sales was more serious with small farmers.

The spread of prices in different markets indicated that they were highly correlated. The zonal system had contributed towards a decline in the prices of foodgrains in Punjab as compared to other States. It is also argued that the zonal policy created imperfections in the foodgrain market structure of Punjab. The study revealed that under conditions of government interventions in the foodgrain markets it would not always pay to store foodgrains. The food zones also put a check on the exports of food surpluses from the Punjab to the deficit pockets of the country. Thus it is pointed out that the zonal restriction on the free market of foodgrains served as a potent instrument of creating imperfections in the foodgrain markets of Punjab.

Though the quantity of procurement was influenced by the system of procurement and the structure of the market, changes in production had greater impact on production. The storage capacity with the government was not adequate to store the quantity of foodgrains procured from the Punjab. The procurement policy followed in respect of paddy resulted in unrecorded sales of paddy by farmers and in millers and millers' direct purchases from farmers at higher prices to evade government share in rice.

The study showed that the scheme of partial State trading in wheat could be made a success by making use of the existing marketing machinery. Though the private trade was not eliminated from the market, its operations were rationalised and improved.

The government policy of take-over brought about changes in the market behaviour of the producers and marketing firms. It also resulted in the changes in the market behaviour of the producer farmers and marketing firms. There had been also changes in the time pattern of marketed surplus. It is concluded that the short-term intervention policies of the government did not contribute towards achieving a solution to the marketing problems on a long-term basis.

The study is a comprehensive attempt to analyse the structure, conduct and performance of foodgrain markets in Punjab. However, the title of the book gives an impression that the author has given a wide coverage of an all-India nature. What was true for Punjab during the closing years of the sixties may not be equally true for the seventies or for other States, and therefore, it would have been appropriate to give a title as changing market structure in Punjab during the specific period of the study. Also there is more than

a ten-year gap between the period of data collection and the publication of the book. Whether or not the conclusions provided in the book are valid for the later periods may be worth analysing especially in the context of the rapid increases of both wheat and paddy production in Punjab.

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Meeting the Basic Needs of the Rural Poor: The Integrated Community-Based Approach, Edited by Philip H. Coombs, Pergamon Policy Studies on International Development, A Report of the International Council for Educational Development, Pergamon Press, Inc., New York, U.S.A., 1980. Pp. x+816. \$ 15.00.

The publication of the report under review is one more addition to the growing literature on rural development in recent years reflecting a renewed concern¹ about the problems of rural development with the emphasis on eradicating rural poverty. The concern voiced by them has firm roots in (a) the growth experiences of many developing countries which have belied the hope that the growth strategy adopted would solve the problem of inequality of incomes, narrow the rural-urban gaps, and alleviate rural poverty if not eliminate it altogether; (b) the Development Programme for rural areas and rural poor initiated by the various governments which have failed to trickle down to the target population; and (c) the share of rural population in the total population, indicating the importance of a rural economy, which is likely to be fairly high even by the turn of the present century.

The new international consensus on rural development supporting the unorthodox strategy called "*The Integrated Community-Based Approach*" to meeting the 'basic needs' of the rural poor mainly to overcome their poverty has emerged out of these painful experiences and realisation of the significance of a rural economy in the years to come. However, it should be recalled that 'meeting basic needs' itself forms a part of the "four different, though largely complementary strategies". The other three strategies are: (i) increasing employment, (ii) reducing inequalities in income and wealth, and (iii) raising the productivity of the poor.²

The volume contains nine case studies. The criteria used in selecting the cases reveal that the selection was purposive. Such cases were chosen

1. Three articles appeared in *Economic and Political Weekly* during April to July 1983 are a case in point.

(i) M. L. Dantwala, "Rural Development: Investment without Organisation", *Economic and Political Weekly*, Vol. XVIII, No. 18, April 30, 1983.

(ii) Sudipto Mundle, "Effect of Agricultural Production and Prices on Incidence of Rural Poverty—A Tentative Analysis of Inter-State Variations", *Economic and Political Weekly*, Vol. XVIII, No. 26, June 25, 1983.

(iii) V. M. Rao, "Barriers in Rural Development", *Economic and Political Weekly*, Vol. XVIII, No. 27, July 2, 1983.

2. World Bank: *Poverty and Human Development*, Oxford University Press, New York, 1980.

which had (i) a primary objective of *improving the conditions of rural families*; (ii) employed an *integrated approach* covering two or more important facets of rural family life; (iii) included a substantial element of *community participation*; and (iv) contained significant lessons about *education*. The six Asian countries covered by these case studies are Bangladesh (2), India (2), Indonesia (1), Sri Lanka (1), South Korea (1) and Thailand (2).³

The report seems to have taken a firm stand that the 'bottom-up' approach of voluntary organizations as contrasted to the 'top-down'/sectoral approach of various government organizations with the accent on integration in the provision of basic needs and active community participation in the management of the services thus provided is the *only* way to tackle the problem of rural poverty. The criteria adopted for the selection of case studies lend support to the basic premise spelt out here.

The provision of rural services directly related to the basic needs of rural families and communities in an integrated manner includes such diverse fields as education, health, nutrition, agriculture, family planning, occupational skill, training, child care and women's programmes. The inclusion of these services stems from the very *narrow human resource base* of the concerned families and communities which can be taken as an important cause of rural poverty defined in the absolute sense.⁴

The hypothesis that emerges from the basic premise can be stated as below. With the broadening of the human resource base of the rural poor by employing the integrated community-based approach, the productivity of rural poor can be raised followed by a higher standard of living and the consequent improvement in the quality of life. The assumptions underlying this approach are (i) it can improve the *accessibility* of rural poor to various services provided unlike the 'top-down' approach and (ii) it can prove to be more *efficient* in terms of the cost of services provided and more *effective* in terms of the coverage of the target population.⁵

All the case studies selected here, with the possible exception of Indonesian case study, have adopted this approach of rural development during the previous decade. The report aims at highlighting their experiences with respect to this approach. In this context, what meaning can be ascribed to the concept 'integration'? What form/forms does it take? What are the implementation and operational problems faced by them in putting this strategy into practice? What lessons—positive as well as negative—do their experiences offer? What type of community participation does it call for? Can it be easily evoked? or what difficulties have they encountered in gaining community participation/support? It is felt that the findings of the case studies have thrown useful light on these questions. Since the beginning

3. Figures in brackets are the number of case studies countrywise. However, they do not appear in that order in the book.

4. The narrow human resource base as a cause of poverty takes a new importance in view of the findings of an earlier quoted study that both agricultural production and rising agricultural prices are not significantly positively correlated with rural poverty (see, Sudipto Mundle, *op. cit.*)

5. Again, the earlier quoted Dantwala's article provides ample evidence of the wastes of investment in the absence of proper integration and organization.

of economic planning in many countries, including India, the planners have been groping with the problem of the involvement of people in the process of economic and social change. The intensity of the problem does not seem to have reduced to date. In this sense, the lessons brought to light by these case studies need a close scrutiny by the planners, implementing authorities, practitioners and social workers.

What is wrong with the top-down/sector-by-sector approach? It is characterized by bureaucratic rigidities. Provision of different services are not viewed as a 'package' to be delivered integrately. Different government departments dealing with the provision (*i.e.*, supply and distribution) of services lack effective co-ordination resulting in the duplication and overlapping of functions. Managing from the top fails to generate effectively the local initiative and leadership, to develop institutions favouring the process of social and economic change in the right direction. The identification of basic/felt needs of the clientele is lacking in this approach. Ultimately, this boils down to poor coverage of the target population to be served and high unit cost of services. Despite all these negative aspects of the top-down approach highlighted by these case studies, the supporters and organizers of the 'bottom-up' approach have shown wisdom when from their experiences they prefer "not to compete with the services being provided by government but to supplement and reinforce them" (Social Work and Research Centre, "An Integrated Team Approach in India", and CBIRD, "Planning from the Bottom Up: South Korea").

Granting that the integrated community-based approach (*i.e.*, the bottom-up approach) is free from all the 'wrongs' associated with the sector-by-sector approach, what do their experiences reveal regarding reaching the poor and improving their standard of living?

Many case studies have expressed concern about reaching the poor. Their experience is not happy in this regard. Whatever may be the social, cultural, political and economic barriers to reaching the poor (which have been lucidly narrated by the case studies) and to get to know the rural poor is the first *must* for anyone desiring to help them, the question posed by the South Korean case study, "can the poor be really *helped*?", looks pertinent. It has raised one more relevant question: To what extent is this goal really *practicable*? What are their answers to these questions? "Except for *outright charity*, attempts to help the poorest section of the rural population must depend mainly on the trickle down effect of generally increased village prosperity." Does it support the SWRC's thesis that "economic change is a prerequisite to social change and also the best initial means to mobilize rural people to improve their own lot"? To what extent can we rely on trickle down effect which is not to be seen or which is very slow in reaching the poor? Rao in his article⁵ writes: "Rural development needs a complementary set of infrastructural, institutional and organizational changes capable of activating the human factor in the development process." The integrated community-based approach precisely aims at these complementary set of

5. Rao, *op. cit.*

changes. It tries to build up qualitatively better *human infrastructure* by introducing both institutional and organizational changes which may be more receptive to new social and economic opportunities. Then, how to account for a partial success, if not a total failure, of this approach to alleviate rural poverty? Does it call for a *wider* integration of the earlier mentioned complementary strategies, namely, increasing employment, reducing inequalities in income and wealth, raising the productivity of the poor along with the strategy of meeting the basic needs of them? Meeting the basic needs of rural poor at the most can widen the human resource base and also improve the productivity of the poor, but their 'economic base' can be strengthened by introducing institutional measures reducing income and wealth (productive assets) inequalities. The simultaneous strengthening of *human resource base* and *economic base* may break the isolation of the rural poor, which is a major barrier in rural development, by grabbing newly created employment opportunities or opportunities for social and economic advancement. This seems to be at the back of the minds of the authors of the book: *Poverty and Human Development* (World Bank) where they write: "This book draws on all these (four strategies mentioned above). But combines them with a strong concern for *growth*."

In the ultimate analysis, even after achieving the best forms of integration and community participation, reaching the poor may seem to be difficult in the absence of a strong concern for growth. This is one important lesson to be learnt from their experiences. As the editor writes: "In such situations strengthened social services may provide a modicum of temporary relief, but without the creation of a fresh economic dynamic bringing new employment possibilities, additional income, and enhanced mobility, there is little chance for substantial improvement in the quality of family life, above all for the marginal families on the outside looking in." Incentives to self-development, thus, in terms of the famous statement given by Adam Smith are "limited by the extent of market."

Many case studies cover a chapter on 'costs and finances.' They are categorical in their assertion that the *unit cost* of the provision of services in an integrated manner is lower than that of the services provided separately in the top-down approach.

One or two observations in this regard may not be out of place. For the purposes of cost comparisons, the concept of unit cost should be made more refined as far as possible by incorporating comparable cost items. With respect to the rural health system, it is reiterated that "adequate rural health services cannot be bought 'on the cheap'." It is further contended that 'the economies of scale' have probably already been largely exhausted.

Nobody questions that investment in better health services is worthwhile even at somewhat higher per capita costs. But this does not preclude one from exploring the further possibilities of economies of scale by undertaking a special cost analysis especially at a time when the overall resource constraint is a major factor to be reckoned with.

For the process of rural development to be self-sustaining, the impetus should come from the people themselves. The communication gap between the people and government agencies, nullifying government efforts at rural development, it is hoped, can best be bridged by voluntary organizations which are flexible in their approach and have known people better than the government agencies. Voluntary organizations participating in rural development in co-operation with government agencies are expected to perform these new roles. And in this respect the volume has some important lessons to offer to them.

Lessons on integration, on community participation and on education regarding implementation and operational problems (mobilization of local efforts, understanding local realities, evolving local leadership and institutions, knowing their prime needs, and making projects self-financing) discussed at length in the report will meet the requirements of those to whom it is addressed, namely, "today's and tomorrow's operators, those involved in training them, and researchers anxious to lend a hand to these operators in meeting the challenges of implementation they face."

Let us hope at least the volume be read by them, as the editor emphasizes, "not like a novel or textbook, page by page from beginning to end" but by glancing through "the headings and sub-headings meant to assist the reader in locating those portions that coincide with his or her main interests."

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Employment Guarantee Scheme: Impact on Poverty and Bondage among Tribals,
Vasant Deshpande, Tilak Maharashtra Vidyapeeth, Pune-37;
Dastane Ramachandra & Co., Pune-2, 1982. Pp. iii+132. Rs. 45.00.

This is an honest evaluation of the Employment Guarantee Scheme (EGS) that was introduced by the Maharashtra Government in 1974. Deshpande selects an *adivasi* (tribal) area in Palghar taluk of the Thane district of western Maharashtra to evaluate the EGS. He first gives a profile of the region and its inhabitants and then an overview of the EGS including the 1978 Act. He describes the data on labour conditions that he has collected from 30 villages in this area in two chapters. In another chapter he looks into labour participation from the point of view of development projects. In evaluating the EGS he studies the bonded labour system, and in conclusion he gives the merits and demerits of the EGS and the part played by *Bhoomisena*, a voluntary association in the implementation of the EGS in a meaningful way.

The EGS had its origin in the 15-point programme adopted by the State in 1971 for the development of rural areas by giving employment to the rural

poor. The programme was carefully planned and extensively implemented in 1974. The evaluation committee of the Programme Evaluation Organisation of the Planning Commission looked at the programme from the point of taluka and the district levels of planning and made suggestions regarding priorities and co-ordination, manpower budgets, wage policy, provision of amenities to workers. On the basis of about six years of working of the EGS, the State passed the Maharashtra Employment Guarantee Act, 1978.

The Act recognizes the right of every adult person in the rural area to get guaranteed employment for doing unskilled manual work and to receive wages thereof every week. A worker is required to apply for employment each season. But under circumstances beyond human control, the State does not pay any unemployment allowance. After accepting the employment if a worker remains consistently absent he loses work and unemployment allowance. The Act also provides for medical treatment in case of personal injury during work situation. Thus the aims and provisions of the Act are commendable. It aims to achieve not only elimination of poverty and unemployment in the rural areas but also accelerated process of rural development with the help of micro level planning. But to what extent has the EGS succeeded in achieving its aims? What are the problems in the successful implementation of the programme? What are the remedies?

