

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

Vol XXV No. 4 ISSN

0019-5014

OCTOBER-DECEMBER 1970

INDIAN JOURNAL OF AGRICULTURAL ECONOMICS





INDIAN SOCIETY OF AGRICULTURAL ECONOMICS, BOMBAY

BOOK REVIEWS

Economic Problems of Indian Agriculture, G. D. Agrawal and P. C. Bansil, Vikas Publications, New Delhi, 1969. Pp. xi + 415. Rs. 32.00.

In the Preface to the book, the authors state: "The study of agricultural economics has suffered greatly for lack of suitable textbooks organized to meet the needs of agricultural students and for lack of qualified teachers." Though the situation has improved considerably in both these respects in the last few years, still students in agricultural colleges where the major emphasis is on technical subjects, have been handicapped by lack of organized teaching material suited to their needs. This textbook has been so planned as to cater to the needs of students in agricultural colleges. The subjects dealt with in the book include the role of Indian agriculture in the national economy, the evolution of agricultural policy, livestock and fisheries, irrigation, fertilizers and manures, land tenures and land reforms, size of holdings, agricultural labour policy, co-operative movement, agricultural indebtedness, agricultural credit, co-operative farming, agricultural marketing, community development, the new strategy of agricultural development, crop and cattle insurance, foreign trade, agricultural taxation, agricultural price policy and agriculture and the Plans. The chief merit of the book lies in providing information and data on the various aspects of Indian agriculture, as far as possible, up to the latest year, i.e., 1968-69. A significant omission appears to be, however, a chapter devoted to population problem and its effect on food supplies and nutrition.

Chapter 1 discusses briefly the role of agriculture in the Indian economy. The different strands of thought on this subject are not well-knit together, as for example, the section on "consumption expenditure" hangs loose at the end of the chapter. The discussion on the evolution of agricultural policy in India (Chapter 2) brings out clearly the hapazard unco-ordinated attempts made in this direction during the British rule, putting a brake on the rapid development of Indian agriculture. No meaningful agricultural policy was evolved until the initiation of the Third Five-Year Plan. Many instances are cited to illustrate that a well-defined agricultural policy has hardly existed and much less has been pursued. (pp. 15-16.) It is only during the period beginning with the Third Plan that the elements of a co-ordinated, meaningful agricultural policy emerged for lifting agriculture as it were by its boot-straps, as is evident from the enunciation of the new strategy for agricultural development. The break from traditional agriculture to scientific agriculture is, undoubtedly, not easy. The most encouraging feature of the new strategy is the enthusiastic response of the farmer to the new ideas, particularly relating to the adoption of recommended package of practices and other auxiliary measures for making his farm economically viable. This chapter would have gained in value had the discussion on the New Strategy of Agricultural Development which forms a separate chapter, been suitably integrated with it. While detailed information is given in respect of livestock and fisheries, irrigation and manurial economy, the chapter on land policy examines the land policy from 1947 only. A brief historical account of the evolution of land tenures and land systems in India prior to Independence would have proved useful to students in agricultural colleges.

The institutional factors which have helped or hindered the development of agriculture have been discussed threadbare. However, in the chapter on cooperative movement, inadequate emphasis is given on the role of supervision and audit. A cursory mention is made of this aspect of the co-operative movement in a sentence on page 180. "In order to safeguard the efficiency and stability of the co-operative movement it was considered that the administrative, supervisory and auditory staff of State co-operative departments should be suitably augmented." The discussion of the function and importance of audit and supervision and the role of non-official agencies of supervision in the healthy development of the co-operative movement would have been rewarding. There is also scope for improving the sequential order of presentation of the chapters devoted to the institutional factors. For example, the chapter on co-operative movement could have followed the two chapters on agricultural debt legislation and agricultural credit as a logical corollary. The appraisal of the working of the community development programme could have been made more broad-based with a view to helping the reader to view it in total perspective.

