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PUBLICATIONS RECEIVED

Bhuleshkar, Ashok V., *Bargaining Co-operatives with special reference to Quick Frozen Food Industry in Great Britain*, Jawaharlal Nehru Memorial Institute of Development Studies, Malad (West), Bombay-64, 1973. Pp. ix+194. Rs. 36.00.

Chaudhuri, Pramit (Ed.), *Aspects of Indian Economic Development*, George Allen & Unwin Ltd., London, Blackie & Son (India) Ltd., Bombay, 1971. Pp. 288. £2.25.

Chaudhuri, Pramit (Ed.), *Readings in Indian Agricultural Development*, George Allen & Unwin Ltd., London, Blackie & Son (India) Ltd., Bombay, 1972. Pp. 192. £2.00.

Farkas, P., Hernadi, A., Inotai, A., Kollath, Gy. and Sandor, A., *The Economic Situation of Developing Countries in 1971*, Studies on Developing Countries No. 63, Center for Afro-Asian Research of the Hungarian Academy of Sciences, Budapest, Hungary, 1972. Pp. 44. \$1.60.

Gaikwad, V. R., Tripathi, B. L. and Bhatnagar, G. S., *Opinion Leaders and Communication in Indian Villages*, Centre for Management in Agriculture, Indian Institute of Management, Ahmedabad, 1972. Pp. 147. Rs. 8.00.

George, P. S., Choukidar, V. V. and Dave, M.B., *Consumption Pattern and Preferences for Rice: A Study in Andhra Pradesh, India*, Centre for Management in Agriculture, Indian Institute of Management, Ahmedabad, 1972. Pp. 223. Rs. 10.00.

Halayya, M., *An Economic Analysis of the Indian Tea Industry and Public Policy*, Research Publication Series 14, Karnatak University, Dharwar, 1972. Pp. v+245+xxi. Rs. 25.00. Calico. Rs. 30.00.

Kashive, R. C. and Williams, S. W., *Economics of Soybean Production in Madhya Pradesh*, Jawaharlal Nehru Krishi Vishwa Vidyalaya and University of Illinois/USAID, Jabalpur, M.P., August, 1972. Pp. 100 (mimeo.).

Khan, Waheeduddin and Tripathy, R. N., *Intensive Agriculture and Modern Inputs: Prospects of Small Farmers—A Study in West Godavari District*, National Institute of Community Development, Hyderabad-30 (A.P.), 1972. Pp. viii+124. Rs. 16.00.

Muthayya, B. C., *Child Welfare: Existing Conditions and Parental Attitudes—A Purposive Study in Andhra Pradesh*, Sponsored by the Netherlands Foundation for Child Welfare, Amsterdam, National Institute of Community Development, Hyderabad-30 (A.P.), 1972. Pp. vii+184. Rs. 20.00.

Patel, M. L. (Ed.), *Agro-Economic Problems of Tribal India*, Progress Publishers, Progress Book Depot, Bhopal, 1972. Pp. x+136. Rs. 20.00.

Pesticides Association of India, *Pesticides Market Studies, Vol. VI—Guntur District, Andhra Pradesh (Resurvey)* New Delhi, 1972. Pp. 72.

Pesticides Association of India, *Pesticides Market Studies, Vol. VII—Ahmednagar District, Maharashtra State (Resurvey)*, New Delhi, 1972. Pp. 166.

Pesticides Association of India, *Pesticides Market Studies, Vol. VIII—Mehsana District, Gujarat State (Resurvey)*, New Delhi, 1972. Pp. 112.

Pesticides Association of India, *Pesticides Market Studies, Vol. IX—Shahabad District, Bihar State (Resurvey)*, New Delhi, 1972. Pp. 95.

Pesticides Association of India, *Pesticides Market Studies, Vol. X—Kulu District (Himachal Pradesh) (Resurvey)*, New Delhi, 1972. Pp. 91.

Rath, Vimal, *Index of Indian Economic Journals (1916-1965)*, Gokhale Institute of Politics and Economics, Poona-4, Orient Longman Limited, New Delhi, 1971. Pp. liv + 302. Rs. 25.00.

Sampath, R. K. and Ganesan, Jayalakshmi, *Economics of Dry Farming in Tamil Nadu*, Madras Institute of Development Studies, Sangam Publishers, Madras-1, 1972. Pp. viii + 128. Rs. 12.00.

Southworth, Herman (Ed.), *Farm Mechanization in East Asia*, The Agricultural Development Council, Inc., New York and Tanglin, Singapore, 1972. Pp. 432.

Tandon, B. K. and Murdia, B.S., *Economic Viability of Farmers in Udaipur District*, Report of a Study sponsored by the Research Programmes Committee, Planning Commission, Government of India, Department of Economics, School of Basic Sciences and Humanities, University of Udaipur, Udaipur, 1972. Pp. xx+249. Rs. 35.00.