Deshpande answers these questions on the basis of an extensive survey of 30 villages and several development projects. He also presents data from 153 workers working on the development projects. The village data contain useful information on landless labourers, employment opportunities, wage rate and mode of payment, seasonal migration and the impact of development projects (EGS) on migration. The data show that the productivity of land is very low and agricultural activity cannot provide employment and food to the tribals. Hence the majority of the *adivasis* find wage-work outside agriculture and outside the EGS. They prefer work on a contract basis with the private employers. The reasons lie both with the limitations of the EGS and with the 'advantages' as perceived by the *adivasis* of working with the big landowners and *sowkars* in the village and in semi-urban places during the agricultural off-season.

The limitations of the EGS are that the projects do not start on right time, payment of wages is delayed and the implements given to the workers are not properly maintained with the result that they will have to work hard. The medical facilities (even the first aid) are deplorable. When the project gets shifted from earth work to metal breaking, several workers resent this as the latter is hard for the wage rate of Rs. 3.00 per day. Thus these limitations discourage the workers to join the EGS even though many of them are interested in utilizing the free wage-work opportunities.

On the contrary, many *adivasis* perceive certain 'advantages' in the traditional *lagingadi* bonded labour system. The main 'advantage' is that the *adivasis* get consumption loans from the farmer-moneylenders mainly for the purpose of marriage and other rituals, and food loans. The creditor gives

an advance to the debtor to meet his marriage expenses on the condition that both husband and wife agree to render personal service or labour till the debt is redeemed. Poor *adivasis* are keen to see that their young children are engaged by some farmers for work. In return for their services they are given grain or two meals and occasionally cloth. The alternative is that they have to stand on their own seeking wage-work all the time either in the villages or in semi-urban places during the off-season. They may also take advantage of the EGS. But there is no alternative credit system for them to get cash loans for marriage and rituals. The government considers such loan demands as irrational. Hence they prefer to be 'irrational' and feel secured by not having to face situations of hunger and starvation. In this process they remain 'slaves' but they can keep themselves alive. The author brings out this fundamental dilemma of the *adivasis* by considering the bonded labour system in relation to EGS.

What are the remedies? There is no doubt about the legal measure abolishing the bonded labour system (Act 1976). But this will not be effective as long as the *adivasis* are economically and politically dependent on the farmer-moneylenders for their subsistence. Even the author's suggestions (pp. 126-129) that there should be vigilance committees and reforming the rituals of *adivasis* are not adequate. This reviewer would suggest that the *adivasis* should be encouraged to organize credit co-operatives for their consumption needs; and an effort should be made under the EGS to give them continuous employment, to organize the agricultural labourers to work for the farmers on job contracts, to develop certain skills among the *adivasis* for self-employment. More fundamentally, the government should restore the land to the *adivasis* and organize and help them to cultivate their land through development projects. In all these, as the author rightly says, the part played by the voluntary associations like the *Bhoomisena* is crucial. Hence the study by Deshpande gives certain insights into the problem from which the planners and administrators can benefit. A serious drawback of the book is that the research is not systematic. The author could have drawn his sample on a scientific basis, administered a well prepared schedule and could have given us a scientific statistical analysis of quantitative data.

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Livestock in Asia: Issues and Policies, Edited by Jeffrey C. Fine and Ralph G. Lattimore, International Development Research Centre, Ottawa, Ontario, Canada, 1982. Pp. 192. \$ 9.00.

This book contains papers presented at a seminar on livestock in Asia in Singapore sometime in March 1982. The main reason for sponsoring the

seminar by the International Development Research Centre has been to draw the attention of the policy makers and researchers of the region to a number of important issues that they will be confronting in the years to come. The aim of the conference was to take stock of the important research work on livestock and then to identify priorities for future research.

The first paper by A. John De Boer provides an overview of the Asian livestock economies. It traces out the current pattern of livestock production and identifies the factors that will affect the livestock economy in the future. According to the author, major possibilities for livestock production exist in some of these economies and the extent to which it can be achieved centre around improvements in the integrated crop-livestock system under which most cattle and buffalo are produced.

The most interesting paper in this volume is the one by Lovell S. Jarvis on the portfolio choices of Asian small holder cattle producers. This is an extension of his earlier model developed in the context of Latin America and Africa as a means of predicting livestock numbers and supply behaviour as a result of changes in cost and demand conditions for the products and services of livestock. First, very simple models were developed to show the determination of optimal slaughter age for male calf for beef only, female calf for breeding and beef and male calf used primarily for draft purposes which were later extended to incorporate the diverse roles of livestock. Conditions for profit maximization were determined for males for draft power only and females for breeding only, males for draft power and females for breeding plus milk. In the model where the cattle have draft purpose only, the slaughter age is higher than in the case where the cattle are used for draft and beef. Also if real costs are incurred to dispose of the animal after its productive life, these costs reduce the value of bullock calves and therefore, their supply. If this disposal cost can be avoided, there is no external diseconomy and the supply of cattle bred and used for draft power does not get reduced. In this model cows have value mainly for their reproductive capacity, but their cost must be covered by the value of draft services of bullocks. A relatively higher value of draft services would result in an increase in the number of calves. A decrease in cow fertility would reduce the bullock use and increase the marginal value of draft services. When milk production is also added along with draft power in the model, the profitability of rearing female calves increases leading to increase in the cow herd and therefore, the supply of male and female calves. The price of bullock falls, its use increases and farm net income increases. If the value of milk is very high and the feed for cows and bullocks is the same, then the value of total output per unit of feed input increases the price of feed and therefore, both the owners of cattle for draft or breeding and feed producers will benefit. In the model where draft power and beef have value (milk being used for feeding the calves only), as beef price rises, the optimal age of slaughter of bullocks and cows will be lowered. But this may not result in a smaller herd because the size of draft, milch and young stock herd will be higher than in the earlier situation. An important inference from the model is that with rising beef

prices and feed costs the proportion of herd slaughtered for beef only will depend on the relative price of beef and feed. As the relative price of beef increases, the use of bullocks for draft purposes becomes an increasingly inefficient use of cattle. Conceptually, the model could incorporate institutional, social and economic factors, but would become complex in its mathematical formulation. As a result, there is need to resort to empirical studies to test the hypotheses suggested by the theoretical model.

A number of papers are presented with this objective. Ekramul Ahsan gives a brief description of the characteristics of the livestock population and its spatial distribution in Bangladesh. Another paper on Indonesia (Kustiah Kristanto) assembles some of the available information on the nature of investment in livestock and its impact on shaping the present livestock economy of South Sulawesi. The existence of a systematic relationship between human density and size and composition of livestock herd and the factors influencing the acceptability of government livestock programmes to small holders are interesting findings of this paper. Theodore Panayotou and Ruangrai Tokrisna discuss the role of livestock in the rural economy of Thailand. They develop an analytical model to determine the optimum holding age of a single animal, size of the herd and its age and sex composition.

Five papers in this volume deal with domestic and international issues on marketing of livestock and livestock products. An important theme of these papers is whether a country without an apparent comparative advantage in livestock production should attempt at achieving self-sufficiency or import livestock products at world market prices. There are two conflicting views on this; the first is that self-sufficiency helps save scarce foreign exchange, boosts domestic employment and incomes, prevents rural population from migrating to cities, provides security on strategic commodities at times of crisis, etc. The other view is that 'self-sufficiency' is meaningless unless one defines a specific price at which it is desired because domestic demand for agricultural products is a function of price. A more serious point is that many countries have to import feedstuffs—which are bulkier than meat or milk and have a higher unit cost of transport and therefore there is no net saving in foreign exchange or any reduction in the country's dependency on external markets.

There are four papers on national livestock policy issues in the context of Indonesia, Korea, Thailand and the Philippines. The paper on Indonesia argues that there is severe competition between human and livestock population on land and therefore, the potential for increasing livestock production is getting limited. Cattle and buffalo population has remained stagnant there during the last two decades and there is widespread public concern on the declining draft animal herd. The existing view is that it is the rising beef prices that are forcing the people to slaughter their animals. A similar phenomenon is reported from Thailand as well. In order to prevent the decline in draft animal herd in both these countries there are regulations on slaughter of cattle. However, rising beef prices may not be the primary cause of the decline in the bovine herd. There are more important factors

operating from the supply side. These include rise in the cost of labour, the shrinking size of farm plots, the rising probability of theft and the increasing pace of agricultural mechanization. In all these countries, the demand for meat is expected to increase in the years to come. Efforts are being made to increase production through credit, improved breeding and feeding, all of which are likely to meet with difficulties because of the growing shortage of feed. Because of the feed shortage, the emphasis has been more on small ruminant production in some of these countries

There are six papers which discuss the methods and issues on livestock research. The major differences between the models used by natural and social scientists, the feasibility of applying the lessons learned from farming systems research on crops to livestock, the practical difficulties in conducting farm level research on livestock and the difficulties one has to face in transforming research results into development projects, etc., are some of the issues discussed in these papers. On the whole, this volume is an important contribution towards widening the existing knowledge on the much neglected field of socio-economic aspects of livestock research.

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Economics of Trees versus Annual Crops on Marginal Agricultural Lands, Tirath Gupta and Deepinder Mohan, CMA Monograph No. 98, Centre for Management in Agriculture, Indian Institute of Management, Ahmedabad; Oxford & IBH Publishing Co., New Delhi-1, 1982. Pp. xvi+139. Rs. 45.00.

The authors in this study have brought out some consequences of misallocation of land resources to various uses in the arid region of Rajasthan. Although only 29 per cent of the land areas are suitable for raising of agricultural crops, in practice, particularly due to the ignorance of the people and short-term gains, nearly 59 per cent of the land areas is being put to agricultural use. The result of such misallocation of a large extent of marginal lands to agriculture is that agricultural productivity has considerably declined over the years and that not enough fuel and fodder are available to the villagers. Such shortages of food and other essential inputs to the agricultural system have forced the people to depend on ad hoc cash assistance from the government. In many cases, they have to sell their cattle, land and ornaments to sustain themselves during the drought years. The authors have pointed out that neither the ad hoc help from the government nor the general outlook of the people for clinging to cultivation of marginal lands is going to improve the economy of the region. Some other alternative uses of land and in which this region enjoys a comparative advantage over the other regions is the subject-matter of discussion by the authors. More specifically, the objective of the present study, as outlined on p. 4 of the book is (1) to estimate the

net annual returns to land and enterprise from the agricultural crops, (2) to identify suitable tree species for cultivation in these areas and estimate the costs and returns therefrom, (3) to compare financial returns from the agricultural crops and the tree crops, (4) to identify the necessary cost and benefits of the alternative land uses and (5) to discuss some of the management and policy issues involved in the suggested changes in the pattern of land use.

The authors have surveyed five villages for collecting the basic data needed for the present study, namely, Kanwalisar, Hansasar, Shekhasar, Bhinyod and Khara in the Nokha tehsil of Bikaner district of Rajasthan. Since Bhinyod turned out to be an uninhabited village, 70 farming households selected from the rest of the four villages roughly constitute 20 per cent of the population of the region. These farming households were selected by random sample and interviewed by administering a structured questionnaire. In assigning cash values to the agricultural crops, the wholesale prices of the nearest market, *i.e.*, Nokha mandi, were chosen. Since most of the residents do not make use of hired labour in crop farming, cost estimates have been made with and without imputed values of labour inputs. No allowance has however been made for the opportunity cost of land resources.

The authors have estimated that the net returns to land, labour and enterprises per hectare for the different size classes of cultivated land are seen to vary from Rs. 80 per hectare to Rs. 183 per hectare. If the labour cost was imputed at Rs. 5 per man-day, it has been estimated that the net returns became negative, except in cases where land holdings are below 5 hectares or 25 hectares and above.

The data collected by the authors do not reveal any systematic pattern in respect of net returns relative to the size of holdings. The reasons, as indicated by authors on p. 31, are (i) the physical conditions of soil, (ii) bargaining capacity of individual farmers in the purchase of inputs and sale of outputs, (iii) availability of family labour and (iv) the art and science of cultivation. All these factors show considerable variation from farm to farm and from individual to individual.

As compared to agricultural crops, the net returns from livestock appear to be significantly high. The net returns from livestock were noted to be highest in the size class of 4 to 6 Adult Cattle Units (ACU) and lowest in the case of ACU size class of less than 2. No detailed analysis of variation in the net returns relative to various size classes appears to have been done. For example, for the size class 4 to 6, net returns per ACU are shown to be Rs. 1,005 in 1976-77, whereas in ACU size class 6 to 8, it sharply falls down to Rs. 218. It again picks up for the size class 12 to 14 to Rs. 920, only to fall down sharply to Rs. 658 for the size class 14 to 16. No reasons have been given for such a steep rise and fall in the net returns per ACU in each size class.

However, an important finding of this study is that nearly 2.8 hectares of land area are needed per ACU for their proper upkeep. As against the annual requirement of 2.5 tonnes of dry fodder per ACU, the average

production was nearly 0.3 tonne of dry fodder per hectare per annum, which barely meets one-third of the fodder requirements of cattle. Consequently, the cattle must, to a large extent, remain underfed or fodders have to be imported from outside the study area to sustain the livestock. The excessive grazing in these areas has caused considerable damage and destruction to the habitat (p. 37). Another consequence of such a scarcity is the large exodus of these cattle to other areas.

The authors have also carried out a comprehensive analysis of costs and returns from raising of tree crops of *Acacia tortilis*, *Albizia lebbek*, *Prosopis cineraria*, *P. juliflora*, *Zizyphus* species and *Leucaena leucocephala*. The data of the physical and financial outputs from the tree crops have been obtained by the authors from extensive field visits and discussion with the officials of the State Forest Department of Rajasthan and Central Arid Zone Research Institute at Jodhpur.

The net return to land and enterprise per hectare have been shown to be as low as Rs. 360 per hectare for the tree plantations of *Acacia tortilis* and as high as Rs. 3,270 per hectare for *Zizyphus* species (for a felling cycle of 25 years). The authors have also enumerated several intangible returns from tree crops and have brought out the fact that planting of trees would confer a variety of benefits both to the people as well as environment and economy of the regions.