In the last chapter of the book, an objective critical assessment of progress of agriculture under the three Five-Year Plans and during the interregnum preceding the Fourth Five-Year Plan (1969-74) is given. The role of agriculture in the Fourth Plan has also been briefly described. A minor omission is in regard to the unit of measurement in Table 20.4 which gives the figures of distribution of the net and gross irrigated area between major and minor sources of irrigation (p.391). It is also not explained how the figure of 55.8 and 63.3 million acres of gross irrigated area in 1950-51 and 1955-56 respectively is estimated by the authors. While in a few tables the sources of data and information are cited, in many other tables they are not mentioned. A select bibliography and references would have enhanced the utility of this book. The above criticisms are offered not so much to detract from the value of the book as to take cognizance of them when the next edition is planned. The authors deserve warm praise for having put out this book, written in a lucid style. The book will be welcomed particularly by the students of agricultural economics as also by the policy-makers and administrators in general. However, the price of Rs. 32 for the book would seem to be beyond the reach of the students in agricultural colleges for whom it is primarily intended.

T. R. SUNDARAM

The New Strategy of Agricultural Development in Operation—A Case Study of the Kaira District in Gujarat, B. M. Desai and M. D. Desai, Thacker & Co. Ltd., Bombay, 1969. Pp. xvi+148. Rs. 25.00.

The book is the outcome of a field investigation undertaken by the Agro-Economic Research Centre, Vallabh Vidyanagar under the guidance of M. D. Desai and B. M. Desai. The objective of the study is to throw light on the organization, implementation and achievement of the High-Yielding Varieties Programme (HYVP) in respect of hybrid bajra in the Kaira district of Gujarat State for *kharif* 1967-68. The study has been divided into five chapters. The introduction gives a brief history of the evolution of hybrid bajra and its importance in the High-Yielding Varieties Programme of the State. The first chapter deals with the organizational set-up and the extent of co-ordination among various

agencies responsible for the implementation of the HYVP. The procedure for target fixation at various levels and targets of area to be brought under hybrid bajra are also critically examined in this chapter. In the next three chapters, attempts are made to examine the various aspects of seed production and distribution; and the adequacy of existing organizational arrangements for the supply of requisite inputs such as fertilizers, plant protection materials and credit. Chapter V presents an analysis of performance of the HYVP at the farm level. In the concluding chapter, recapitulation of the important conclusions that have emerged from the study and suggestions for improving upon the implementation of the HYVP are made.

It is important to bear in mind that the HYVP which is now said to be the pivot round which the new strategy of agricultural development revolve was implemented upon the edifice of progress the country had made in the three Five-Year Plans. In that period substantial change has taken place in Indian agriculture and the whole country was covered by the National Extension and Community Development Programme. Nevertheless, the programme has not been as successful as could have been hoped for. It is, therefore, significant to know in what respect the new strategy of agricultural development embodied in the implementation of the HYVP failed to achieve its objectives and why.

Successful implementation of the HYVP depends largely on the organizational efficiency in regard to the production and distribution of seeds and provision of requisite inputs such as fertilizers, plant protection materials, credit, etc. It is observed in this study that the organizational set-up in the selected districts, talukas and villages was adequate but the functions of various agencies remained to be co-ordinated and integrated. Procedural delays in the finalisation of arrangements for procurement, treatment and distribution of seeds and procedural tangle between the Government Departments engaged in the formulation of the Programme and co-operatives functioning as distributive machinery are the main obstacles for the successful implementation of the Programme at all levels. It is also observed that the targets of area to be brought under the HYVP were fixed "on inadequate and unrealistic basis with the result that an over-ambitious programme came to be formulated at all levels." The criterion followed by the Government agencies for the fixation of targets was the availability of high-yielding variety seeds. Important factors such as availability of complementary inputs, efficiency of distribution agencies and effectiveness of extension staff were not taken into consideration.

