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

*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 XVI
No. 3

ISSN 0019-5014

JULY-
SEPTEMBER
1961

INDIAN JOURNAL OF AGRICULTURAL ECONOMICS

INDIAN SOCIETY OF
AGRICULTURAL ECONOMICS,
BOMBAY

The analysis of the data has been carried out very extensively encompassing a hundred tables some of which provide for the first time information on some aspects of social demography. For example, in Chapters IV and V are contained important facts for both sociologists and demographers on matters such as age at first marriage, proportion of child marriages, percentage of remarriages, the average amount and proportion of marriages in which a dowry was paid and/or debt incurred for the bride or bridegroom, and so on. Similarly, the survey has furnished in great detail morbidity data for the rural communities.

The analyses and conclusions by the author regarding the interrelation of marital fertility and other biological and social factors are significant though somewhat controversial. Chapter VIII devoted to this presents findings that are contrary to the general opinion among the demographers. The author states that (*i*) age at present marriage, (*ii*) difference between the ages of husband and wife, (*iii*) order of delivery or in other words number of previous children, (*iv*) income, and (*v*) caste show 'no positive evidence that any of these factors has any influence on marital fertility' (p. 72). This inference is based upon the chi-square test of significance. What is, however, not very convincing to the reviewer is how far the chi-square test can be applied to examine phenomena of this kind some of which have important bearing in time dimension. Can the chi-square test here give conclusive evidence of relationship ?

This volume has, however, aroused (what is most essential to research) further thinking on the controversial issue of the effect of socio-economic factors on fertility, an area where too much is presumed or taken for granted from Western experience. The presumtions are sustained by the lack of comprehensive studies in India to investigate the nature of relationship between socio-economic forces and fertility. The author has made a courageous beginning in this direction while fulfilling the major objectives of providing basic demographic data for rural communities.

K. S. GNANASEKARAN

Influence of Mettur Irrigation and Hydro-Electric Project on Agriculture and Agro-Industries, S. Krishnamurthi, Research Programmes Committee, Planning Commission, New Delhi, 1959. Pp. iii + 100.

This report which embodies the findings of a Pilot Survey to assess benefits of the Mettur Project conducted under the auspices of the Research Programmes Committee of the Planning Commission, endeavours to study the direct effects of irrigation on agricultural production and the influence of electricity on the agro-industries. The Pilot Survey was undertaken in Pattukkottai Taluka of Tanjore District of Madras State. Out of 269 villages of the taluka, 231 are covered by the irrigation facilities of the Project. Pattukkottai Taluka is divided into 7 firkas. From them, 15 villages were selected for the enquiry, the number of villages from each firka being proportionate to the total villages benefited by the scheme. Ten per cent of the total number of holders constituted the sample for detailed investigation. Three villages not covered by irrigation were selected for comparison.

Chapters I and II deal with the broad objectives of the Survey and the physical features of the Cauvery-Mettur Project. Chapter III describes agricultural practices and the important features of the economy of the Tanjor District. The analysis of statistical data is spread over Chapters IV and V. A separate chapter at the end is devoted to the summary and conclusions.

Both, the area newly brought under irrigation and the area under dry cultivation increased leading to increased intensity of cropping and doubling of the yield of paddy. The area under paddy increased gradually from 38.3 per cent of the total cultivated area to 80.8 per cent during 20 years, 1931 to 1951. This made it possible to sustain a much larger population with 93.8 per cent of them employed in agriculture. The increase of population in the surveyed villages between 1931 and 1951 was 58.62 per cent as against 44.21 per cent in Pattukkottai Taluka as a whole and 25.01 per cent in the Tanjore District respectively for the same period. About 3.5 lakh acres were newly brought under irrigation as a result of the Project and the area under cultivation increased by about 27 per cent in the Pattukkottai Taluka.