On an analysis of the data, it is seen that both the physical outputs and prices per unit of the output have been reckoned at extremely high values. For example, the internal rate of return, as calculated from the data for *Leucaena leucocephala* plantation works out to 115.52 per cent. It appears to be impossible, for the returns from such plantations even under irrigated conditions in Yavatmal district of Maharashtra State are expected to be barely 14 per cent for a crop planted at a spacing of 3×1 metre and harvested at six years' interval.

Similarly in the case of *Prosopis cineraria* (p. 51) raised on a felling cycle of 30 years, the annuity value per hectare at 11 per cent is Rs. 1,700, whereas in the case of Bhokar area of Nanded district in Maharashtra State, the annuity value from afforestation of several fuelwood and timber species in the timber and fuelwood reserve, on a similar rotation and at 11 per cent discount rate works out to barely Rs. 26.44 per hectare. It is worth mentioning here that Nanded areas have much better soil and climatic conditions and better growth than the areas for which the authors have calculated the costs and returns of these plantations.

Similarly for *Zizyphus* (grafted ber), the annuity value on 15 years of felling cycle is Rs. 2,910 per hectare (p. 63, Table 4.8), whereas if the same figures are compared with the cashewnut plantations in Yavatmal areas over similar periods, the annuity value, according to the authors' method, works out to barely Rs. 325 per hectare, for an identical rate of discount. The cashewnut crop, in terms of monetary value (as well as production in Yavatmal areas) is significantly high as compared to *Zizyphus* and it is quite

unlikely that the *Zizyphus* fruit trees would yield such high returns, as are estimated by the authors.

It is, therefore, felt that all this data on outputs and prices need to be carefully reviewed (and revised in subsequent edition) of this book.

However, one thing stands crystal clear from a comparison of returns from tree plantations as displayed in Table 4.8 (p. 63) that the returns from the tree crops would confer substantially higher social and economic returns as compared to agricultural crops. The suggested change over to tree farming would also help in maintaining the productivity of soils as well as the much needed fuelwood and fodder in the region. These outputs from the tree crop would also serve as valuable inputs needed for the agricultural system and would also strengthen the rural base of the economy.

In the management and policy issues discussed by the authors in Chapter 4 (pp. 70-80), the authors have brought forth an important issue regarding the farmers' incapacity to bear the risks of raising tree crops and in which investments have a long gestation period. They feel that the State Forest Department can assume a portion of this risk and provide suitable subsidies to the farmers willing to undertake tree plantations. They also point out that it may be necessary for the State Government to financially support the project, at least for a portion of the early years of plantations and ensure adequate supply of food materials to the farmers. Additional food supplies would be needed on account of diversion of these marginal lands from agricultural crops to tree crops. The authors have also demonstrated in considerable details the estimated annual total and human cost per hectare for the raising of six species in this region, and have also suggested suitable organization for implementation of this proposal through formation of village-based institutions. If these proposals are implemented, it will be interesting to watch the results of such an experiment over an estimated 12,500 hectares of the area and which is inhabited by less than 400 householders. This will also serve as a valuable demonstration area for the rest of the arid region, which occupies nearly 9.8 per cent of the total area of the country. Several additional protection measures like imposition of grazing levies, strict control on open grazing, etc., have been proposed by the authors in the interest of the fragile nature of the resources and also in the interest of the society as a whole. The implementation of such a proposal can be directly entrusted to the newly constituted Desert Development Organization in the State, with suitable technical help from the existing Forest Department.

The authors have also suggested research and other studies regarding evolution of suitable plantation technology, irrigation techniques, mix of tree species and research about genetic improvement in *khejri* tree which are highly valued by the local population.

In general, the book is eminently readable and the authors deserve commendation in highlighting several important management and policy issues concerning the existing land use pattern of marginal lands in arid areas. The matter deserves urgent attention of the State Government

and policy planners for implementation of the proposals contained in this book. It is to be hoped that similar studies would be carried out for the land-based resources in the other areas, with a view to find out the comparative advantage in trees vs. annual crops for different regions in each of the agro-climatic zones in the country. The overlying principle of any suggested change in the land use pattern would be that the productivity of the lands remains undiminished under a given use and that the resources are used to the best economic and social advantages of the people.

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Food, Politics, and Agricultural Development: Case Studies in the Public Policy of Rural Modernization, Edited by Raymond F. Hopkins, Donald J. Puchala and Ross B. Talbot, West View Press, Inc., Boulder, Colorado, 1979. Pp. xv+311. \$ 40.50. (Distributors: Bowker Publishing Company, Epping, Essex, England.)

This useful collection of research papers on agricultural development has, probably for the first time, the bias of the political factors determining the courses of development of rural areas in general and agriculture in particular. The economists, who usually assume other things remaining the same, will learn a lot from this book feeling the crucial gaps in their stock of knowledge, and will also get inspiration to modify their development models.

The first essay on "The Politics of Agricultural Modernization" by Donald J. Puchala and Raymond F. Hopkins summarise in an analytical frame the findings of the country-specific case studies presented in the chapters which follow. The authors of this essay have systematically classified in a comparative analytical frame the results of the country-specific case studies. Probably the pattern of land ownership, external control, choice of technology, rural vs. urban bias, food vs. non-food and finally the role of the rural populace in bringing about the change appear to be the crucial politico-economic factors determining the quality of agricultural development brought about. The authors have done a difficult job of assimilating the different issues raised in different case studies, especially when those studies "do not systematically review the manner in which each of these issues was resolved nor the apparent effect of each."

The case studies of five countries, namely, the United States, Taiwan, South Korea, Iran and Pakistan, and also of those groups of countries like England, France and Denmark representing the politics of agricultural development in Western Europe and the Soviet Union and China representing the diverging experience of the communist block present interesting experiences.

The unique development model of the United States, which is generally known as "agri-business model" is dealt with by Don F. Hadwiger and

Ross B. Talbot. The authors, before exploring the relevance of the U.S. experience to the third world countries, have dealt with in detail the myths and realities of the 'exceptionalism' of U.S. agriculture. It should be noted that the agri-business model has been criticised even in the United States for its most devastating nature of resource depletion. There are, however, other mysteries behind the unique performance of the U.S. agriculture, particularly during the 19th century. Apart from the political developments being the promoting factors, there were other interesting promoting factors like self-reliance, craftsmanship, ability to innovate and the emergence of entrepreneurial qualities among the masses which together brought about the change. On the part of the third world countries there are institutional constraints which would not permit one even to imagine the transferring of the American agri-business model.

Agricultural modernization in the developed countries of the Western Europe mainly depended, in the first place, upon the changing agrarian relations influenced by the government policies and secondly, by the process of the rapid introduction of technological and other innovations. The paper on "Agricultural Modernization in England, France, and Denmark" by Pamela R. Aall reveals that each case is unique in certain sense. In Denmark, the government played a pivotal role in reforming agriculture. In France, not only that the government went for land reforms, but it also resorted to policies of protection which rapidly brought about the change. The English case is unique. The land redistribution policies resulted in the creation of large estates owned by the enterprising class from urban areas. This class always influenced the government policies which aimed at giving protection from outside competition.

Coming to the centrally planned socialist agricultural systems, two unique experiments, one by the Soviet Union and the other by the Peoples' Republic of China, illustrate the diverging courses pursued and the varying rates of success of those experiments. The paper by Thomas P. Bernstein on "The State and Collective Farming in the Soviet Union and China" gives evidence on varying experiences of the collective farming reform. The Soviet agriculture, organized on collective basis and controlled by the political interests which were biased towards the rapid industrialisation of the country, finally turned out to damage the foundation of the agricultural sector. On the other hand, China was careful in avoiding the mistakes committed by the Soviets and endeavoured to achieve progress in agriculture through the willing co-operation of the peasants. Probably this differential attitude on the part of the Chinese regime was due to the fact that socialist revolution in China was led by the peasants rather than by the urban-based industrial workers as it so happened in Russia.

The country cases from the developing world vary from each other depending upon the historical and the political developments. In Taiwan, as revealed by Puchala and Jane Staveley, the development took place even during the colonial period, under the conditions of regimentation and forced mobilization. The colonial Government of Japan had its own self-interest in

introducing drastic land reforms measures which transferred the land ownership to the actual tillers. The agricultural sector received suitable attention in credit allocation which brought in modern technology.

The case of South Korea is somewhat different as revealed by Young Whan Kihl. The centralised control and authoritarian decision-making, at least in the beginning, gave effective solution to the problems of agricultural development and modernization in Korea. The rapid industrialisation of the country improved the standards of living of the masses which resulted in increased demand for food products. Though Korea is having a limited land base, the development in agriculture has shown that a centrally directed and induced strategy could give expected results.

Iran's agriculture during modern times was very much influenced by the policies pursued by men in power. The Shah wanted rapid industrialisation even at the cost of agriculture. Not only that there was any policy move to reorganize agriculture on a sound basis, but there were counter-moves to curb agriculture by permitting foreign capital to exploit the rising consumer demand for food products. Besides, there was corruption at every stage which saw the Shah's dream of rural prosperity remaining only on paper. Ann T. Schulz's paper on Iran reveals not only the politics of insufficiency but also that of insufficiency of food in Iran.

In most of the developing countries, tractor is regarded as a symbol of modern technology in agriculture. Pakistan is no exception to it. But the effects of farm mechanization, as Ronald J. Herring and Charles R. Kennedy, Jr. reveal, were far reaching. Not only the small holders lost control over their land and other resources but the tenants in general were deprived of their source of living. The tractor owners could dictate terms to the small holders in getting their lands tilled. This new mechanized land holders had a great say in the political affairs of Pakistan.

Robert H. Bates has examined the relationship between the commercialisation of agriculture and the rise of political protest in Africa. There were externalities represented by foreign capital which did great harm to African peasantry which were resented by certain sections of the commercialised agriculture. These people turned to politics and opposed the foreign interference.

Finally, the paper by Norman K. Nicholson, John D. Esseks and Ali Akhtar Khan on the politics of food scarcities in developing countries throws light on the genesis of the food scarcity problem, the politics of food production and distribution and the political constraints influencing solution to food crisis. The inter-regional conflicts, the character of rural politics, the growing class consciousness among the farm population, the role of new technology vis-a-vis the political developments, the increasing frequencies of food crisis and continued international dependency are some of the issues which need detailed analysis.

Though this collection of studies on the politics of agricultural development represents a modest attempt in highlighting the role of politics in the processes of development, there is no exaggeration if this reviewer calls this

attempt a pioneering one which should draw attention of all those connected with problems of agricultural development.

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Crop Combinations in India: A Study, Majid Husain, Concept Publishing Company, New Delhi-15, 1982. Pp. 206. Rs. 100.00.

This title by Majid Husain is the product of an enormous amount of arduous work dealing with district level data on crop acreage. The study addresses itself to clearly posed objectives, namely, (1) to rank crops by districts based on acreage, (2) to bring out the crop combinations at two points of time—pre- and post-green revolution periods—and to record the changes therein, (3) to assess the impact of new cropping practices on various classes of farmers and (4) to propose suitable crop combinations for different agro-climatic settings. It is convenient, therefore, to review the work in the context of realisation of these objectives.

The first of these objectives is realised through a lengthy descriptive chapter wherein the spatial patterns of the three top ranking crops (based on acreage) during 1961-64 and 1971-74 are brought out. The chapter concludes that the number of crops which ranked first (or second) reduced during the decade, thus indicating a trend towards crop specialisation. The problems of the ranking method are too many. It is difficult to draw meaningful conclusions unless it is supported by additional analysis. Many of the uses of this method that the author enumerates (p. 34) are not valid. Fortunately, the author does not really interpret the patterns but stops at description. Some of the important earlier studies on this theme are not cited.

The author then moves on to a study of crop combinations at two points of time, 1961-64 and 1971-74. Here again the study is entirely dependent on cumbersome arithmetic following Weaver's method. The justification for the selection of this method in the study—"being based on statistical approach is more scientific and authentic"—reflects the naivete on the part of the author. The author is well aware of the serious shortcomings of the method. Yet, for convenience he opts to follow Weaver. Prevalent crop combinations are derived for pre- and post-green revolution periods and a lengthy description of the patterns ensues. This section is even more monotonous to read and at the end no worthwhile conclusions are obtained.

The author then labours on the changes in the crop combinations and their association with some socio-economic variables pertaining to the third objective stated by him. Here, the data base is too weak (40 households each from small, medium and large farmers from a village in Western Uttar Pradesh). Much of what is written is neither based on the analysis nor well documented and tends to be textbook material. This reviewer is tempted to

quote Dr. Allan, who concludes in his Foreword to this book "...the author (who) doles out facts and fluency in the same breath while injecting fiction in his facts...."

Geographic literature is replete with proposals of regional schemes for various purposes. The author offers one for crop combination (the fourth stated objective). Methodologically, it would perhaps be slightly more rewarding if the analyses in the previous sections were also done within the same regional scheme.

The study certainly contains a remarkable amount of information on the cropping patterns at district level, much of which is contained in the appendices. The maps have been reproduced in such a small scale that their inclusion becomes dysfunctional. Academic dividends that one derives from the study are hardly commensurate with the amount of work that has gone into the preparation of this study.

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Problems of the Marginal and Small Farmers: A Case Study in the District of Ganjam (Orissa), Bidyadhar Misra and Ajit Kumar Mitra, Department of Analytical and Applied Economics, Utkal University, Bhubaneswar-4, 1983. Pp. 109.

The book under review is the report of an UGC sponsored research project on the problems of marginal and small farmers in Ganjam district of Orissa State. Specific programmes for improvement in the conditions of small and marginal farmers were launched beginning with the Fourth Five-Year Plan. The contents of the programmes have undergone continuous change based on the experience gained through studies brought out from time to time. This book is an addition to the literature already available in the country. The objectives of this study were to identify the problems of small and marginal farmers and socio-economic correlates of adoption of improved farm practices and to examine the extent to which SFDA programmes fit into their felt needs. The study was carried out during the period 1977 to 1980. The sample consisted of 412 marginal and 323 small farm households in two blocks of Ganjam district. The report is spread over eight chapters.