Analysis of performance of hybrid bajra at the farm level made by the authors shows that the per acre yield of hybrid bajra obtained by the participants in the programme was 80 to 95 per cent higher than that of local bajra and the net value of product per acre was also 81 to 136 per cent higher than that of local bajra. According to the authors, the convincing superiority of the hybrid bajra over the local variety is mainly responsible for whatever the success the programme has achieved in the Kaira district in *kharif* 1967-68. The important factors responsible for the shortfall in the area actually brought under hybrid bajra in relation to targets fixed for Kaira district in *kharif* 1967-68 were non-availability of fertilizers and plant protection materials in time and lack of finance,

On the basis of the findings of the study, the authors have made a few suggestions for improving the organizational efficiency for the successful implementation of the Programme. Some of them are constructive and if implemented would definitely go a long way in improving the organizational efficiency to ensure the successful implementation of the Programme. In making suggestions, the authors seem to have, however, put overwhelming faith on the efficiency of cooperatives and panchayat institutions. One of the important suggestions made by the authors is effective and formal participation of co-operatives which are responsible for distribution of hybrid seeds and requisite inputs with the formulation of the Programme. As regards the work of seed distribution, it is suggested that panchayat institutions at the district, taluka and village levels must be made involved in undertaking this activity. Looking to the past experience it is doubtful to what extent this will ensure the successful implementation of the Programme.

The findings of the study are quite interesting and revealing. In fact, they provide some explanations why our technological revolution in agriculture has not gone farther and faster than what has taken place. Incidentally, they call for utmost flexibility in organizational set-up and for drastic administrative changes in favour of more local direction. The book is valuable not only for research workers but also for those who are concerned with the implementation of the High-Yielding Varieties Programme.

N. S. SHETTY

Rural Industrialisation—The Impact of Industrialisation on Two Rural Communities in Western Ireland, Denis I. F. Lucey and Donald R. Kaldor, Geoffrey Chapman, Ltd., London, 1969. Pp. 208. 35s.

Regional imbalances resulting from uneven industrial growth have created political tensions both in developed and developing countries. In this context experience gained in Ireland is of great significance. Lucey and Kaldor have rendered signal service by conducting an extremely stimulating study on the impact of industrialization on two rural communities in Western Ireland. Fogarty, in his Foreword to the study aptly observes, "Ireland is gradually becoming equipped with means for a realistic assessment of the effects of its own drive for development... It carries a wider lesson for those concerned with rural industrialization anywhere in the world." (p. 9.) The objective of the study is to "consider the impact of new plants in two communities in West of Ireland on jobs, emigration, income, spending patterns and these communities' hitherto dominant occupation of farming."

Three chapters in the study deal with the academic discussions. Chapter II is devoted to a historical survey of industrialization and economic development in less developed as well as the developed economies. Chapter VI contains academic discussion of hypothetical industrialization effects on the rural communities in which industrial plants are located. It is observed, "The location of a new plant in a predominantly rural community can be expected to have many social and economic effects... The present study focussed primarily on the economic impact of local industrialization on households and on farm business

77

in two areas of Western Ireland." (p. 67.) Chapter VIII deals with various problems relating to "methodological considerations involved in the identification and measurement of industrialization effects in Western Ireland." (p. 89.)

BOOK REVIEWS

Of the two areas selected for the study, one is around Tubbercurry, Co. Sligo, about 120 miles north-west of Dublin and the other around Scarriff, Co. Clare, which is about 120 miles west by south-west of Dublin. The town of Tubbercurry situated in the south-western part of Co. Sligo had a population of 878 in 1961 and Scarriff which is in the eastern part of Co. Clare had a population of 600 in 1966. It is significant to note that due to lack of employment opportunities in these areas the population during the five-year period ending 1961 had declined by 55 in Tubbercurry and 98 in Scarriff. Labour started migrating to England in search of employment.

With a view to reverse this trend by launching a massive programme of rural industrialization, the Irish Government established a board (An Foras Tionscal) in 1952 which was given wide powers to acquire land, way-leave or other land or water right (if necessary, by compulsory means), to construct, adapt and maintain buildings, to provide services in connection with land, to make grants to individuals to (a) acquire land, (b) construct, adapt and maintain buildings and other works, (c) acquire machinery and equipment for an industrial undertaking, (d) provide training (either in Ireland or abroad) to workers, to make grants where necessary for the provision of infra-structural elements, especially the construction and repair of roads, bridges, harbour works and railway lines and facilities together with the provision of houses, canteens and other places of refreshment or recreation for persons employed in any such undertaking. (p. 27.)