The study concludes that the entire increase in yield is obtained due to the provision of irrigation water. The conclusion is based on these findings : that only 1.2 per cent of the total area under paddy, which is the main crop, was under improved strains, that only 8 per cent of the total area under paddy received an effective dose of ammonium sulphate and for the rest conventional cultivation practices continued.

The relative economic prosperity of the cultivators in the project area is indicated, firstly, through the absence of rural indebtedness and secondly, through the purchase of additional land by landowners. However, it is noteworthy that credit facilities through co-operative credit societies are neither adequate nor efficient. The effect of land transfers on concentration of land holdings is not studied.

The emergence of monoculture in the project area is ascribed by the study to "lack of better marketing facilities for agricultural products of the farmer which in turn deprives the farmer of the opportunity of growing profitable commercial crops and selling them at higher prices than he gets from the middlemen." (p. 56). This statement is more an aspersion than a statistically verified conclusion. The study has no remarks to make regarding the marketable surplus.

The effect of hydro-electric power on agro-industries and on the economy of the region is far from encouraging, in view of the small number of people engaged in rural industries and small extent of rural electrification. 1.3 per cent of the rural population is engaged either whole time or part time in rural industries, while only 10 out of the 269 villages surveyed have been electrified.

To remedy the shortcomings of the irrigation projects the Report recommends that from the very commencement of the introduction of the irrigation benefits of a project, a dynamic organisation should be set up for effective multipurpose developments such as the introduction of improved agricultural practices, diversified agriculture and the economic use of water, an active campaign for savings,

the establishment of rural, cottage and agro-industries for removing the excessive pressure on land, better marketing through improved communications, a more intensive and extensive agricultural extension organisation and a co-ordinating agency for a balanced development of the economy of agriculture and prosperity of the agriculturists and agricultural labourers.

The study is limited in respect of both the area surveyed and the aspects covered. The indicators studied to gauge the influence of irrigation are not by themselves adequate for a proper assessment of the effects of irrigation. A canal system is likely to have far-reaching effects on the economic life of the community in the area commanded by the canal system as well as to some extent on the economic life of community outside the area commanded by it. The secondary and tertiary effects, however, do not lend themselves to an easy and precise assessment. It would have been worthwhile if the effects of irrigation on the size of holdings, the land values, the class of agriculturists mainly benefited and the organisational problems concerning the proper utilisation of irrigation facilities were also studied.

BASHIR A. DESAI

Agricultural Economic Theory and the Indian Economy, J. R. Bellerby and N. A. Mujumdar, Vora & Co., Publishers Private Ltd., Bombay, 1961. Pp. 158. Rs. 7.50.

This short book of 158 pages is really three-books-in-one and renders an integrated (overall) judgment almost impossible, for the three pieces do not really hang together and show great unevenness in the matter of treatment. The first two pieces could have been integrated but this has not been done ; from the first two to the third is a discrete jump. At each stage the book grows but does not evolve. Yet the authors have somehow seen it fit to put the whole thing between two covers.

In addition to the lack of an overall plan, the book also shows some marks of haste and insufficient attention to detail. The separate contributions of each author have been indicated in some detail (p. 106) only for Chapter VII, not for others. That the words 'this country' (p. 102) in a book about and published in India should refer to Britain is curious and also confusing. The earlier enthusiasm of the authors for a machine revolution (p. 24) does not accord well with the more sobering reflections elsewhere in the book. These are, however, comparatively minor defects.

The three 'pieces' that the reviewer has in mind do not conform to the 'parts' into which the book has been divided, nor to any specific grouping of chapters. Yet it seems there are three distinct subjects covered in this book — (1) an analytical essay which explores the distinguishing characteristics of commercial and non-commercial farming and the application of this analysis to conditions of Indian agriculture,(2) general development in the Indian economy on a wide front of industry, population, health, education, etc., and (3) planning of 'civilization.'

The first piece is an attempt to evolve an analytical framework which could be used for examining different types of agriculture. With their preoccupation