Chapter I covers a survey of changing definitions of small and marginal farmers in India, statement of the problem, objectives and sampling method. Chapter II includes the general economic profile of the study area. Nearly 87 per cent of the farmers in this district are either marginal or small. The family size, land and livestock holdings, caste structure, educational level, occupational pattern and incomes of sample households are presented in Chapter III. The table headings of some tables are inconsistent with the contents. The authors bring out that 42.2 per cent of the marginal and

32.8 per cent of the small farmers do not own milch animals. Low income generating resource ownership coupled with medium to large size families and low proportion of workers in these families result in very limited capacity to spare investible resources. The per capita gross income was estimated as Rs. 525 for marginal and Rs. 614 for small farm households.

Chapter IV covers the land holdings and related problems. The authors have tried to derive some trivial implications. For example, they say that small and marginal farmers who constitute 86.94 per cent of the total holdings operate only 50.91 per cent of the area and use these figures to infer that the average size on these farms is relatively small. In fact, by the very nature of definition of these holdings, they have to be relatively small. The important striking feature of these farms brought out in the study is the subdivision of these tiny holdings into 5-6 scattered plots and low irrigation level.

On p. 40 the authors state that 46.6 per cent of the cropped area belonging to the marginal farmers and 44 per cent of the cropped area belonging to the small farmers were either under double or multiple cropping or capable of being under double or multiple cropping. The units of data in Table 4.3 are not given which makes it difficult to understand the basis of such statements.

Nearly 90 per cent of the cropped area was occupied by low value crops. But they did not indicate the intensity of cropping on these holdings. They further show that the average size of 81-84 per cent of holdings remained unaffected after the implementation of land reform legislation. The extent of leasing in of land has decreased due to public policy measures.

Income, savings and borrowings are dealt in Chapter V. Nearly 12 to 15 per cent of these families are reported to be having negative net incomes. In the absence of the method of accounting adopted, it is difficult to make out whether these families really incurred loss or earned low returns for their labour and other resources. The authors attribute negative net incomes of these families to two phenomena, *viz.*, some families adopting farming 'as a way of life' and due to lack of alternative employment opportunity, they continued to stick to farming, implying their opportunity cost to be zero. They observe that these families are characterized by low incomes and low savings. The sources of income specifically from farm, wage employment and others would have given a better picture of these families' income structure. Wilful default in repayment of loans has been stated as the major cause of overdues.

Chapter VI covers the marketing problems of small and marginal farmers. Both output disposal and input procurement problems have been brought out. Low marketed surplus and predominance of village sales were observed by the authors. Other observations are based on the opinions expressed by the respondents.

The role of Small Farmers' Development Agency (SFDA) in improving the conditions of small and marginal farmers has been presented in Chapter

VII. The agency has completed the task of identification of small farmers, in addition to the identification of 93,174 marginal farmers and 9,980 agricultural labourers by the end of March 1980. Almost all of these identified families have been reportedly brought under the co-operative fold but the sample study by the authors refuted this claim by observing that only 58.2 per cent of the small and 41.5 per cent of the marginal farmers have been covered by co-operatives.

The authors have observed that during the seven years (1971-78) 14.1 per cent of the marginal and 28 per cent of the small farmers were helped to dig irrigation wells and 4 per cent of the marginal and 6.4 per cent of the small farmers were helped to install irrigation pumpsets. But 25 to 30 per cent of the wells dug with SFDA's assistance became inoperative after 2-3 years. Coupled with this, inadequate availability of HYV seeds, fertilizer and pesticides substantially deterred these households to take advantage of new farm technology. The SFDA was mainly a credit arranging agency. Credit advanced per beneficiary upto March 1980 was Rs. 207 of short-term, Rs. 806 of medium-term and Rs. 506 of long-term credit. Nearly 40 per cent of the identified families received one or the other form of credit but the authors consider this as limited coverage. They have observed that the SFDA did not attend to the marketing problem of these families. The families which were helped through provision of subsidiary occupations (dairy, goat, poultry, etc.) constituted only 1.58 per cent of the identified families. Due to the difficulty of procurement of feed and marketing of the produce, the benefited families transferred these assets to others against lower financial returns. The study has brought out that there was no significant difference in the incomes of beneficiary and non-beneficiary households.

In the final chapter on summary and conclusions, the authors have made three suggestions, (i) to associate SFDA in the preparation of district credit plans, (ii) extension of functions of SFDA to cover marketing aspects of targeted families and (iii) involvement of target groups in the decision-making process of the agency.

On the whole, the study has achieved the objectives set forth. The presentation of tables and drawing inferences could have been improved. Nevertheless, the utility of such studies at district levels can hardly be over-emphasized, specially at this stage of national development planning when programmes are rapidly being changed. The newly created DRDAs in various States will find a useful critical review of experiences of Ganjam district in this book for devising strategies in their own areas.

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The Formulation of Price Expectations—An Empirical Study of Woolgrowers in New South Wales, Robyn G. Munro and B. S. Fisher, Research Report No. 8, Department of Agricultural Economics, University of Sydney, Sydney, 1982. Pp. viii + 261.

Price expectations in commercialised agriculture play an important role in decision-making at the micro and the macro level. To an individual decision-maker these provide guidance as to what to produce, how to produce and how much to produce. At the national level, price expectations are helpful in formulating a suitable regional commodity policy. Considering the usefulness of price expectations, the authors have endeavoured a valuable empirical study of woolgrowers in New South Wales, Australia. The report under review is the outcome of the study.

The report contains nine chapters. The first chapter provides an insight into the problem and a brief coverage of the study. The main interest of the study is to provide empirical evidence on the process by which price expectations are formed. Woolgrowers' price expectations for the major commodities, namely, wool, lamb, beef and wheat are examined and compared.

The second chapter throws light on the marketing arrangements of wool, meat (sheep and beef) and wheat in Australia. It has been pointed out that there are price stabilisation schemes for wool and wheat in Australia to mitigate the risk arising from fluctuating prices and to encourage the convergence trend towards a long-term equilibrium. Further, fluctuations in production and prices of wool and alternative commodities are discussed in detail.

Chapter 3 describes the theoretical background of the study. Various price expectation models are discussed in an excellent manner with their limitations and weaknesses. This is followed by the supply response models and a review of supply response studies particularly of wool and alternative commodities. The authors have also presented a detailed review of the formation of price expectations. It is suggested by the authors that in studies like formation of price expectations more co-operative research between economists and psychologists would be very useful. It is indeed a welcome suggestion and efforts must be made to collaborate with other disciplines for more realistic results. In this direction, the authors have used a psychological theory known as the 'Personal Construct Theory' developed by George A. Kelly. A detailed discussion of the theory has been presented in this chapter.

Chapter 4 is devoted to the method of data collection, sources of data, sampling procedure, etc. Further, response variables and explanatory variables are defined and explained with complete justification. The authors are also very cautious about the reliability of the survey results. Three sources are assumed for the possibility of errors in sampling results. These are (i) sampling variability, (ii) missing data, and (iii) response errors and other inaccuracies. Appropriate tests have been carried out to test the errors.

There are several sources of information in the formation of price expectations in the short and long run. These sources may be past prices, farm literature, radio, TV, stock and station agents, rural newspaper, personal visits and contacts, field days, seminars, producers' own past experience, etc. In this context, the producers' decision to use any particular source(s) in the formation of short and long run price expectations for wool and alternative commodities is examined and the results are presented and expounded in Chapter 5.

Using the technique called the Repgrid, an attempt has been made to identify the main dimensions of woolgrowers' perceptions of information sources in terms of their relevance to the formation of price expectations. The findings of several case studies are presented in Chapter 6. The authors have concluded that the theoretical information was found unreliable by the farmers in forming price expectations. Therefore, a suggestion has been made to expand market prospects information and to educate the producers to use these sources.

In Chapter 7, the main empirical findings of price expectation models are presented. Four models, namely, extrapolative, adaptive expectation, naive cobweb and arithmetic lag model, are examined to determine the best model with the help of simple regression analysis using the pooled cross-sectional and time-series data. In this chapter, besides elaborating the results, the rationality of expectation is also presented with an excellent review of the past work.

Supply response models are estimated and discussed in Chapter 8. It is well recognized that supply response models are useful in forecasting suitable policy. An in-depth attempt in this direction has been made. Based upon the findings, it is concluded that the expected price of wool strongly influenced the producers' decision regarding intended merino and breeding ewe numbers.

Chapter 9 presents the conclusions of the study. A few limitations of the study are also listed in this chapter. The main limitation expressed is that of gathering sufficient data by the survey method due to limited time and cost. The chapter is followed by appendix tables and selected bibliography.

On the whole, the study is an excellent contribution in the field of agricultural price policy and marketing. The report will essentially be useful to the Australian Government in formulating a national and regional price policy for wool and alternative commodities. Besides, the report will be a valuable guide to the students and research scientists concerned with agricultural price policy and marketing expounding the use of various tools and techniques.

Finance Corporations: A Study of 'Unregulated Banks', C. P. Somanathan Nayar, Institute for Financial Management and Research, Madras, 1982. Pp. vii + 121. Rs. 45.00.

The monograph embodies the results of the research work on structure and functioning of finance corporations and similar indigenous financial institutions in South India which have lately attained the status of an important financial intermediary in the unorganized sector of the money market in India, particularly in South India, in terms of their number, volume of business and mode of operations. The book is divided into seven chapters.

Chapter I explains the meaning of finance corporations and similar indigenous financial institutions and alternative names by which they are known. It also outlines the objectives of the study and describes the methodology. The methodology description is found too brief for details inasmuch as it does not indicate in what manner 116 firms were finally selected out of 450 firms identified, State/districtwise distribution of the firms and also their distribution as to their form of organization, *i.e.*, proprietary concern, partnership and private or public limited companies. Such details one can partly gather from subsequent chapters.

Chapter II briefly describes the organizational form of the selected finance corporations, proprietary concern type and partnership type, distinguishes between finance corporations and moneylender and draws a contrast between the mode of operations of finance corporations and banks. General features and the business practices of finance corporations in respect of conditions, period of loan, purposes for which credit is given, mode of repayment, etc., and interest rate offered on deposits are discussed for the selected centres. The reasons of failure are summarised on the basis of findings of the study of two corporations that failed. The business figures for some firms are given in absolute terms while for others they are given in percentage terms. Such a disuniformity in the description leaves a distracting effect on making inter-firm comparisons meaningfully.

Chapter III deals with the method of raising funds by finance corporations through acceptance of different types of deposits: current, savings, recurring, short notice and term deposits, and the method of operating the deposit accounts by depositors. Formats of deposit receipts and promissory notes given to depositors are presented. The author concludes that one of the main reasons of deposits with finance corporations is the high rate of interest offered which seems to overcome all the misgivings of depositors with regard to the serious risk of default faced by them owing to the nature of lending business of these corporations. It would have been more useful had the author shown in Table 3 the effective rates of interest on monthly interest paid deposits using the average interest rate for all centres reported in Table 2 (and not some other rates) which are otherwise straight away reported in Table 2.

Chapter IV focuses on lending business of finance corporations detailing the procedure of lending for different purposes, the method of charging interest, mode of repayment and security requirement, etc. Purposewise flow of credit in different centres is also discussed. Formats of credit instrument in use by finance corporations are presented. Finally, it explains briefly how finance corporations meet their liquidity requirements to meet contingencies arising out of premature withdrawals of deposits when the credit-deposit ratio of these corporations ranges in the neighbourhood of 100 per cent. There are several troublesome, though minor, errors and omissions in mathematical annexure II and III, which affect the readability.

$$I = \sum_{i=1}^n \text{ on p. 76 should be } I = \sum_{i=1}^n ;$$

$$I = \frac{\text{Pr}}{100} \times \frac{n}{2} \text{ on p. 77 should be } I = \frac{\text{Pr}}{365 \times 100} \times \frac{n}{2} ;$$

$$P_i = \frac{1}{n} P_1 \left(1 + \frac{1}{n}\right)^{i-2} \text{ on p. 78 should be } P_i = \frac{1}{n} \left(1 + \frac{1}{n}\right)^{i-2}.$$

Further, on p. 78, it would have been more appropriate to define

$$P = P_1 + \sum_{i=2}^{n+1} P_i \text{ instead of } P = \sum_{i=1}^n P_i$$

to improve the clarity of subsequent derivations. On p. 76, the formula derived and applied for calculating effective interest rate is actually what is technically known as Constant Ratio Equation.¹ The author has unnecessarily therein approximated $(n+1)$ to n , when the equation itself gives a little over-estimate, to show that nominal interest rate gets exactly doubled when a loan is repaid in equal instalments calculated by dividing the loan amount with the number of instalments.

Chapter V evaluates the question as to how finance corporations are able to function in spite of their high rates of interest on loans and the total lack of security regarding deposits they collect. In this context, the author points out certain attractions and conveniences to borrowers as well as depositors. One of the principal arguments put forth by the author is that their procedure is simple and the flexibility unmatched in opening and operating a loan and deposit account. The author highlights that bad debts of finance corporations are a minute percentage of their total loans because the corporations bind the borrowers both with personal and legal obligations. Financial ratio analysis clearly reveals that finance corporations enjoy a higher operational efficiency than banks, however, such an explicit

1. A. G. Nelson *et al.*: *Agricultural Finance*, Iowa State University Press, Ames, Iowa, U.S.A. 1973, p. 156.

conclusion has been skipped. The author then points out certain serious weaknesses of finance corporations and concludes that since the whole operation is based on confidence any jolt to it would affect a finance corporation severely. Finally, it is explained how finance corporations help the banking system to strengthen its money creating power.

Chapter VI examines the existing regulatory framework within which finance corporations function. The author observes that the system of self-regulation and control followed by the corporations has some strength in it and concludes that if regulation along the lines of banking companies is enforced upon them, finance corporations will cease to exist because of their very nature of operations and needs of their clientele.

Chapter VII deals with suggestions and conclusions regarding regulation of finance corporations. The author argues that since the corporations perform a useful economic service and, hence, instead of banning them or converting them into banking companies, regulation which will offer a greater protection to depositors and ensure a reasonable conduct of their operations is thought of. To this end, the author suggests certain measures aimed at strengthening of self-regulation and introducing some outside control to make up the deficiencies of self-regulation. Creation of common fund by the corporations to act as a lender of last resort, licensing by Central Bank with a simple set of rules, application of a progressive ratio of capital to liabilities to arrest the temptation of lending too much on clean loans are, *inter alia*, excellent suggestions.