Out of the total grants amounting to £2,78,600 received from An Foras Tionscal, three plants were established in Tubbercurry, one for the manufacture of locks (1956), another for the manufacture of ancilaries such as tools, jigs, fixtures, gauges, and moulds, etc., and all kinds of tooling equipments (1959-60) required by the first plant, and the third for the manufacture of plumbers' brassware, castings, etc., and all other metal castings (1965-66) required by the earlier two plants. It is significant to note that by the year ending 1966, the three plants established at Tubbercurry had a combined employment of 183 persons while one plant at Scarriff engaged in the manufacture of chipboards employed 194 persons. Chapter V contains descriptive analysis of the labour force of the industrial plants in the two areas. Certain personal and household characteristics of the plant employees such as sex, age, marital status, educational attainment, farm association according to residence and work are analysed in detail. Analysing the distribution of plant employees by farm work association, the study points out, "16 employees in Tubbercurry and 19 employees in Scarriff were farm operators. Fifty employees in Tubbercurry and 33 employees in Scarriff were nonoperator farm workers, while, in both areas, the majority of plant employees, 91 or 58 per cent in Tubbercurry and 99 or 65.6 per cent in Scarriff had no farm work association when this study was conducted." (p. 50.) Rural industrialization provided employment to local people as well as outsiders. As a result of this, the total population of these areas gradually increased and reached a level which prevailed in 1956. It is pointed out, "In the absence of the new plants the population of Tubbercurry would have been at least 8.22 per cent less

than its 1966 level of 937, while that of Scarriff would have been at least 11.74 per cent less than its 1966 population of 673 persons." (p. 133.) The majority of employees reported net increase in their income as a result of plant employment. Further analysis indicates that the reported increments in household income ranged from less than £50 per year to more than £550 per year. The most frequently occurring increment reported was between £200 and £250 per year. Similarly, in both the areas about 70 per cent of the increments were greater than £150 per year.

Analysis of expenditure resulting from increased income due to plant employment indicates that consumption expenditure such as purchase of household equipment, purchase of car, clothing, etc., was more compared to investment expenditure such as purchase of farm equipment or livestock, land or investment in non-farm business. Farm investment uses were reported by a somewhat higher proportion of the Scarriff employees but these were not reported exclusively by farm operators. Some non-operator farm workers reported that some of their added income was used for farm investment on their home farms. Chapter XII is exclusively devoted for the micro analysis of "increased expenditure on farm business." It is pointed out, "in the majority of cases, employment of farm operators (15 in Tubbercurry and 17 in Scarriff) at the new plants did not lead to a reduction in their farm output. In fact, in many instances farm operators reported an increase in farm output as a result of their plant employment."

It is also interesting to note that "considerable labour substitution occurred on farms whose operators had taken plant employment. Often, the operator gave up some former leisure time in order to do farm work. Rising earlier and working into evening time were reported in many instances. Farmers' wives and other family members usually did more farm work than formerly on these farms, so that in many cases total amount of time spent by all the farm family at farm work did not decrease." "Increased use was also made of the farmers' own machinery and equipment and hired machinery and equipment tended to be used more frequently as a result of the operator obtaining plant employment." "In addition to these substitution effects, there were also strong farm investment effects from the increased household income obtained by farm operators who obtained plant employment. Some of these operators bought or rented extra land. Most operators bought additional livestock. Investment in fertilizers was frequently mentioned. As a result of these substitution and investment effects, plant employment of farm operators did not, in general, result in reductions in farm output." (p. 196.)

In conclusion it will be pertinent to observe that the Irish experience in the field of rural industrialization by establishing medium size industrial plants in predominantly rural areas is of great relevance from the point of view of Indian planners who place excessive reliance on household (excluding handicrafts) and small-scale industry to achieve rural industrialization. More often than not, the locational aspect of the industry—small, medium or big—is overlooked by the Indian planners. As a result of this logical flaw in planning the so-called household and small-scale industries have tended to grow around urban centres. Hence the problem of rural industrialization has still remained unsolved. Proper approach to the problem of rural industrialization in the Indian context appears to

be to take into consideration the locational aspect of the industry irrespective of its size in the predominantly rural areas. Lucey and Kaldor's study deserves to be read and re-read by all those in India who are genuinely interested in the programme of rural industrialization.

