



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*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](mailto: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 XXXI  
No. 4

ISSN 0019-5014

OCTOBER-  
DECEMBER  
1976

# INDIAN JOURNAL OF AGRICULTURAL ECONOMICS



INDIAN SOCIETY OF  
AGRICULTURAL ECONOMICS,  
BOMBAY

## REVIEWS IN BRIEF

*Small Farm Agricultural Development Problems*, Edited by Huntley H. Biggs and Ronald L. Tinnermeier, Colorado State University, Fort, Collins, Colorado, U. S. A., 1974. Pp. x + 168.

This volume brings together nine papers dealing with various aspects of the small farm sector, contributed by experts belonging to the disciplines of anthropology, animal science, economics, geography, sociology and water law. These papers were presented at a series of seminars organized at the Colorado State University during 1973 and 1974. The first three papers examine some general aspects relating to the small farm sector in developing countries. Huntley H. Biggs in his paper makes out a case for devoting increased resources to raising productivity levels on small farms and indicates that economic growth has failed to alleviate poverty among the majority of the population in developing countries. It is implicitly assumed in the paper that the small farm sector is not likely to disappear in response to general economic growth. Programmes designed to enhance the levels of living for small farmers could assist in alleviating the inter-related problems of poverty, increasing levels of unemployment and worsening maldistribution of income. The second paper by Wyn F. Owen stresses the social welfare function of the small farm sector in the development process. It recognizes the importance of large commercially oriented farmers in providing output surpluses for domestic consumption and for exports. The need is stressed for viewing the small farm sector in its own right and for formulating programmes for expanding the capacity of the small farms to perform their transitory roles. While small farm-oriented development programming should clearly deserve greater priority, it is suggested that such a thrust should not be pursued at the expense of an expanding and dynamic commercial farm sector. Some aspects of resource management by traditional farmers covering water, slope, soil, climate and space are discussed in the third paper by Gene C. Wilken. The problems of implementing a successful small farmer development programme are discussed in the next six papers. John L. Schultz in his paper deals with primitive and peasant economies and indicates that in peasant societies cultural values and attitudes, beliefs and behaviour patterns often play an equal or greater role than economic considerations in influencing the decisions of farmers in the adoption of a new production technology. Based on data obtained through in-depth interviews of a sample of 60 cultivators in two villages of Raipur district of Madhya Pradesh, Linwood L. Hodgdon makes an attempt to identify in his paper the factors affecting the adoption of new agricultural inputs and practices at the local village level and influences originating outside the narrow confines of the village. It is concluded that the role of input suppliers in the conveyance of new production technologies could be crucial to the adoption or non-adoption by the small farmers. Ronald L. Tinnermeier focusses attention in his paper on a few important aspects of the general issue of agricultural credit for small farmers. The scope for intensive

livestock production on small farmers in developing countries is discussed by Gerald M. Ward in his paper, based on a study of the historical development of agriculture in the West. The European historical example suggested that intensive livestock production created a disciplined and skilled labour force and an entrepreneurial management class and fostered the development of capitalistic institutions. George E. Radosevich examines in his paper alternative water user organizations for small farmers. Organizational forms for water use in the United States and Spain are examined in terms of their usefulness for developing countries. The magnitude of co-operation among farmers in the United States for efficiently utilizing local water resources has ranged from independent action by them in small groups to the most complex of local organizations which included private commercial and mutual irrigation companies, quasi-private water user associations and quasi-public irrigation districts. A number of benefits to small farmers resulting from forming water user organization are outlined. In the last paper, Huntley H. Biggs describes the key features of the Puebla project initiated in Mexico in 1967 from the point of view of its approach to the research and extension problems of small-scale subsistence farming and examines the obstacles to extending new production technologies to a larger number of farmers. It is noted that it was relatively simple to solve the technical problem of devising a new production technology for substantially raising yields; but the problem of generating lasting farmer participation has proved to be difficult. The papers included in this volumes provide valuable insights into the significance of the small farm sector in terms of the resources allocated to subsistence production and the problems associated with devising a suitable programme to raise the levels of productivity on these farms and enable the reader to view the problems of small farmers in their totality.

*National and International Agricultural Research and Extension Programs*, James K. Boyce and Robert E. Evenson, Agricultural Development Council, Inc., New York, 1975. Pp. xii+229. \$ 4.50.