When the author talks of the regulation, he does it mainly with a viewpoint of offering protection to depositors. However, inasmuch as these corporations are not subject to the direct control of the monetary authorities, their lending policies may weaken the monetary control. This has not been duly emphasized in the discussion on regulation. However, it is believed that monetary policy does affect them indirectly as the corporations also borrow from commercial banks, and this indirect effect is strong enough to preclude any form of direct control over them. Granted this indirect effect, the question is how long would it take for the impacts of monetary control to be felt by these institutions. If there is no substantial time lag, the direct control over them by monetary authorities does not appear to be necessary. The lags, if any, involved in the transmission of the effects of monetary controls to these non-bank financial intermediaries, however, remain a subject of empirical investigation.

The book is supported by adequate appendices. The material on the origin and growth given in Appendix I would have greater relevance near the beginning of the book. Index, though limited, appears useful.

The total thrust of the book is informative. In the informal sector of money market in India, economists face a continuing struggle with data problem. Viewed against this, the book is a significant contribution to the subject of banking and finance and should be of interest and use to any one

concerned with developments in the working and structure of financial institutions.

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Agricultural Development Planning in Thailand, Edited by Kenneth J. Nicol, Somnuk Sriplung, and Earl O. Heady, Iowa State University Press, Ames, Iowa, U.S.A., 1982. Pp. xv+326. \$ 21.50.

This book summarises some of the major work done under the Thailand Agricultural Sector Analysis Programme. The programme was a co-operative arrangement between the Royal Thai Government and the United States Agency for International Development (USAID)/Thailand in the form of a project grant to Iowa State University (ISU) for technical assistance to the Ministry of Agriculture and Co-operatives (MOAC) through its Division of Agricultural Economics (DAE).

The purpose of this book is two-fold: first, to document the operational aspects of the Thailand Agricultural Sector Analysis Programme; second, to provide descriptions of the systems developed under this programme in such a manner that they can be reviewed by agricultural policy specialists in other countries and the concepts and procedures possibly adapted in their programmes.

This book has been organized as a series of reports of the different phases of the programme. The first three chapters provide the background including the operational philosophy adapted by the DAE and ISU teams, overview of the agricultural and rural sectors of Thailand and an overview of the surveys conducted and the data processed. The next four chapters present the agricultural production models. Chapter 8 presents the models developed to analyse specific commodities and policy programmes. Chapter 9 presents a model which allows for the evaluation of different stock and reserve policies and is designed to provide a framework to analyse the Association of South-East Asian Nations (ASEAN) rice buffer stock and programme. Chapters 10 and 11 review two models developed for more macro level analysis. These models permit alternative assumptions on birth rates, migration, and regional employment to be tested with the output reflecting estimated impacts on the rural or agricultural labour supply and regional population distribution. Chapter 12 covers the transport and marketing models developed in the programme. The next four chapters provide short overview on on-going model development under the programme with the DAE. The final two chapters provide reflections on the project from perspectives of DAE and ISU programme leaders.

The process of development of various models presented in the book illustrates the steps that need to be taken in any effort towards systematic

model building starting from the scratch. The models explained in this book are those most needed for explaining 'where', 'how much', and 'when' investments and programmes should be implemented in the context of Thailand. Similar issues need to be answered in other developing countries. In this sense, the theoretical process of construction of these models is of wider interest.

There are, however, two major problems in adapting and applying these models in the case of India. First, a massive amount of data is required for various homogeneous regions in the country on crop and livestock production activities. These data are not readily available or not comparable in terms of definitions. This makes the job to construct the type of models illustrated in the book very difficult and at times even meaningless. Second, most of the models presented in the book are the linear programming models. In the context where production functions are undergoing a rapid change, problems in the application of linear programming models are well known.

Although the type of models presented in the book are very comprehensive for the policy decisions, the utility of such models depends on the care with which the required coefficients are computed. It is very difficult for the reader to verify these coefficients because in most cases the basic data are never presented in the final reports and published papers.

The limitations and constraints on the use of the models presented in this book do not, however, minimize the importance of such efforts. It should be emphasized that care should be taken to organize the pre-requisites for such applications before an attempt is made to build this type of models.¹ In this context, the book definitely broadens the range of knowledge of the professionals involved in this area and gives them more insights into the process of application of such models for policy making.

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Critical Study of Agricultural Productivity in Uttar Pradesh, 1951-75, Som Nath Pandit, Concept Publishing Company, New Delhi-15, 1983. Pp. ix+154. Rs. 90.00.

This book is largely devoted to the analysis of broad trends in area, production, yield and prices of major crops in Uttar Pradesh for the period 1951-76. One chapter deals with the supply response of selected crops and another chapter gives projections of availability of foodgrains in Uttar Pradesh upto 1990. The title of the book is quite misleading because analysis of the agricultural productivity forms a very small part of the study.

1. See Earl O. Heady and U. K. Srivastava (Eds.): *Spatial Sector Programming Models in Agriculture*, Iowa State University Press, Ames, Iowa, U. S. A., 1975.

Chapter 1 gives a brief account of the role of agriculture in economic development, the place of agriculture in Uttar Pradesh and the objectives and scope of the study. The next two chapters are concerned with the study of changes in land use, irrigation, crop pattern and trends in area, output and yield of six major crops (rice, wheat, sugarcane, barley, maize and gram) during the period 1951-76. The study of trends has been done at the State level and is based on moving averages, indices, graphs, and growth rates. The major conclusions of the study are (1) "area under superior foodgrains is on the increase while area under inferior cereals like barley is on the decrease", (2) "the process of intensive cultivation of land has set in" and (3) "the process of horizontal and vertical expansion of land has taken place simultaneously." While the author has taken considerable pains in describing the trends in area, output and yield, very little attempt has been made to identify the factors responsible for the changes in the selected variables.

Chapters 4 and 5 are concerned with the prices of selected crops. Chapter 4 shows the movement of farm harvest as well as wholesale prices of six selected crops in the State during the period 1955-75. The analysis of price trends is based on price indices, graphs and trend values. The major conclusion of the study is that "the movements of farm harvest prices and wholesale prices pertaining to the selected commodities were roughly in the same direction." In the fifth chapter the author has estimated the coefficients of supply response for rice, wheat and sugarcane. The chapter begins with a brief survey of the literature on supply response and the methodological issues pertaining to the specification of variables in the Nerlovian distributed lag adjustment model. This is followed by the specification of the scope of analysis and the model used for the study. The supply response of selected crops has been studied with respect to both the farm harvest prices and wholesale prices. The author has made considerable efforts in estimating supply response coefficients. He has tried several linear and non-linear equations using several independent variables like relative prices, relative yield, gross irrigated area, pre-sowing rainfall, lagged acreage and relative lagged acreage. The main conclusion of the analysis is that "the acreage response in the case of sugarcane and rice with reference to price was positive but in the case of wheat the effect of the shifter variables like yield was more important than price variable." Even in the case of rice the influence of lagged acreage was 'very dominant'.

In Chapter 6 the author has presented rough projections of the net availability of cereals, pulses and total foodgrains in the State for the years 1985 and 1990. The projections have been done on the assumption that "the present level of per capita availability of foodgrains is maintained." The author has taken considerable pains in working out three alternative estimates of availability on the basis of the average, highest and lowest availability during the period 1951-76. 'Net availability' has been defined as the quantity of foodgrains available for human consumption. But in fact he has worked out the requirements of foodgrains on the basis of per capita

availability in the recent past. These estimates seem to be of limited significance.

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Rural Industrialisation (Approaches and Potential), T. S. Papola, Himalaya Publishing House, Bombay-4, 1982. Pp. viii + 100. Rs. 60.00.

“It seems that the assumptions underlying the official approach to rural industrialisation and programmes for the industrial development of rural areas are not necessarily valid. In the absence of information and analysis, however, policy instruments continue to be evolved and used on the basis of partially valid propositions” (p. 19). In these words, the author has revealed where the shoe pinches and sets out to give us a scenario of rural industrial units on the strength of 387 units spread over six blocks of Varanasi and Gorakhpur districts of Uttar Pradesh; the region covered is a specially backward one. The range of products manufactured by these units is wide: traditional and modern, skill-based and material-based, meeting local and urban demand.

Before delving into the empirical analysis, the author has attempted to set right his base by discussing issues involved in the approach to rural industrialisation. Of foremost importance is the question of strategy. Various aspects are thrown open. (1) Is it a strategy of spatial dispersion of urban industries to the rural areas or of rejuvenation of rural crafts? (2) Rural industrialisation: for whom? Should the employment-income generation for rural people be tried through the production of commodities which the rural people do not necessarily consume or through the production of their basic needs? (3) Should the activity be looked as a measure leading to increasing integration between rural and urban areas or one concerned with the development of rural areas without such a linkage? (4) Should it be considered as an effort merely to provide employment to the rural masses or as a means to improve technology and productivity? (5) What kind of employment should they provide—primary or supplementary? (6) What may be the mode of production: self-employment or wage labour?

After posing these vital questions, the author straightway jumps to a very brief overall assessment of the rural industries in India. He makes statements without giving factual details in support. Hence, the reader is required to glean perhaps a plethora of information from other sources to verify the statements! A number of observations are almost forced on the reader. Greater attention to ‘rural’ industries, decentralisation of urban ones, exclusive emphasis on employment at the cost of growth and productivity, wrong interpretation of emphasis on traditional skills and technology, linkage of industries jeopardised by scare of modern urban industry, approach to rural industries as a means of ‘village survival’ and over-emphasis on the

household mode of production contributed to unsatisfactory performance of rural industries in India making them "a marginal activity in rural areas and an inefficient and unlinked appendage of the industrial structure of the country" (p. 18). It will be difficult for anybody to accept this inference on its face.

Nearly three-fourths of the book pertains to the analysis of the sample industries in the light of their social and economic base, mode of production, technology and size structure, employment, output and productivity and finally growth performance, problems and plans for expansion. The author comes to specific conclusions in this behalf. The traditional village industries and crafts continue to engage a major part of the rural industrial force; but a number of industrial activities, which were not traditionally a part of the rural scene, have started playing a significant role in rural areas. "Most of these activities have been economically more rewarding than the traditional ones, have provided remunerative employment and have shown a relatively better growth potential" (p. 93). These observations cut across some of the statements made in the Indian context. Other inferences are worth noting: non-traditional industries instrumental in breaking the caste-industry nexus, low income-generating capacity of most of the rural industries due to their tiny size, better performance of the industries not linked with rural resources and shift from household to non-household basis of organization. The study drives the author to recommend forcefully that "the upgradation of the technologies of 'dynamic' rural industries and the introduction of relatively modern-technology industries in rural areas alone are likely to make rural industries an integral part of the industrialisation process in the country" (p. 97). One can understand the benefits of such a policy, but the question of 'walking on two legs' remains unexplained. How can we have a happy marriage between the objectives of employment generation and technology improvement? The author very cursorily suggests the adoption of co-operative organization of units (p. 99) as also grouping of villages into a cluster (p. 5). More explanatory and detailed account of this line of improvement would have added strength to the suggestions. In its absence, the suggestions are subject mostly to attacks. A broad outline at least of the planning framework for development of rural industries would have provided guide-lamp to the policy makers. This study, therefore, does not transcend beyond the empirical observations; the prescriptive role remains unplayed.

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Agricultural Development in Kerala, Edited by P. P. Pillai, Agricole Publishing Academy, New Delhi-17, 1982. Pp. xv+256. Rs. 150.00.

This publication emanates from the papers presented at a two-day seminar organized by the Department of Economics (Calicut University)

celebrating the fifth year of its existence. The seminar was inaugurated by Dr. M. S. Swaminathan, the eminent agricultural scientist, then member of the Planning Commission. The keynote address was given by Dr. C. T. Kurien, Director, Madras Institute of Development Studies.

Swaminathan in his inaugural address dwelt on the technical aspects of fuller exploitation of sunlight in a sub-tropical climate like that of Kerala. Modernization of agriculture, according to him, should enable "... many farmers to produce for the market than for home consumption."

Apart from the excerpts from Swaminathan's address, the publication contains 15 papers starting with Kurien's keynote address which presents his study on agricultural change in Tamil Nadu and Kerala. After analysing linear changes in area, production and productivity separately for the two States and bringing out the progressive changes that have taken place in the past, he poses a number of questions for the seminar to answer, the star one among them probably is: "But what is the meaning of that 'progress' if it has not improved the living conditions of millions of people?" He was reflecting over the vast multitude of people below the poverty line in both the States. Unfortunately such basic questions find no answer in the publication.

P. P. Pillai's paper analysing growth of agricultural output in Kerala (1952-53 to 1978-79) provides continuity, but again fails to bring out the factors responsible for the declining agricultural production. His analysis showed that in Kerala's agriculture the sixties was a period of accelerated growth and the seventies one of decelerated growth and this was the reverse of the experience in the country as a whole in the two decades. Identifying such trends provides satisfaction to the research worker, but hardly helps the policy maker or the administrator who would like to know the factors responsible for the given situation. In this respect the exercise is defective.

The next two papers, "Peasant Movements in Kerala" by K. Mathew Kurien and "Evolution of Land Tenures in Kerala: A Review" by B. A. Prakash have one thing in common, *viz.*, they provide historical perspectives in the respective fields. Kurien's paper is interesting but fails to link the peasant movement with the fortunes of agriculture in Kerala. The other paper also fails to do this. Coming at this stage in the order, these papers break the flow of the theme of this publication because of the failure to link the discussions with the growth of agriculture in the State.

"Capital Formation in Agriculture in Kerala" by R. P. Nair makes an estimate of capital formation and compares it with the State domestic product (SDP) and comes to the conclusion that capital formation as a percentage of SDP declined from 42.2 per cent during the Second Plan to 20.5 per cent in the Third Plan, to 22.4 per cent in the Annual Plan, to 21.1 per cent in the Fourth Plan and to 18.12 per cent in the Fifth Plan period though measured in money terms the capital formation more than doubled during the period. Probably constant prices would have given a different picture. Besides, different approaches were used for different sectors for estimating capital formation, which probably was inevitable in the context of data

constraints. However, one wonders as to how the shift of land from one crop to another could be considered as capital formation without providing for suitable adjustments. While in some cases private capital formation is taken into account, in others it is not.