G. A. PAI

Economic Development of the Underdeveloped Region in Italy, T. K. Meti, Economic Series No. 9, Karnatak University, Dharwar, 1969. Pp. xii + 235. Rs. 10.00.

Regional imbalances have been a major issue in the economic development, especially of developing countries. Certain areas of a developing country respond significantly to the growth stimulus, whereas others grow at a rate hardly commensurate with the size of the effort. This hiatus tends to widen with the intensity of developmental effort. A policy of relatively greater investment effort and attention in such comparatively 'drag' areas, instead of bringing them in line with the progressive regions lead to a general decline in the pace of economic change of the country as a whole without reducing disparities and involve a measure of waste of effort. Such discrepancies in the rate of development carry economic, political and social implications. Basic to these economic disparities might be physical, economic and social factors which, in their turn, determine the growth potential of a region. Sometimes, lack of social overheads is the cause of stickiness of a region. But the generation of such infra-structure is fraught with difficulty. Conditions for the optimum use of such overheads do not obtain so that investments in them without the scope for their full economic utilization turn out to be substantially a waste.

The study of regional disparities and the factors that make for them has been a major area of research to locate causes which will help formulate a strategy of growth to solve these imbalances. Meti's book which deals with such issues hold out hope of delineating factors of imbalances and offer appropriate solution to them. It has been the general impression that one of the reasons for such imbalances as between regions in a country may be its large size. But if Italy also provides a case of such disparities, it would be obvious that the size of the country is not relevant. Numerous socio-economic and political factors might jointly go to constitute the problem.

Meti starts with a review of the major growth theories in their application to different developed and developing situations. The presentation is lucid with appropriate comments on them thrown in. The treatment and the tone promise a refreshing new approach to this hitherto intricate field. A few statements that appear during the narration, however, provide a jolt to this atmosphere. For instance, it has been suggested that a higher per capita income would connote higher living standards without increasing consumption. (p. 10.) Similarly, it would be useful to understand the point made that because of complications and imprecision, population as a determinant of per capita national income yields an unsatisfactory picture of the economy. (p. 13.) Similarly, one would like to pinpoint the situations under which an increase in per capita output cannot be equated with economic welfare. (p. 14.) And yet the author's description of

the current state of the U.S. economy (p. 22) and the categorisation of a variety of dualisms that subsist and handicap development and growth and which are not all necessarily economic in nature are very interesting. (pp. 41-44.)

With this background the author starts off on a study of the economy of Southern Italy. The chapter provides the major characteristics of the region and the factors that inhibit its growth and integration with North Italy. The author's account of the political conditions in Italy and the popular attitude to and the poor influence of the central government over Southern Italy are revealing. These must have profoundly affected the efforts at the reconstruction of the region.

Southern Italy is predominantly agricultural by European standards and though the Indian reader would not miss the familiarity of the description, he would at the same time notice that India is significantly behind Southern Italy and the region has been transformed significantly since World War II by the measure of Indian achievements. The subsistence character of agriculture of Southern Italy is highlighted but not with such indicators as market-orientation or monetization of agriculture or the marketable surplus of farm products.