This monograph embodies an extension and updating of an earlier published study on "Investment in Agricultural Research Extension: An International Survey" by Yoav Kislev and Robert Evenson. It is "a compilation of international data on investment in research and extension directed towards the improvement of agricultural crops and livestock production." It is divided into six chapters. The first chapter provides an overall summary of data on investments in agricultural research and extension by major regions of the world, by grouping the countries according to per capita income levels and by geo-climate regions. The 'core' data relating to investment in conventional agricultural research and agricultural extension and agriculturally related scientific research in the public sector are discussed in detail in Chapter II. It presents several measures of research and extension intensity. The emerging system of international centres for agricultural research is discussed in Chapter III. The assessment of world-wide agricultural research

is supplemented by an analysis made in Chapter IV of the important role played by the private or industrial sector in agricultural research activity. Data on the organization of public sector research systems and commodity orientation of particular research programmes are provided in Chapter V, which help to make inferences regarding the skill level of scientists. The last chapter contains a survey of literature dealing with the economic returns to agricultural research and extension and analyses the factors determining investment in research and extension. The findings of this study suggest that the investment policy has been far from optimal, particularly in the low-income countries. The results of regression analysis of research and extension investment indicated that the investment levels in both research and extension are found to be associated with the value of agricultural product. It essentially showed that larger agricultural countries invested more. The evidence regarding extension investment was that it showed relatively normal rates of return. The results of studies on agricultural research investment reviewed in this monograph appeared to cast doubt on the "induced institutional change" hypothesis of Hayami, Ruttan and Binswanger. Clear evidence is presented to show that countries with significant exports and imports spent more on research, but not on extension, showing a high degree of rationality. The prices of scientific resources appeared to influence investment as expected. The new international centres system has been found to be productive. This monograph is an invaluable addition to the sparse literature available on the subject and provides an international perspective to the study of the role of investment in research and extension programmes in the development of agriculture.

*Marginal Farmers and Agricultural Labourers in South Kanara District: An Economic Analysis*, N. K. Thingalaya, Economic Research Department, Syndicate Bank, Manipal, Karnataka, 1976. Pp. 111.

An attempt has been made in this brochure to study the problems of marginal farmers holding 2.5 acres or less each and agricultural labourers earning 50 per cent or more of their income from agricultural wages in Udupi and Coondapur taluks of South Kanara district in Karnataka. The field survey undertaken in 1975 covered a selected sample of 1000 marginal farmers and 500 agricultural labourers in both the taluks under the Marginal Farmers' and Agricultural Labourers' (MFAL) Development Agency established in 1971. Divided into seven chapters, the first chapter deals with the problem of marginal farmers in the rural economy, the scheme for the development of marginal farmers and agricultural labourers and the objectives of the study. Chapter II analyses the agro-economic background of the South Kanara district with a view to providing a perspective of the whole problem. On the basis of available data, it reviews the agricultural situation prevailing in the two taluks selected for the study. The next chapter outlines the methodology adopted for the sampling design of the survey and

describes the characteristic features of the selected villages. The economic profile of the sample of marginal farmers is presented in Chapter IV. The economic conditions and problems of agricultural labourers are examined in Chapter V with special reference to their pattern of living, consumption expenditure and indebtedness. Chapter VI reviews the various developmental measures which are in operation in the two taluks, aiming at the overall improvement of agricultural conditions in the district. The last chapter summarises the major findings of the survey. Based on the findings, it spells out the line of action that needs to be taken for improving the coverage of the scheme with a view to helping a larger number of the weaker sections of the community. The study revealed that the marginal farmers in the size-groups 1.0-1.5 acres and 1.5-2.0 acres managed their farm and family affairs within their means. The poorest among the marginal farmers in the size-groups below one acre incurred a deficit, varying from Rs. 101 to Rs. 231 per family. A major portion (45 per cent) of the borrowings of marginal farmers came from co-operative banks, 10 per cent was provided by commercial banks and the rest was met from non-institutional credit agencies. Over 50 per cent of the borrowed funds was utilized by them for productive purpose. The agricultural labourers were employed for about 220 days in a year, of which employment on the farm accounted for 169 days. They were found to have an average deficit of Rs. 70 per family per annum and those in the income group below Rs. 1,000 had the highest deficit of Rs. 102 per family per annum. About 60 per cent of the agricultural labourers borrowed either from institutional financial sources or from private sources. Their dependence on non-institutional sources was found to be larger and perpetual. A review of the progress made by MFAL project in the two taluks between 1971 and 1975 showed that while some progress was achieved in the case of different programmes under animal husbandry excluding schemes for poultry and piggery development, supply of agricultural implements, seeds and fertilizers and demonstration of improved practices, little progress was made in regard to developmental schemes like rural works programme and custom service centre. It is observed that on the whole, the assistance given under the scheme has made a significant impact on the majority of identified marginal farmers and agricultural labourers.

*Rural Co-operatives as Agents of Change: A Research Report and a Debate*, Rural Institutions and Planned Change, Vol. VIII, United Nations Research Institute for Social Development, Geneva, Switzerland, 1975. Pp. xii + 116. \$ 2.50.