The analysis of "Structure and Flow of Agricultural Credit in Kerala" by M. Mohandas is an interesting exercise. It reveals the dominant role of co-operatives and the improving overdues position, which is a special feature of co-operatives in this part of the country.

Kerala always had a low priority in the matter of development of irrigation and even the low potential generated was grossly under-utilized, according to M. V. George and N. G. Nair. The consequence was the low, rather negligible overall impact of irrigation on agricultural development. It would have been possible to go into the constraints in the fuller utilization of the potential created.

P. S. George's analysis of movements of wholesale agricultural prices in Kerala is significant as it tries to link such movements with that in the parity of prices. He concluded that out of the 27 years covered the parity of prices was favourable for the farmers only in seven years. The chinks in his 'armour' are (a) the use of working class consumer price index to represent the payments made by the farmers and (b) the use of wholesale prices to represent prices received by the farmers. While data constraints dictate the use of working class cost of living index, one would have gone in for suitable adjustment of the wholesale prices to bring it nearer to harvest prices for this exercise or why not use harvest prices straight away for this purpose.

Small Farmers' Development Agency (SFDA) is an old story now but the study by V. Radhakrishnan and D. V. Rajendran on the working of pumpset scheme and milch animal scheme has relevance to Integrated Rural Development Programme (IRDP) Milch animal scheme is beset by a number of problems which are practically similar in other parts of the country also. The paper on "Fertilizer for Higher Productivity" by P. S. Surendran and S. Krishnan is based on data from agricultural research stations in Kerala Agricultural University, which can hardly be reproduced on private farms. P. R. Gopinathan Nair in his paper on "Some Economic Aspects of Coconut Cultivation in Kerala" concluded that in the seventies there was a decline in the area under coconut as well as in productivity. Why the decline in productivity? However, this aspect was not investigated. Some experts believed that interculture, particularly with tapioca, accounted for the declining productivity of coconut in the seventies. If such relationship could be established the much celebrated multi-level cropping without substantial augmentation of plant food, would turn out to be a technology with serious limitations. This paper is followed by P. K. Muraleedharan's paper on "Resource Use Efficiency in Rice Cultivation in Low Lying Lands in Kerala" and S. Natarajan's paper on "Labour Input in Rice Farming in Kerala." K. Ramachandran Nair's "A Study of Wage Structure of Agricultural Labour in Kuttanad" and M. Kunhaman's study of "Dual Labour Market for Agricultural Labour in Kerala" complete the list of papers.

Intensive analysis of sectoral development problems in regional setting are not too many and in this context the book under review is a welcome addition and deserves commendation. The editor could have used his privileges to regroup the various papers and provide some amount of linkages by editorial notes to make the volume a comprehensive one instead of presenting merely a collection of papers.

Investigation is triggered of by the questions What? Why? and How? After going through the papers in this publication one gets the feeling that most of the researchers tried to answer only the first question. The other two questions remain unasked and unanswered, by and large. That was necessary to bring out possible policy alternatives and other remedies for the general decline in the growth of agriculture in Kerala. If the publication contained the discussions at the seminar probably answers to some of these questions would have been found.

One must congratulate Pillai for the excellent fare placed before the reading public on Kerala's agriculture which is often considered as something apart from that in the rest of the country. More questions are left unanswered than those that were answered and one shall look forward for more seminars to take them up, or should one wait for the second quinquennium.

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Profiles of Poverty in India, A. E. Punit, B. R. Publishing Corporation, Delhi-52, 1982. Pp. xv+195. Rs. 80.00. (Distributed by D. K. Publishers' Distributors, New Delhi-2.)

This book contains a collection of seven essays by the author. Six of them relate to aspects of poverty in India and there is one on poverty in the U.S.A. The first essay is on the concepts of absolute poverty, its dimension, changes over time and regional distribution within India. The other five essays on different aspects of Indian poverty deal with bonded labour, famines, caste, class and poverty, the effects of green revolution in widening economic disparities, and Plan policies in relation to poverty.

The various aspects of poverty covered in these essays are no doubt germane and interesting. However, the author's treatment of these topics leaves much to be desired. In general, his method is to string together quotations, or short summaries from a number of books on each topic. Although the information thus reproduced is not without interest, each essay gives the impression of putting together of disparate pieces without any clear focus from which the issues are set out or analysed. The data that are presented—for instance on the levels of poverty or on the effects of green revolution—are not critically evaluated. The overall effect is that of a series of interviews with groups of authors who have written on the topic in question. One does not discern either any organizing principle for the

collection as a whole, especially with the piece on American poverty thrown in. Finally, the reader's frustration is heightened by the fact that there are numerous misprints, of the order of half a dozen a page.

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Nutrition Gap—An Economic Analysis, C. H. Shah, S. D. Sawant and B. I. Sanghavi, Himalya Publishing House, Bombay-4. 1983. Pp. xi+280. Rs. 90.00.

Numerous studies reported during the last decade revealed the growing awareness about the problem of measurement of poverty. So far, poverty has been viewed, by and large, as an economic problem by defining an income (expenditure) level that would enable an individual to buy the minimum food required. Thus, it has been essentially studied in relation to inadequacy of food since food is of utmost importance for living. As such, a proper understanding of nutritional issues form one of the important dimensions of the poverty problem to ensure unbiased estimates of poverty. Studies dealing with poverty problem are vital as they concern developmental policies to be adopted in the country. Therefore, it is necessary to study critically the methodology, analysis and conclusions obtained in such studies. It is against this background that this book should be viewed.

To quote the author's words, "The book is the first attempt made by an economist to measure nutrition gap." The summary and important findings are: (i) The main contention is that the usual method of using calorie norm to decide expenditure deficiency or poverty line does not take into account tastes and food preferences which are important aspects of nutrient intake. Therefore, minimum cost diets allowing for food preferences are evolved with the help of linear programming (LP) analysis and the costs are then compared with the actual expenditure on food. The gap between the two is defined as expenditure deficiency or poverty. (ii) It has been observed that calorie deficiency is more widespread than expenditure deficiency. (iii) The deficiency in other nutrients reported is even higher. (iv) The policy measures therefore suggested are: (a) employment generation to increase income for those who lack purchasing power and (b) spread of appropriate nutritional knowledge to remove nutritional inadequacy.

To start with, the knowledge about requirements of various nutrients forms one of the basic needs for evolving minimum cost diets with the help of linear programming (LP). However, this knowledge in regard to most nutrients, particularly vitamins and minerals, is so scanty that its use is limited in drawing any finer conclusions. In the case of calories and proteins even after using the minimum requirement, which is much below the average requirement, the estimate of deficiency given by the authors is as large as those previously reported. Moreover, there seems to be some inconsistency

in the estimates. For example, figures given in Tables 5.1 and 5.2 show the proportion of people deficient in calories using the minimum requirement of 1,595 calories as the cut-off point; in the case of females in the rural areas it is about 55 per cent and yet the mean intake distribution (2,107) is the same as that of average requirement (2,274 calories). This would indicate an extremely skewed distribution for intake. However, this does not seem to be the case from data in Table 2.7. The picture is even worse in the case of protein intake. It becomes necessary therefore that distributions of individual intakes and not averages, for various age-sex groups, should be mentioned for such an exercise. Besides this, the basic question is that Chapters 5, 6 and 7 on calorie/protein deficiency and its association with activity or income appear to be out of scope of the hypothesis considered in the book, *viz.*, elasticity of income for quality of food is larger than that for quantity of food.

The second point is about food preferences. It is difficult to separate food preferences from food habits. For example, the fact that the protein intake of a relatively costly type (such as fish) starts even when calories are inadequate (vide Table 2.3 for Kerala) can well be attributed to food habit than food preferences since tapioca, rice and fish are habitual diets of most people in Kerala. Moreover, data from other States are not indicative of the role of food preferences since proteins from costly sources are observed to be consumed mostly by families in higher income groups. The authors themselves have reported that "dominance of food preference was obtained to a much greater extent among the higher income group" (p. 169). Therefore, the claim that consideration of food preferences adds a dimension to the measurement of poverty problem is not appealing.

The third important point is regarding the feasibility of diets evolved by LP exercise. For example, quantities of tapioca obtained in particular for children and younger age groups vary from 500 to 1,000 gm. Is it possible to consume this much bulk? Ingredients, such as cooking oil, have no place in LP solutions. The cost comparisons for measuring nutrition gap would therefore be imperfect unless the acceptability of the diets evolved is considered on the ground of palatability, digestibility, etc.

Some of the analytical issues also cannot be ignored. The very hypothesis with which the authors start is about the income elasticities for quantity and quality of food. No illustrative estimates of these have been offered. Secondly, 1971 prices are used in LP exercise and further no price differentiation for urban and rural areas has been made. Again it is not clear why the minimum requirement for calories is taken to be 70 per cent of the average requirement whereas in the case of proteins, it is taken as 80 per cent. It is also an unusual observation that the authors find significant proportions of pure protein deficiency while there is a general consensus that pure protein deficiency does not exist; it is really the calorie deficiency which is predominantly observed.

Finally, a mention must be made about the policy measures suggested by the authors—they do not necessarily follow from the exercise undertaken.

For example, spread of nutritional knowledge is one of the measures suggested. However, their own conclusion based on their observations has been that nutritional awareness does not reflect any relation with food preferences. Similarly, employment generation is the most trivial measure that is suggested by a number of studies since inequalities in income and food distribution form the basic root cause of poverty.

To conclude, the problem of poverty is multi-dimensional and interaction between various disciplines should form the basis for tackling it. For instance, income or purchasing power is taken to be the sole causative factor for the state of under-nourishment. However, factors such as morbidity might affect the level of calorie intake of an individual despite adequate level of income. However, one can also think of combining calorie norm or income with other parameters like observations on health or demographic information on various factors. This would certainly help to get objective estimates of poverty or under-nutrition.

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Management of Capital Flows on Farms, Gurdev Singh and Krishna Kumar, CMA Monograph 104, Indian Institute of Management, Ahmedabad; Oxford & IBH Publishing Co., New Delhi-1, 1983. Pp. viii+142. Rs. 60.00.

Indian agriculture has made noticeable structural change during the last seventeen years, *i.e.*, from subsistence orientation to market orientation. As a result, the demand for capital inputs has increased manifold. Besides, production/returns are seasonal while use of capital inputs is spread throughout the production period. Thus, it has ultimately aggravated the problem of liquidity management on farms. The book under review examines the issues related to farm capital flows and its financing. It contains eight chapters. The specific objectives of the study were: (i) to study the socio-economic profile of the sample farmers; (ii) to examine and understand the nature and structure of capital flows on these farms; (iii) to discuss the role played by various agencies in the capital flow process on the farms; and (iv) to examine the possibilities of changes in the role of these agencies and the policy implications thereof.

Safidon block of Jind district in Haryana State where advancement in agriculture had taken place, was purposely selected. All the villages in the block were stratified into five strata, based on location of primary agricultural co-operative societies called mini banks, co-operative fertilizer depots and commercial banks. One village from each of the five strata was randomly selected. A sample of 74 cultivating households (five per cent) belonging to marginal, small, medium and large categories from these selected villages

was randomly selected. Primary data pertaining to farm and farming practices including capital flows and liquidity management from the selected cultivating households for the year 1979-80 (June-May) and secondary data from various agencies were collected. The reviewer feels that normal agricultural year and one backward block too in the district could have been taken.

Owner operators and tenant operators were the major categories of farm operators and a majority of sample farms belonged to small and marginal categories. Share lease was more common mainly because of the tight liquidity position of the tenants and also because the landlords wanted more control on production decisions. Leasing-in was not very common among marginal, medium and large farms. *Rabi* was the main cropping season on all farms and cropping patterns were different. The intensity of cropping tended to decrease with the increase in the size of holding. Family labour was the major source of labour supply and cash contracts were more prevalent among the permanent hired labour. On small farms labour hiring was done for weeding and hoeing, and harvesting and processing of *khariif* crops but on medium and large farms it was for harvesting and processing of *rabi* crops. Similarly, cash wage was more popular among casual hired labour. A majority of the farms were deficit in capital investment, specially marginal and small farms, and custom hiring, therefore, was quite common on these farms. The per acre use of conventional inputs was low and pesticides were rarely used. But the per acre expenditure on variable inputs as well as marketed surplus increased with the size of holding.

The capital inflows, such as capital inputs, capital assets and custom hiring in, increased with the size of holding upto medium farms while these decreased on large farms. The larger capital flows on small and medium farms were due to the acquisition of capital assets but capital inputs were the major inflow on marginal and large farms. The inflow of custom hiring decreased with the increase in the size of holding. The various inflows were concentrated during the pre-sowing to late sowing seasons. Although custom hiring was seasonal, the purchase of assets was also in the same period. Even the inflows of fertilizers, diesel oil and irrigation purchases were concentrated in the two identified periods. Outflows of capital assets and their services were also found to be seasonal (post-harvest months). The net inflows remained concentrated in the beginning of each crop season whereas the actual use of capital inputs and services of assets were well spread over the entire production period. The net capital inflows were positive except for a few months on marginal, medium and large farms.

The liquidity generation for financing inflows was concentrated from the end of a crop season to the beginning of the next season mainly from the sale of crop produce, milk and ghee, assets and services of assets, kind wages, labour hiring out and credit. This was quite consistent with the pattern of inflows. But inflows of capital inputs were not consistent with the use of those inputs. The comparison of inflows and the liquidity generation on

different farms have left a deficit of significant amount on medium and small farms and must have been met by past savings.

Over-financing, double financing and financing of defaulters were reported due to the multi-agency model. Similarly, target oriented approach adopted by DRI, SFDA, etc., has led to the problem of overdues. The requirement of purchase of shares in co-operative loans and the complicated procedures and distant location of commercial banks have resulted in less use of institutional credit. Similarly, crop loans were only upto harvest time and not upto the time of disposal of crop produce. The marketing facilities and supply of capital inputs and services were also inadequate. Besides, the working of extension service was less than desirable and needed streamlining.