In the chapter on Development Policies, the author compresses the discussion a bit too much. The premises are not all supported by the facts of achievements or even by the broad frame of planning and developmental policies. The author suggests a pattern of mixed economy, but in the narrative of suggested approach to problems of Southern Italy he almost favours regimented planning. It would be equally difficult to fit regional planning into overall goals of national development which the author appears to favour. There will similarly be no difference about developing agriculture by maximizing production through the optimum use of the factors of production. But one would find it difficult to follow the thesis that industrialization of agriculture should precede its commercialization. The argument runs on that when the latter is achieved employment will be diversified through exodus of work force from agriculture to the other sectors, a phenomenon which would precisely be helped by rapid non-agricultural growth. The usual connotation of diversification of employment is also missed in such an interpretation. The suggestion about community development with the felt needs of the people in the focus as a strategy for agricultural change for Southern Italy by an Indian writer would appear to be not reinforced by experience at home. If "anarchic individualism which leads not to self-reliant or co-operative action but to a passive expectation of government assistance" (p. 103) is how the Italians of the South are described, community development with felt needs as the basis for agricultural change would appear to be foredoomed. And then one can only escape from the tenor of the argument with the suggestion for an anthropological study as a pre-condition to the initiation of the technique. Land reforms which comprise land distribution, protection of tenant cultivators and a programme for consolidation and enlargement of holdings similarly would appear in sum total to be self-defeating. The emphasis likewise on foreign aid and technical knowhow for industrialization of Southern Italy would appear to overlook their availability in North Italy far more significantly than other developing countries including India. These illustrations bring in great relief the Indian imprint of the study. Perhaps, there is also little that the Italian experience offers for streamlining Indian developmental policies.

A large portion of the chapter on Development Planning and Organisation is theoretical giving the fundamentals and objectives of planning in under-developed countries. We in our country who have such a vast literature on the subject and experience of setting objectives and targets and evaluating the achievements would not be able to much improve upon our understanding of the subject. Similarly, an account of planning performance in Italy that follows is refreshing in a limited way. The semi-autonomous agencies of development to translate the plans seem to predominate in Italy as against the decentralized popular machinery we have in India for the purpose. Whereas, the former might mean multiplicity and overlapping, in India at least it would ensure uniformity in execution through multi-tier but homogeneous popular developmental machinery. Planning in Italy, as in India, would appear to mature with time and the Italian Plan, 1966-70 appears to be more comprehensive and co-ordinated than the earlier variegated and loosely related developmental effort. The treatment of the topic throughout, however, is global. If the plan effort in Italy has been broken down as relating to the two parts of the country and juxtaposed with the respective achievements in the two areas such an effort would have brought to the surface factors that both retard and promote progress and, therefore, leading to regional imbalances.

It is not claimed that the account of the book that the review attempts is either comprehensive or entirely faithful. It would, however, give the frame of the study of planning in general but in Southern Italy in particular. The comments at different places in the review would show how far the treatment is amiss and fails to be refreshing. Of all the expectations that the title aroused, the one that is badly missed is the lessons of planning of under-developed regions in Italy and a possible solution that they would provide to the obstinate regional imbalances that emerge from developmental effort in developing countries.

M. B. DESAI

Co-operation and Integration in Agricultural Production: Concepts and Practical Application, An International Synopsis, Otto M. Schiller, Asia Publishing House, Bombay, 1969. Pp. xiii + 230. Rs. 25.00.

That voluntary joint cultivation evokes no response from the peasants and that joint cultivation co-operatives imposed on them in an authoritarian manner quite clearly demonstrate their failure is well known by now; equally well known is the fact that traditional service co-operatives do not go far enough in aiding the farmers to develop their agricultural economy. Schiller's lifelong passion was to search for alternatives and, more important, to try them out in far-flung areas. He propagated his ideas with indefatigable zeal in India too, by means of frequent contributions to Indian journals (including this journal), one official Report (Report of the German Delegation to India on Co-operative Farming, Farm Machinery, Fertilizer, Land Consolidation and Dairy Processing, Government of India, New Delhi, 1960) and talks with economists and planners in his many visits to this country. Probably because nothing less than full co-operative farming was good enough for us, not a single project, nor even a single scheme,* along

^{*} Earlier the author described his scheme as 'Individual Farming on Co-operative Lines.' Now he has preferred the term 'Co-operative Promotion of Agricultural Production.'

Schiller's lines qualified for inclusion in all the 350 pilot co-operative farming projects (with 10 co-operative farms in each project area) of the Third Plan. Serious students of Indian agriculture, however, can ill-afford to dismiss his ideas in a light-hearted manner.