This final volume of the multi-national study on rural co-operatives and related institutions as agents of planned change embodies a General Statement summarising the major research conclusions of the study, which was discussed at a meeting in Geneva in November, 1972 by representatives of United Nations, inter-governmental and non-governmental organizations involved in promoting the co-operative movement in developing countries, and by experts from international organizations and the staff of the Institute.

The proceedings of the meeting (Record of Debate) and Supplementary Notes citing the evidence for the various conclusions made in the General Statement are also incorporated in this volume. The findings of the study are based on field research conducted in 1968-70 which included 40 case studies of individual co-operatives concerned with one or more functions such as credit, consumers stores and services, production or marketing and related institutions in Asia (Ceylon, Iran and Pakistan), Africa (Cameroon, Ghana, Kenya, Tanzania, Tunisia, Uganda and Zambia) and Latin America (Colombia, Ecuador and Venezuela). The issues discussed at the meeting were concerned with the methodology of the study (case study method), the objectives of rural co-operatives, and the pre-requisites for rural co-operatives. A major conclusion of the study was that rural co-operatives in developing areas brought little benefit to the poorer sections of society and cannot be generally regarded as agents of change and development for such groups. It was the better-off rural people who mainly took advantage of the co-operative services and facilities such as government supported credit and technical assistance channelled through co-operatives. The need is stressed for a serious review of co-operative policy for considering not only possible adjustments of co-operative methods and procedures to meet some of the problems encountered but for examining the possibilities and comparative advantages of alternative institutional arrangements to promote socio-economic development in the rural areas.

## ARTHA VIJNANA

Quarterly Journal of the  
Gokhale Institute of Politics and Economics

CONTENTS

Vol. 18, No. 4

December 1976

INCOME, SAVING AND INVESTMENT IN AGRICULTURALLY  
PROGRESSIVE AREAS IN AHMEDNAGAR DISTRICT,  
MAHARASHTRA STATE (1969-70 to 1971-72)

*M. P. Khare*

1. Introduction
2. Structure of Assets
3. Asset Formation
4. Saving
5. Consumption
6. Labour Households
7. Summary

Subscription Rates (inclusive of postage)

Annual : Rs. 25; \$7.50; £2.25.      Single issue: Rs. 7.50; \$2; £0.75

Please address all correspondence relating to academic matters (*e.g.*, articles, book reviews, etc.) to Dr. Vasant P. Pethe, Managing Editor, *Artha Vijnana* and other correspondence (*e.g.*, subscriptions, etc.) to the Editorial Assistant, *Artha Vijnana*, Gokhale Institute of Politics and Economics, Poona-411 004, India.



## PUBLICATIONS RECEIVED

Agro-Economic Research Centre, *Saving and Investment in an Agriculturally Prosperous Area (A Study in the Surat District)—Combined Report 1969-70—1971-72, General Report* by M. D. Desai. *Case Studies* by A. D. Chauhan, Research Study No. 47, Sardar Patel University, Vallabh Vidyanagar, 1976. Pp. 186+iii+xvi.

Andrew, Chris O. and Hildebrand, Peter E., *Planning and Conducting Applied Research*, MSS Information Corporation, New York, U.S.A., 1976. Pp. x+116. \$5.00.

Arnon, I., *The Planning and Programming of Agricultural Research*, Food and Agricultural Organization of the United Nations, Rome, Italy, 1975. Pp. xii+122.

Bandyopadhyaya, Kalyani, *Agricultural Development in China and India: A Comparative Study*, Wiley Eastern Limited, New Delhi-16, 1976. Pp. viii+204. Rs. 30.00.

Bhati, J. P., *A Study of Incomes, Savings and Investments Pattern in an Agriculturally Progressive Area of Himachal Pradesh (Kangra District), Reference Year 1973-74*, Agro-Economic Research Centre, Himachal Pradesh University, Simla, June, 1976. Pp. 155 (mimeo.).

Brahmbhatt, D. M., *An Economic Profile of the Kadana Irrigation Project and Its Command Area*, Research Study No. 45, Agro-Economic Research Centre, (for Gujarat and Rajasthan) Sardar Patel University, Vallabh Vidyanagar, 1976. Pp. 310+viii (mimeo.).

Dasgupta, Subhachari and Bhagat, M. G. (Eds.), *New Agricultural Technology and Communication Strategy*, National Institute of Bank Management, Bombay, 1976\* Pp. xiv+310. Rs. 45.00.

Desai, B. M., Gupta, Ranjit, Moulik, T. K. and Vyas, V. S., *Rural Development for Rural Poor—Dharampur Project, Vol. II: Contours of Poverty and a Plan for Action*, CMA Monograph No. 63, Centre for Management in Agriculture, Indian Institute of Management, Ahmedabad, July, 1976. Pp. xii+193. Rs. 10.00.