The authors have also suggested a single agency approach for institutional credit in the State. Financing of different aspects of farm business may be allocated among co-operatives and commercial banks but disbursement and recovery should be carried out through mini banks. Their responsibilities should include identification of borrowers, disbursement, monitoring the use and recovery of loans for which they should get commission. But commission should be partly for disbursement and partly for recovery. A land record book or land register duly recorded with the change in ownership as well as credit use and its repayment should be issued to the individual cultivators by the revenue department. The credit limits for each season/year may be entered in the pass book and cash and kind cheques may be issued to the borrowers so that they could use them as and when they need cash or inputs. But cash and kind ratio should be variable according to borrower's resource mix. Flexibility in the recovery of loans during stress periods may be incorporated in the operational policies of the credit agencies. Besides, credit limits should be raised further and concessional credit should be given only to the weaker sections.

Additional market centres for farm produce specially in the two harvest seasons together with the organization of markets for perishables are essential. Improvements in other marketing functions, such as transportation, storage and processing together with linking villages with market centres are very essential. Similarly, storage under rural warehousing scheme at the village level should be popularised. Cold storage facility for the development of vegetable and fruit cultivation, poultry and dairy would be a right step. The State Co-operative Marketing Federation should take the lead in organizing primary societies and in the establishment of storage and processing facilities. All the needed inputs including custom services of some equipments may be supplied from the locally located outlet, preferably service societies.

The specialists of *Krishi Gyan Kendras* of Haryana Agricultural University at the district level could not get any place in the suggested model. In fact, District Extension Specialist (Farm Management) together with other specialists can act as a pivotal point. Emphasis on statistical analysis at desired places and consideration of two crop seasons as well as programming models incorporating liquidity management activities (debt and cash management vectors)

would have considerably improved the qualitative contents of the book. On the whole, the book is extremely useful and informative to the researchers, institutional agencies and policy makers.

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Economic Appraisal of Irrigation Projects in India, Basawan Sinha and Ramesh Bhatia, Studies in Economic Development and Planning No. 27, Institute of Economic Growth, Delhi-7; Agricole Publishing Academy, New Delhi-17, 1982. Pp. xxxi+487. Rs. 200.00.

Irrigation plays a key role in the new strategy for transfer of agricultural technology in developing nations. To achieve well-defined economic and social objectives in a specified time, there is a need to develop water resources in a shortest possible period. But irrigation projects require massive public investment and, therefore, techno-economic appraisal of irrigation projects is the basic premise for investment decisions. Irrigation planning and its management are complex problems which can only be resolved with the co-ordinated efforts of agriculture, engineering, economics, political science, sociology and management science. The book under review has successfully demonstrated the importance of evolving a co-ordinated and multi-disciplinary approach in planning and appraisal of projects in the irrigation sector and illustrates the process of project evaluation by considering all feasible technical alternatives in view of multiple objectives of irrigation planning.

The first chapter introduces the subject of techno-economic appraisal of irrigation projects and discusses the broad principles and criteria which are currently being used for pre-sanction evaluation of irrigation projects. The limitations of the present methodology of benefit-cost analysis given by the Irrigation Commission are discussed. In view of these limitations, the authors rightly stress the need for a framework for a detailed social benefit-cost analysis (SBCA) of an individual irrigation project, keeping in view the multiple objectives of irrigation planning, *viz.*, increasing aggregate production, employment generation, redistribution of income and development of backward regions. The technical alternatives in view of the overall objectives of irrigation projects are identified and examined using the Incremental Cost-Benefit Analysis based on market prices and shadow prices.

Chapter 2 describes the techno-economic features of the Auranga Reservoir Project which is used as a case study throughout the book. The project is planned for irrigation and industrial water supply in a drought-prone district of Palamau in Chhotanagpur region, Bihar. The features of the Auranga Reservoir Project and agro-economic profile of the project region are sketched in this chapter and used as the basic data for appraisal of irrigation projects. Chapter 3 deals with benefit-cost analysis and incorporates

some improvements over the presently followed practice for pre-sanction evaluation of irrigation projects suggested by the Second Irrigation Commission. The benefit-cost analysis of the Auranga Reservoir Project is based on valuation of costs and benefits at (a) market prices and (b) economic prices. This analysis takes into account the benefits under without and with project concept rather than with and without irrigation and the discounted benefits and costs streams over a period of economic life of the project. The method of estimation of economic life of the project is not spelt out. The economic appraisal of the project at economic prices is likely to over-estimate the decision criterion and the uneconomical project may get selected for public investments. A basic description of irrigation projects has added to the utility of the chapter.

Chapter 4 is devoted to the use of SBCA in irrigation projects and presents the methodology of estimation of parameters, namely, social rate of discount, shadow foreign exchange rate, shadow price of investment and shadow wage rate, including semi-skilled and unskilled labour in the project region, weights on income distribution benefits, commodity prices, etc. In Chapter 5, the methodology of SBCA is illustrated with the help of Auranga Reservoir Project and the calculations are given step by step which might prove handy for those who would like to use SBCA methodology for analysis of other similar projects. Apart from the sensitivity analysis, a risk analysis for evaluating the effect on uncertain elements in project evaluation is demonstrated in a very simple way.

Chapter 6 presents a detailed economic appraisal of various technical alternatives relating to the size of dam, type of dam, extensive versus intensive irrigation, cropping pattern and lining of the main canal of Auranga Reservoir Project. This chapter is a modest attempt to illustrate the procedure for identifying alternatives and carrying out economic analysis for evolving the best plan for implementation. In the last chapter, the computer programme in FORTRAN IV language is given for the SBCA of irrigation projects. This computer programme is certainly an added incentive to a meaningful techno-economic appraisal of the project.

In general, the book endeavours to acquaint the reader with the complex problems of project appraisal. The empirical data have dominated the book and it lacks in the theory of project analysis. Half of the book is devoted to tables and illustration of economic appraisal of the Auranga Reservoir Project. The book is not well balanced in theory and illustration and the entire book looks like a report on "Economic Appraisal of the Auranga Reservoir Project". From the title of the book one may expect the analysis of more than one irrigation projects in India but the book under review contains only one reservoir project as a case study. Nevertheless, one must agree that the presentation of various aspects of appraisal methodologies in this book will stimulate rethinking in the direction for change in the present criteria of project evaluation and will surely equip the project planners adequately to accomplish the job of ranking of projects and alternatives within the project.

The book, on the whole, is a welcome addition to the literature on project appraisal and should prove quite useful to researchers and policy makers who play the irrigation game seriously. The price appears to be rather on the high side for the Indian readers.

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Agricultural Development in Himachal Pradesh, R. Swarup and B. K. Sikka, Agro-Economic Research Centre, Himachal Pradesh University, Simla; Agricole Publishing Academy, New Delhi-17, 1983. Pp. xi+156. Rs. 100.00.

Have the hilly regions of the country lagged behind the regions in the plains in agricultural development in India? If yes, is it owing to the differentials in the behaviour pattern of farmers of the hills and the plains? Or, is it due to the lack of enterprise of the Government of the hilly regions compared to that of the regions in the plains? Or, is it due to lack of requisite basic information required for planning in the hilly regions? Since the growth of hilly regions has lagged far behind as compared to that of the plain regions, the Union Ministry of Agriculture initiated a number of studies to find the answers, probably, to the above raised queries. The book under review is aimed at accomplishing such a task (although not clearly specified) with experiences emanating from a hill State, the Himachal Pradesh. The experience documented spreads over a span of fourteen years, *i.e.*, 1966-67 to 1979-80—a period during which Indian agriculture witnessed the introduction and almost complete diffusion of High-Yielding Varieties (HYVs) of wheat and paddy crops.

Broadly, the book is divisible into two parts: Part I, spread over six chapters describes the land use pattern (Chapter III), the land holding pattern (Chapter IV), the cropping pattern (Chapter V), the agricultural inputs (Chapter VI), trends in area, production and productivity (Chapter VII), and component analysis of the growth of agricultural production (Chapter VIII). Part II, spread over the remaining half of the book, contains a wealth of statistical information relating to State, income particularly that originating from agriculture, use pattern of geographical area, distribution of holdings according to size and tenancy, cropping pattern, irrigation according to source and use pattern, HYV seed, fertilizer consumption, insecticide and pesticide consumption, implements and machinery, livestock, work force, credit societies, wage rates, harvest prices, and crop yields.

The two parts taken together provide ample evidence, although not clearly spelled out in the study, to the effect that the behaviour pattern of farmers of Himachal Pradesh is rational. They show positive response to market and technological signals. For instance, the component analysis shows that yield effect is a dominant factor in the explanation of output

change in those crops which have experienced technological change (such as wheat, paddy), and area effect and cropping pattern effect are dominant factors in the case of those crops (e.g., gram, maize, barley) where market signals are agents of change. It also reveals that the government of Himachal Pradesh has been making great efforts to help the farmers to have more production, say by distributing HYV seeds, credit, etc.

Thus, the slow rate of agricultural development in Himachal Pradesh is probably attributable to the lack of proper mapping of the basic topographically embedded resource information that would help exploit the comparative advantage of the region. For instance, the terrain of Himachal Pradesh is divisible, depending upon the elevation above mean sea level, into five zones: (i) valleys (upto 1,000 metres) suitable for intensive crop cultivation; (ii) low hills (1,000 to 2,000 metres) suitable for horticulture; (iii) high hills (2,000 to 3,500 metres) suitable for raising forests; (iv) alpine zones (above 3,500 metres) suitable for grazing; and (v) snow desert—the land of perennial snow without vegetation (p. 9). However, this information is not incorporated into the massive statistical information compiled and described in the book. Again, the State has been said to have a comparative advantage in the cultivation of horticultural products and vegetables. But, what are the potentials in these areas? How far these have been exploited? What are the bottlenecks in their exploitation? Such relevant issues are neither raised nor answered.

To sum up, the study is competently handled. Its massive data should, however, make it a good reference book for the Hill State. Incidentally, printing and get up of the book is very good.

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Neglect of Agriculture, J. S. Tomar, Agricole Publishing Academy, New Delhi-17, 1982. Pp. xvii+83. Rs. 100.00.

As the title of the book indicates, this book is an attempt to show how the agricultural sector has been neglected in the Plan frame of our economy mostly due to the 'urban bias' approach of planning and policy formulation by those who belong to the urban areas. The book, divided into 12 chapters, is a collection of articles written by the author at different times and hence it covers a variety of topics from investment in agriculture to agro-service centres and banks and agriculture and yet, we do find some main current of the common theme.

It states that on account of inadequate knowledge of rural life and agriculture and apathy towards rural economy on the part of the urban elites and empires which have ruled rural India, due priority to agricultural and rural development is not given and correct policies are not followed. In

fact, rural problems are treated in isolation and as a result, such remedial policy measures themselves gave rise to a large number of problems.

The neglect of agriculture and rural economy is reflected in the social and economic exploitation and abject poverty. Because of the under-pricing of the product even the cost of cultivation is not recovered by the producers. This has been very well demonstrated by the author in one of his best papers on "Cost-Price Relation in Agriculture—An Empirical Case Study" where it had been shown, how unfavourable was the movement of price trend of inputs and output during 1967-77. Similarly, it has been vividly sketched how a tiny minority (20 per cent) of the population enjoy the benefits of almost 'ninety per cent' of the facilities, services and amenities. If the exploitation of the rural area is not put to an end, the author warns of political dangers of socio-economic revolt by the peasantry.

The author's aim of the present book is "to create some awareness in the public in regard to the difficulties which merit immediate removal so as to enable our rural people to share the benefits of economic development of the country." However, in view of the subject-matter of the book being 'indigestible and bitter', the author himself has anticipated severe criticism and controversy. He has also succeeded in creating better understanding of the most burning and intricate issues of the rural economy. Therefore, this book is a valuable source of reference for all those who are interested in the rural economy. However, some of the arguments of the author are less likely to be accepted. For example, the author's views on rural taxation and land reforms may not receive agreement.

In writing this book, the author does not have any academic style and tradition which is both a source of its strength and weakness. While the experience and practical insight of the author is reflected in the material and mode of arguments, the methodology of analysis, adequate and up-to-date data, objectivity in reasoning and depth of analysis are not adequately reflected in the book. However, the book makes an interesting and thought provocative reading for the students, teachers, researchers and policy makers and administrators associated with agricultural and rural development.

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Learning from the Rural Poor: Shared Experiences of the Mobile Orientation and Training Team, Henry Volken, Ajoy Kumar and Sara Kaithathara, Indian Social Institute, New Delhi-3, 1982. Pp. viii + 114. Rs. 15.00.

This small booklet which is a follow-up of an earlier book: *Moving Closer to the Rural Poor*, sums up the experiences of learning from the rural poor by the Mobile Orientation Training Team (MOTT). It has been claimed that the title of this book expresses best the essential characteristics

of the four-year involvement of the Team with the rural poor. It analyses the distinctive methodology adopted by MOTT to support the rural poor and the oppressed in the discovery of their potential to be makers of their own future. The book is divided into five chapters. The first chapter sums up the situation of the rural poor and the MOTT's role in people's education to make them fight injustice. Chapter 2 deals with raising the consciousness of the rural poor and discusses the Jagruk Kisan Programme as an educational approach to the tribals in eastern Madhya Pradesh. It describes the three phases of the training of rural animators and gives instances of how this training leads to people's action. In the first phase of training emphasis was on teaching more appropriate skills in agriculture and other related economic fields. During the second phase of training the main focus was on effective communication techniques. In the third phase, the focus was on approaches that would help in understanding the social situation of the tribals.

MOTT approach is quite penetrating. The striking contradiction between the appearance and realities in a village in Surguja district in Madhya Pradesh has been highlighted, as the first impression of the village was one of prosperity and happiness but closer contact of the animators with the village people revealed a shocking story of 20 out of 180 families in the village starving for three days as they had no work.

An excellent feature of this programme was the withdrawal of the animators after about a year when further education would be continued by the people themselves in their own way. Another redeeming feature of this programme is the people's action for securing higher market prices, defending forest rights and people's voice against injustice. However, the MOTT's technological approach is based on perpetuating tradition to the utter neglect of the improved new farm technology. The whole emphasis is on introducing simple technology using local resources to get small increases in yields.

In regard to the high-yielding varieties, it has been mentioned that "it has no doubt done wonders in progressive farming areas of our country. However, our experience with this technique in tribal and interior rural areas, suggests that it is irrelevant." Such a sweeping generalisation seems to be totally unjustified as technological progress is the most important engine of economic development in any sector of the economy.