Whitcombe, Elizabeth, *Agrarian Conditions in Northern India, Volume I: The United Provinces Under British Rule, 1860-1900*, University of California Press, Berkeley, California, U.S.A. and Thomson Press (India) Limited, New Delhi, 1971. Pp. xxviii+330+11 figures. Rs. 55.00.

Wunderlich, Gene and Gibson, Jr., W. L. (Ed.), *Perspectives of Property*, Institute for Research on Land and Water Resources, The Pennsylvania State University, University Park, Pennsylvania, 1972. Pp. vi + 210. \$3.50.

ANNOUNCEMENT

SUBJECTS SELECTED AND THE VENUE FOR THE NEXT CONFERENCE OF THE SOCIETY

The 33rd Annual Conference of the Society will be held from 26th to 28th December, 1973 under the auspices of the A.P. Agricultural University, Rajendranagar, Hyderabad. The following subjects have been selected for discussion at the Conference.

1. Integrated Area Development with reference to District Planning.
2. Benefit-Cost Analysis of Agricultural Projects.
3. Agricultural Input Supply Systems including Marketing.

The synopses of these subjects are given below. Papers (in triplicate along with summaries) for discussion at the Conference should reach the Society's Office not later than September 15, 1973.

SYNOPSIS

1. INTEGRATED AREA DEVELOPMENT WITH REFERENCE TO DISTRICT PLANNING

In view of the fact that an aggregative approach to development results in unbalanced development of regions, the policy of area development is pleaded. The strategy of area development helps taking into account forward and backward linkages and through them the optimum development of a region. So far, development of rural areas was considered in isolation. The area development approach now developed in the schemes of growth centres ensures integration of rural and urban development and thus the development of the region as a whole.

The study of integrated area development would relate to (i) concepts, (ii) techniques, and (iii) evaluation.

I. *Concepts and Definitions*

The area approach would require at the very outset a clear and concrete definition of area as apart from a region. Further, if the emphasis is on the balanced development of different regions, the concept of backwardness may also have to be clearly defined so that special problems of such regions may be adequately attended to. To mark out developed regions from backward ones, indicators of development may have to be evolved. The suitability of such indicators may also be discussed. The concepts of backward regions

may have to be developed keeping in view the needs for special treatment, if any, for different types of regions such as tribal area, desert or drought-affected area, river irrigation command area, etc. One may also discuss the appropriateness of district or a block as a unit for formulation of integrated area development plans.

II. *Techniques*

The integrated area development in the context of the growth centres strategy may require evolution of appropriate technique for locating growth centres. In particular, measures of centrality may be discussed and suitability of Gutmen's scale for the same can be examined. Discussion regarding locating the growth centres may cover related issues such as the concept of population threshold, range of goods traded, types of functions the growth centres are required to perform and the area of hinterland served by these centres.

III. *Evaluation*

There are twenty growth centres where schemes of integrated area development are in various stages of operation. The general settlement plans, general transportation plans, etc., are being evolved in these regions. Evaluation of working of these centres may be fruitful. A comparative study of earlier approaches like Community Development and extension blocks, IADP, etc., with integrated area development may be useful. The need for integration of various programmes of the government with the integrated area development may also be examined. The programmes to be considered in this context may include Crash Scheme for Rural Employment (CSRE) and 'Pilot Intensive Rural Employment Project' (PIREP). Besides these recently started programmes, there are others already in operation such as agricultural extension, Community Development, IAAP, Lead Bank, etc. The problem of integration of different programmes with the area development may also be examined.

2. BENEFIT-COST ANALYSIS OF AGRICULTURAL PROJECTS

During the last two decades in particular, the economics of long-term investment in private as well as public enterprises has received considerable attention. Valuable work on the conceptual and methodological aspects as well as on their applications to specific investment projects in various fields are now available both in India and outside. Agriculture has been one of the earliest and most frequented field of application of this analytical technique. It relates not only to investment in irrigation, flood control, electrification, land development, mechanization, but also to investment in research

in agriculture. Papers covering any of these aspects of benefit-cost analysis in agriculture should be of interest.

The problems associated with project analysis or benefit-cost analysis may be broadly divided under two heads : (i) the problems involving measurement of benefits and costs; (ii) the problem of choosing an appropriate interest or discount rate to compare different streams of benefit and cost of a project through time. In regard to each of these two aspects, differences may arise depending upon whether the investor is a private entrepreneur or a public agency. It would be useful to draw distinction between these alternative points of view while analysing specific investment projects. Specifically, discussion on the following aspects of agricultural investment projects in the course of analysis of specific projects, should help throw light on them.