Donald, Gordon, *Credit for Small Farmers in Developing Countries*, Prepared for the U.S. Agency for International Development by the National Planning Association, Westview Press, Inc., Boulder, Colorado, U.S.A., 1976. Pp. xi+286.

Karnataka, Government of, *Economic Development of Bijapur District under Drought Prone Areas Programme with World Bank Assistance*, Project Formulation Unit, Directorate of Project Formulation, Evaluation and Manpower, Planning Department, Bangalore, 1973. Pp. xiv+346+11 maps.

Karnataka, Government of, *Evaluation of Artisan Training Institutes in Karnataka*, Directorate of Project Formulation, Evaluation and Manpower, Planning Department, Bangalore, 1974. Pp. 116.

Kearl, Bryant (Ed.), *Field Data Collection in the Social Sciences: Experiences in Africa and the Middle East*, Agricultural Development Council, Inc., New York, U.S.A., 1976. Pp. xxiv+200. \$4.50.

Mukhopadhyay, Sudhin K., *Sources of Variation in Agricultural Productivity: A Cross-Section Time-Series Study in India*, The Macmillan Company of India Ltd., New Delhi-2, 1976. Pp. xii+121. Rs. 40.00.



Mysore, Government of, *Evaluation Report on the Scheme of the Agricultural Refinance Corporation for Reclamation and Development of Land under the Tungabhadra Project—Left Bank Canal Ayacut*, Directorate of Evaluation and Manpower, Planning Department, Bangalore, 1972. Pp. 50.

Patel, V. C. and Desai, M. D., *Factors Affecting Milk Supply to Co-operative Dairies in Gujarat—A Study of Amul and Dudhsagar Dairies*, Research Study No. 46, Agro-Economic Research Centre (for Gujarat and Rajasthan), Sardar Patel University, Vallabh Vidyanagar, 1976. Pp. 44+vii (mimeo.).

Patil, R. K., Datye, K. R. and Bhide, S. B., *Appraisal of Rural Development Project through Systems Analysis—A Case Study of Rural Electrification Programme*, National Institute of Bank Management, Bombay, 1976. Pp. 102. Rs. 25.00.

Pyatt, Graham and Thorbecke, Erik, *Planning Techniques for a Better Future*, International Labour Office, Geneva, Switzerland, 1976. Pp. vii+91. 17.50 Swiss francs.

Satyaprakash (Ed.), *Indian Science Index 1975*, Indian Documentation Service, Gurgaon, Haryana, 1976. Pp. xvi+140. Rs. 50.00.

Singh, Harbans, Rana, R. S., Swarup, R. and Tewari, R. N., *Fruit Industry of Himachal Pradesh in Retrospect and Prospect*, Agro-Economic Research Centre for H. P. and Adjoining Hilly Areas, Himachal Pradesh University, Simla, 1975. Pp. 39 (mimeo.).

Sinha, P. R. R., Chakravarty, T. K. and Arya, H. P. S., *Village-Level Workers—A Study of Factors Influencing Their Performance*, National Institute of Community Development, Rajendranagar, Hyderabad-30 (A.P.), 1976. Pp. vii+111. Rs. 40.00.

Sinha, P. R. R., Kolte, N. V. and Arya, H. P. S., *Communication in Developmental Administration—A Study of Inter-personal Communication in Three Indian States*, National Institute of Community Development, Rajendranagar, Hyderabad-30 (A.P.), 1976. Pp. viii+123. Rs. 40.00.

Sinha, Radha, *Food and Poverty: The Political Economy of Confrontation*, Croom Helm Ltd., London, 1976. Pp. ix+1976. £6.50.

Stevens, Robert D., Alavi, Hamza and Bertocci, Peter J. (Eds.), *Rural Development in Bangladesh and Pakistan*, The University Press of Hawaii, Honolulu, U.S.A., 1976. Pp. xiii+399. \$15.00.

Thingalaya, N. K., *Marginal Farmers and Agricultural Labourers in South Kanara District: An Economic Analysis*, Economic Research Department, Syndicate Bank, Manipal, Karnataka, 1976. Pp. 111.

Tyagi, S. S., *Small Farmers' Development Programme in District Ambala (Haryana): An Evaluation of Progress and Problems*, Research Study No. 75/2, Agricultural Economics Research Centre, University of Delhi, Delhi-7, 1975. Pp. 70 (mimeo.).

The World Bank, *Landsat Index Atlas of the Developing Countries of the World*, Washington, D. C., U.S.A., 1976. \$12.00 (Distributed by the Johns Hopkins University Press, Baltimore and London).