Chapter 3 is devoted to community health education. The MOTT's philosophy has been to awaken social consciousness and to help the people grow in a critical understanding of society, especially in the latter stages of their training. It has been rightly argued that illiterate women trained as village health workers are effective in their work and capable of sacrifice. The study provides the details of the syllabus for community health workers which is divided into four phases. The methods used for imparting this training are visual aids: slides, films, pictures, songs, dramas, group discussions, demonstrations and learning by doing which are quite in accord with the needs.

Chapter 4 discusses the MOTT's programme for adult education. It has been claimed that in the past five years considerable efforts have been

made by the MOTT to develop a distinct pedagogy of the oppressed which is qualitatively different from non-formal education carried out in the past. Adult education is understood as an organized effort to set up adult education centres in villages of a region. It has been an important aim of the MOTT to awaken a concern for adult education and to offer orientation and training to teams that would initiate regional adult education programmes, whilst in other training activities the MOTT has been more directly working at grass-root levels. In this particular field its main endeavour was to assist the group of educated men and women in acquiring the insights, attitudes and skills required for launching adult education programmes. The people are educated regarding the nature and functioning of the local society and some of its exploitative mechanisms affecting the social existence of their people.

The last chapter sums up the conclusions. It has been claimed that the weak have begun to show strength: "they organise themselves, they manage their own problems and have confidence and power in unity to oppose the injustice done to them." It has been contended that "only a socialised form of the means of production can serve as a base for both the required increase in production and a just distribution. What remains to be invented is the nature of this socialisation which cannot be blindly copied from elsewhere."

In the end the philosophy of the MOTT is summed up as follows: "We believe that without a struggle, the rural poor cannot obtain their rights, and there cannot be any transformation of society affecting its vested interests. People also learn and grow in the struggle against injustice. In principle, we also believe that in the early stages, people should deal with simpler problems that they can handle and avoid premature confrontations. But in situations of immense suffering inflicted by man and by one social group on another, wisdom does not lie in being patient."

On the whole, this book is based on a distinct philosophy of preparing the rural poor for confrontation with the vested interests based on their understanding of the structure of property and production. As such, it has got strong ideological underpinnings. Moreover, the book lacks scientific rigour as it is based on the MOTT's experience of working with the rural poor and not any well-conceived research study or experiment. A major weakness of this study is its lack of or rather a denunciation of new technology which is a *sine qua non* of economic progress. There is little that can be gained through organized confrontations but much can be achieved through technological progress which is the source of productivity gains. No doubt, social justice is important but it cannot take precedence over growth. The best strategy seems to be to integrate equity with efficiency in planning economic development.

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Irrigation and Agricultural Politics in South Korea, Robert Wade, Westview Replica Edition, Westview Press, Inc., Boulder, Colorado, U.S.A., 1982. Pp. xv+172. \$ 29.50. (Distributors: Bowker Publishing Company, Epping, Essex, England.)

The Far East is known for its impressive agricultural growth and high crop yields. This book by Robert Wade provides useful insights into how high productivity is achieved under irrigated agriculture even when irrigation is neither privately owned nor is based on groundwater. The reviewer is indeed pleasantly surprised that rice yield of the order of 5 tons/ha. has been attained in South Korea on small holdings served by small-scale surface irrigation works operated by the state. In contrast, beneficiaries of tank water in India realise between one and two tons of rice yield per hectare. Even in the case of major surface irrigation works in the rice growing tracts of this country, rice yield seldom exceeds two and half tons per hectare. Yields of the order of 3 to 4 tons are certainly observed on tubewell irrigated farms in Punjab, Haryana and Tamil Nadu.

Protagonists of water management may ascribe this high performance of irrigated agriculture to superior management of public irrigation works. While one cannot deny the role of this factor, one should also note the vital role of other factors which are carefully listed by Wade in the particular context of South Korea. Not all components of the Korean model are worth emulating for us in India. To this reviewer, equality in land ownership appears to be worth emulating. In the absence of such equality, farmers' co-operation in water management tends to remain poor. The imperative of such a co-operation is all the more in semi-arid areas where irrigation water is vital to the well-being of a crop. Because of high and well-distributed rainfall, the need for irrigation in South Korea is marginal (it normally arises in the month of May as pointed out by Wade). The state policy of premium on rice price and subsidy on farm inputs, including irrigation, has led to very high application of fertilizers (500-750 kg./ha. according to Wade). Do we need such a policy? Finally, there is the question of coercive use of political apparatus for attaining developmental goals.

Wade has made a useful contribution to the literature on irrigation management. His critical appreciation of others' viewpoints, as also the totality of a situation, may be usefully emulated by upcoming scholars of empirical research.

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Agrarian Policies in Communist Europe: A Critical Introduction, Volume I, Karl-Eugen Wadekin, Studies in East European and Soviet Russian Agrarian Policy, Martinus Nijhoff Publishers, The Hague, 1982. Pp. xi+324. Dfl. 85.00.

This is published as volume I in a three-volume series—"Studies in East European and Soviet Russian Agrarian Policy", under the general

editorship of Alec Nove. The Foreword by the editor of this volume, Everett M. Jacobs, mentions it as "the first attempt to treat agrarian policies in Communist Europe in a comprehensive, systematic, cross-national way... with a thorough understanding of the political, social and economic systems of the countries involved."

Beginning with a general essay on the agrarian question in Marxist and Leninist thought, the volume takes us through Soviet agriculture under Stalin, early post-war period in Eastern Europe, changes in policy brought about by Khrushchev, economic reforms of the 1960s in the agriculture of both Soviet Union and Eastern Europe, and the more recent attempts at 'Industrialisation' and 'Integration of Agriculture'. The study also offers an assessment of the performance of agriculture and an analysis of labour incomes in agriculture.

There is a separate chapter on agricultural producer prices, which shows how producer price policy has sought to stimulate output growth through balanced price ratios (as distinct from overall price levels), and how these ratios began to resemble Western price structures by the 1970s. The chapter interestingly concludes that "the notion that socialized farms can produce without regard to problems of costs and profits has been given up, if it was ever fully adhered to" (pp. 202-203).

The study, however, comes to the rather familiar conclusion of Western scholarship: "...one suspects that Marxist-Leninist agrarian policies—except for their Hungarian variant—have ingredients which are unpropitious not only for peasant small scale farming but also for socialist large-scale farming." The author attributes the harvest shortfalls in the later half of 1970s to this factor, rather than to the "unusual sequence of meteorologically unfavourable years" during the period. As such, the author does not think much of modernization of agriculture and the generation of capital under it, since it is limited to the public sector supplying the needed inputs for 'industrialisation' through subsidised prices and investment and "not by thoroughly reforming the agro-economic system and thereby making it more efficient" (p. 263).

Such a conclusion is surprising particularly in view of the author's own earlier statements and analysis. For example, "For the Soviet Union, the prewar gross product...per head of population was fully attained by the middle of the 1950s... Since then, the growth of agricultural production in Eastern Europe and the Soviet Union has been more rapid than that in Western Europe..." (p. 120). Again, "...soil and climate in most of Western Europe and North America lend themselves more easily to highly productive crop and animal farming, and thereby to higher labour productivity... For the first fifteen or so years after the Second World War, agriculture in Eastern Europe and the Soviet Union received very little capital, and this deficiency has not yet been made up in spite of increasing supplies and investment from the 1960s on" (p. 145). The devastation caused by the Second World War to their economy which was less developed than in the

West, meant tremendous strain and capital scarcity, which was an important factor behind the lower labour productivity in agriculture, compared particularly with the United States. The United States did not suffer much through the War since it was fought on others' lands, and could provide capital to Western Europe. Having made the statements quoted above, the author brazenly adds that "obviously the low labour productivity that prevails in all branches of Communist economic systems, not only in agriculture, aggravates the consequences of their costly tribute to ideology and power" (p. 159).

No one, not even the Communist countries themselves, would claim that their agricultural system is perfect. In fact, there has been a constant search for organizational improvement involving greater decentralisation of responsibility and granting more incentives for initiative and better performance. A major goal of agricultural policy and of 'industrialisation' of agriculture, apart from increasing labour productivity, has been to bridge the gap between rural and urban working conditions and levels of living. As a result, the disparities have now been so much reduced that a Russian industrial worker today can legitimately feel jealous of the prosperity of an Uzbek farmer. Apart from other economic goals, collectivisation, mergers and enlargement of farms sought to create a viable setting to satisfy social, educational and cultural needs of the rural sector. Khrushchev's idea of 'agrotowns' (*agrogorod*) also had the same goal, involving resettlement of scattered villages to provide urban type facilities and qualitatively improve rural life (pp. 50-51). In this process certain problems too were created. In many cases, for example, the distance between the farm and the farmers increased, affecting labour productivity. But this was a temporary difficulty, which was sought to be solved through more efficient transport and better organization of farm work.

In a few regions of the Soviet Union itself and also in some of the East European countries like GDR, agriculture has been a major success story, though paying 'tribute' to the same ideology. The major bane of Soviet agriculture is its instability and not lack of growth. This is particularly so in grain production, which therefore affects animal production too. What could have happened is that when irrigation was made available in fertile areas, such lands were diverted to the cultivation of cotton and such other relatively high value crops, with the result that grain cultivation and productivity push to grain yields became confined to or were extended to relatively marginal lands. This hypothesis needs of course to be tested in detail, but *prima facie* is quite plausible. Similarly, the difference between the 'performance' of private plots and the collective farms has been principally due to the earmarking of the production of grains to the collective areas, and of the high value activities to private plots. It is not widely known that private plots too fulfil plan targets in respect of such activities.

There is a lot that is of interest in the book, whose value is further increased by a 55-page selected bibliography. But one also wishes that a

scholarly book such as this, could have afforded to be more objective and less ideologically prejudiced.

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The Women of Rural Asia, Robert Orr Whyte and Pauline Whyte, Westview Special Studies on Women in Contemporary Society, Westview Press, Inc., Boulder, Colorado, U.S.A., 1982. Pp. xix+262. \$ 14.50. (Distributors: Bowker Publishing Company, Epping, Essex, England.)

Drawing on more than 500 books, articles and reports, available in the English language (which are listed in the bibliography at the end of the book), the authors examine the current status of rural women in monsoonal and equatorial Asia (comprises virtually all the countries East of Afghanistan). The objective of this review of available literature over vast area and covering nearly 94 per cent of Asia's population (and 55 per cent of the world's population) is to understand and provide descriptive analysis of the position of women at home and through various stages of their life cycle, in the communities in which they live and of their role in the processes of production.

The authors identify three regional patterns in the status of rural women. In the South Asian region (includes the entire Indian sub-continent upto the borders of Burma but excludes Central and Eastern Himalayas, Sri Lanka and the tribal groups within the region) as well as in East Asia (includes China, Taiwan, Korea and Japan), women enjoy low status. Further, the customs and practices or the societal norms are so deep-rooted and against improving the status of women that modern legislation has been able to make very little inroads to alleviate the subordinate status of women; whereas in Southeast Asia, women have enjoyed and continue to enjoy higher status in family, in society and have, by and large, retained the right to property.

The authors do not intend to explain the reasons for female subordination in general, but the distinct patterns that they observed do seem to intrigue them and make them look at various possible factors which determine the status of women in different regions. Religion is one such factor whose influence is examined. While women are held low in esteem in all the religious scriptures, the available literature indicates that the scriptural stereotypes and reality are divergent in many cases. (Islamic Indonesia is far more egalitarian than Pakistan or Bangladesh.) The authors dismiss religion as a factor determining the status of women.

The authors also reject the hypothesis that women's status is determined by the kinship organization (although there is strong evidence to suggest that women enjoy low status in patrilineal, patriarchal societies compared to matrilineal, matriarchal societies). The argument which finds favour with

the authors and which is most studied in almost all the societies is that women in control of economic returns from their production enjoy higher status, irrespective of religion or kinship mode.

The regions where women enjoy relatively greater control of economic returns are ecologically determined, according to the authors. In the Swidden way of life (practising shifting cultivation), women take an active part in production and receive respect in family and are consulted on economic, community or religious matters. In settled agriculture, ownership of land is in the hands of men and women have little or no control over the means of production and are subservient. Shifting cultivation was the mode of agriculture in Southeast Asia until recently, whereas in South and East Asia, settled agriculture is being practised for many centuries.

The authors, towards the end, also examine the position of women in the changing times and of the impact of agricultural mechanization and technological innovations, including the introduction of high-yielding varieties of crops, on the status of women, which have brought about many changes in social relations and allocation of labour. The overall conclusion which emerges is that women have suffered rather than benefited from them in all the Asian countries. Further, while the position of women in the Asian countries is improving when viewed in terms of indices such as reduction in infant mortality rate and improvement in the levels of literacy, the authors are of the opinion that the impact of such measures of equalisation will not be felt for a long time. Women will continue to be treated as inferior and accept secondary and submissive role as has happened in Japan. In the short run the status of women can improve only when they receive gainful employment with adequate income and thereby receive recognition. Agriculture is unlikely to provide such opportunities and therefore, as a policy measure, the authors suggest that non-farm employment opportunities should be created by means of widespread development of rural industry.

This book is very valuable to scholars interested in research done on the status of women in the Asian countries. The authors should be complimented for their effort to digest and synthesize information scattered in many micro studies. Very little cross-country comparable data exist to measure the status of women, yet the descriptive analysis, based on small studies does offer an opportunity to understand the situations prevailing in various countries and discern determining factors for the distinct patterns which seem to become apparent.

While attempting to explain what determines the distinct regional patterns, the authors do seem to realise that participation in economic activities does not necessarily enhance the social status of women. There are social forces, societal norms and mores which influence the status of women in different societies regardless of the eco-systems or the forms of economic production. Participation in labour force does not necessarily lead to economic independence or control over the earnings. The right to control the use of resources as well as the right to take one's own decisions in the domestic or

public domain is acquired by women (or is granted to women) in certain societies. What exactly influences this is yet to be ascertained. The book is not very helpful in understanding the processes partly because social norms and mores do not easily lend themselves to measurement; further there are very few empirical studies on the subject. Therefore, one is essentially left in the realm of economic explanations, however partial they may be.

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