The lynch-pin of the Schillerian co-operative is its emphasis on common crop rotation with individual farming. The co-operative of his conception makes a much greater thrust into actual production activities by collectivizing many decisions in respect of production and management of the farm, as compared to a 'service' co-operative, but it recognizes the value of family incentives so that in this scheme the member still harvests his own produce. In the author's earlier writings, emphasis on a new kind of land consolidation and on 'farming units' of proper sizes and shapes was all too frequent and a little too terrifying. Although rather easily manipulable in new settlements it raised doubts regarding its practicability in old villages and this was probably the reason behind its lukewarm reception in the earlier days. But in his later writings he did canvass schemes which did away with land consolidation altogether and, again, tried them. (See experiments in Egypt, Chapter V.) He was nothing if not realistic. In this book, descriptions of several experiments of each kind-with consolidation patterns of various kinds and without consolidation—in many countries, with illustrative diagrams and maps, have been provided. A common crop rotation if not acceptable fully "can be confined to the main crop."

Another direction in which the author's thoughts have turned (in Chapters VI and IX) is that of alternatives to co-operation. He has shown how small groups of neighbouring farmers (who do not qualify for formal registration under the Co-operative Law because of their smaller than the minimum requisite number) can rearrange their activities with profit if they plan and co-ordinate their production. Examples from West Germany, France, Italy, Netherlands, etc., are interesting in this context. It is noteworthy that both in France and the Federal Democratic Republic of Germany legal recognition has been given to groups as small as consisting of 2 to 5 members.

In addition, the book surveys the more familiar experiments in joint cultivation in several Communist and non-Communist countries and discusses their problems. A refreshing example of the author's positive and dispassionate attitude is to be found in his criticism of the manner in which collective farming was abandoned by Poland and Yugoslavia: "... it would have been possible to direct the process of decollectivization in such a way that it would not have meant a return to the former primitive small-scale farming, but a development towards a new order of progressive individual farming."

It would not do to belittle the difficulties facing a Schillerian co-operative. A new form of land consolidation (which allows a *scientific* fragmentation into 3, 6 or 8 plots, according to the requirements of rotation), combination of very small farming units into *jointly* worked units, field operations on the 'long line' with mechanical equipment, etc., are bothersome enough. But even if consolidation is ruled out as impracticable and crop rotation is partial, several difficulties would still stand in the way of the management of the co-operative in getting the *individual* farmer to fall in line with the general plan of production, the general

time-schedule of operations and the general discipline. It will not have that unrestricted manoeuvreability which full land pooling gives to the management of a co-operative farm. And Schiller is far from claiming all the technical advantages of co-operative farming for his scheme. But it has two virtues: one, it respects the incentive of private family farming; two, it has great flexibility and adaptability to varying local conditions. And therefore it has what co-operative farming lacks: acceptability. Not all the items of his more complete agenda need be taken up simultaneously; certain aspects of it could be tried in a variety of situations, in a variety of forms, co-operative or other. What we need for verification are experiments near at hand. If a few such are taken up, India will have paid a handsome tribute to the memory of a genuine friend of her agriculture.

S. H. DESHPANDE

JOURNAL OF AGRICULTURAL ECONOMICS

Vol. XXI, No. 3 (September 1970):

The Mechanisation of British Farming 1910-1945 A New Study of United Kingdom Cereal Supply The Analysis of Net Farm Income: An Examination of Farm Management Survey Data Simulation of Agricultural Systems

Symposium on the Food Industry:

Developments in the Food Manufacturing and Distributive Industries Labour Productivity and Concentration in the Food

Processing Industries
The United Kingdom Food Processing and Distributive Trades: An Appraisal of Public Policies ...

With Reviews, etc. Journal of Edith H. Whetham D. R. Colman

D. K. Britton P. J. Charlton and S. C. Thompson

> J. E. Bessell R. C. Rickard

Kelsey van Musschenbroek

D. I. Bateman

W. P. I. Maunder

THE AGRICULTURAL ECONOMICS SOCIETY

Published thrice yearly; annual subscription 63s.

tor: O. J. Beilby, Department of Agriculture and Fisheries for Scotland, St. Andrew's House, Edinburgh, EHI 3DA, Scotland.

Treasurer: Ian G. Reid, Department of Agricultural Economics, Wye College, Ashford, Kent, to whom all enquiries regarding membership of the Society and orders for Journals should be sent.