(a) The estimation of the stream of benefits. In agricultural investments in particular, full benefits take quite sometime to accrue regularly, for a variety of reasons. This long gestation period is sure to have its impact on the economic productivity of the project. A discussion of the implications of this with specific data may highlight the need for and possibility of improving the economics of such projects.

(b) In valuing the stream of benefits (as also of costs) relative prices in future have to be estimated. This sometimes involves a number of difficulties; discussion of this aspect would be of interest.

(c) Costs include not only direct project costs but also other associated increments or reduction of costs. In certain cases the alternative cost of producing the product may be the more appropriate cost to use. These may be discussed.

(d) Various methods have been suggested to compare the two streams of costs and returns to determine the economic feasibility of a project or to choose from amongst the alternative projects. The use of an appropriate discount rate or the calculation of the internal rate of return are the two major alternatives. These alternative approaches to discounting benefits and costs, or what some like to refer to as cash flows, may be examined in terms of specific investment projects. In Indian studies these have not received adequate attention so far.

(e) The difference between the decisions by private and public enterprise involves mainly the valuation put to products and factors, as also to the rate of discount. The question of calculation of shadow prices for public enterprises in the field of agriculture deserves more attention than has been paid to it so far.

(f) In deciding upon public investment projects in agriculture there has been a shift of emphasis from the financial feasibility of a project to its benefit-cost ratio. A full discussion of the implications of this at the private and public enterprise level might be worthwhile, if only to clarify important issues of public policy involved in it.

This field of research is quite wide, and naturally invites empirical exercises. Empirical analysis of any specific agricultural investment project would make distinct contribution to our understanding of Indian agricultural development provided any of the above aspects is rigorously analysed in terms of the data available. In the process it would be worthwhile to draw specific attention, with fully worked out examples, wherever possible, to the wastage involved in undertaking investment projects in agriculture without adequate prior project analysis.

3. AGRICULTURAL INPUT SUPPLY SYSTEMS INCLUDING MARKETING

A system analysis would involve ordering of the supplies in keeping with the need arising for their use and would be concerned with an integrated approach to the problems of production, processing and distribution. Though a complete system of agri-business would include both inputs and output, for the purpose of discussion, the scope of the subject may be limited to purchased material inputs. Agricultural products and use of labour, hired or own, would be excluded. Three types of problems that can be studied are : (1) relationship between input supply and output performance, (2) efficiency of input supply system, and (3) public policy.

I. *Relationship of Input Supply and Output Performance*

The relationship between supplies of inputs and output performance can be examined regarding inputs like seed, water, fertilizers, pesticides, farm machinery, etc., purchased by farmers from the market, to study (a) the relationship between input and output prices, (b) the regional variations in input supplies, (c) the variations in systems of supplies for different inputs, (d) the impact of variations in the supply systems on production at the farmers' level, including discussion of problems faced by farmers in obtaining the necessary supplies of different inputs through different systems, and lastly, (e) the infra-structure for input supply-systems and constraints imposed by limited facilities.

II. *Efficiency of Input Supply System*

The problem of efficiency of input supply system can be studied at two levels : (i) the estimation of demand for different inputs and its comparison with available supplies; and (ii) the efficiency of supply system in terms of distribution costs at various levels, and the efficacy of the system in making

available necessary supplies at appropriate time and place. In the context of distribution, one may also include the study of promotional work undertaken for demand creation for inputs and economics of such an activity. This study may be extended to include supply of ancillary services to be provided by the input supply systems. One may use norms to measure efficiency, on the basis of alternative markets or one may employ the techniques of operations research to generate efficient input supply systems.

III. *Public Policy*

In a developing economy for the agricultural sector the promotional work cannot be fully internalised by the individual producer or the marketing agency or both. The Government may be required to undertake these functions at least initially. The role of the government may be extended beyond the initial stages in case the supplies fall short of the demand generated as a result of the public promotional activities. As an arm of the public sector, co-operatives have an important share in the distribution of the inputs. The role of the Government and co-operatives may be evaluated in regard to price policy, quality control, system of supply and providing overall guidelines.

GUIDELINES FOR SUBMISSION OF PAPERS BY AUTHORS

1. Subjects: The objective of the *Journal* is to provide a forum for dissemination and exchange of findings of research on agricultural economics. Purely descriptive material is not appropriate for such a journal. Papers dealing with (i) new developments in research and methods of analysis, or (ii) which apply existing empirical research methods and techniques to new problems or situations, or (iii) which attempt to test new hypotheses/ theoretical formulations or modifications of existing theories or policies to explain economic phenomena especially in the Indian context, or (iv) papers based on research done by the authors bringing out new facts or data presented in an analytical frame will be preferred. Younger economists are advised to seek guidance from their seniors in the preparation of the paper for the *Journal*. A one-page statement indicating the author's own assessment of the importance and relevance of the findings reported in his paper in the context of recent researches would be welcome.

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