Economic Theory and Practice in the Asian Setting, Volume 3: The Economics of Agriculture. Edited by Committee on Economics Teaching Material for Asian Universities. New Dehli: Wiley Eastern Limited.

This book is the product of the efforts of a group of teachers who felt the need to provide Asian students with empirical work on agriculture which applies economic theory to their own environment. The papers in the volume are organized into six topics on Agriculture: (a) Management decisions on small farms; (b) importance of technical know-how; (c) mechanization of agriculture; (d) relationship between farm-size and productivity; (e) impact of food aid; and (f) agricultural policies of Asian countries. The major theme of the papers is that land holdings in Asian Countries are usually very small.

The first part of the book entitled Subsistence Theory deals with the management decisions faced by small farmers. It consists of one chapter divided into seven major sections. The introduction gives the hypothesis that has been tested i.e., small farmers do not necessarily maximize profits but rather strive for self sufficiency in consumption. This is followed by the description of the two townships; Chupei Hsiang and Hsiangshan Hsiang in northern Taiwan where the hypothesis was tested. The third section states the general economic and social factors affecting farming in that area. It also states the statistical methods that have been used; for the convenience of the reader, S.C. Hsieh has shown by the help of an hypothetical example, how these methods are applicable to his work.

In Sections IV to VII the author has discussed in detail all aspects of farming on small farms, many of which are usually ignored in the agricultural text. Section four concentrates on the relationship between the number of decision makers and the size of holdings. Section V is the most crucial and detailed part of the chapter. It shows by the help of statistical tables that amongst all the crops that can be grown food crops have the first priority in the surveyed area. The explanations following the statistical tables, which are based on the experiences of the farmers make a very useful and interesting reading.

Section VI shows that the use of agricultural inputs is greatly affected by the price variable, that labour is the most stable and wage inelastic input, that the use of pesticides varies according to need, and lastly, that chemical fertilizer is highly price sensitive and is greatly substituted by compost. Reviewing the factors underlying these conclusions it would seem that the allocation and use of agricultural inputs in other small farm Asian economies largely follows the same pattern. Taking labour first, we know that due to small holdings agriculture is carried out with primitive methods which are labour intensive. Secondly, surplus labour supply makes it wage inelastic, and wages are generally constant and low. The use of pesticides, clearly, cannot be hindered by price factors when it is necessary. Finally, since all farmers in small-farm countries are usually poor and since chemical fertilizer is an expensive input, it would be generally substituted by compost and other forms of manure.

The last section gives the relationship between the index of agricultural knowledge and the adoption of various farming techniques. It shows that the major source of agricultural knowledge is experience, followed by extension services, and friends and relations advice. Similarly, the technique most widely

adopted is deep ploughing, learnt by experience. There can be no disagreement that these two conclusions are widely applicable in small-scale agriculture.

This paper does not suggest new methods and technologies for the small farmers; it only brings to light what in actual practice happens in the small-scale farming system. It is indeed remarkable that the findings of the study are of such wide applicability.

The second part of the book discusses the issues of technical knowledge and the mechanization of agriculture with reference to the Malayan and Japanese economies. Technical knowledge is defined as specific information relevant to decision-making on some or all aspects of farming. There is no denying of the fact that whether farm enterprise is large or small the proper utilization of the resources is a prerequisite for efficient production. The study conducted in Malaya, by U.N. Bhati convincingly tests the importance of technical knowledge in padi-production in terms of such measures as farm income, yield per acre, gross income per hour of labour, literacy, acerage under crops, and farm area.

The study of the mechanization of Japanese agriculture by Keizo Tsuchya is important in that it suggests guidelines for the mechanization of agriculture to overcome labour shortage. But at the same time its validity for the small-farm Asian economies is doubtful for two reasons. First, these countries are faced with the problem of cheap, surplus labour. Second, as industrial sectors are small, all mechanization depends on imported machinery which requires large expenditures of scarce foreign exchange. In comparison, the spread of technical information would be of much greater utility to the developing agricultural countries than mechanization.

The third part of the book deals with the issue of land reforms and is based on a case study of Philippines. Land reforms have been carried out in most of the developing countries but these have not always proved as successful as would be expected. Analyzing the factors necessary for the successful implementation of land reforms, Ruttan states that these must be supplemented with important institutional reforms which allow small farmers access to credit facilities, better agricultural inputs, and markets. The institutional set-up favouring the higher economic and social classes is not atypical of the Philippines; it is common to all countries with the result that small farmers—the majority of all farmers—are ignored.

In Part four the crucial issue is marketing in Asian societies. The conclusion of two studies by Peter F. Bell, Janet Tai and Leon A. Mears and Teresa L. Andem is that the middle man is the benefactor of small farmers. It is argued that farmers in South East Asia do not have access to price information and technical knowledge and it is the middle-man who provides them with this information, so farmers benefit. Also, it is argued that by buying at the time of harvest the middle-man reduces the risk burden of small farmers. There is no reason to reject this view that the middle man provides essential services for small farmers. However, it is a common experience of all agricultural economies that the middle man over charges the value of these services by exploiting a monopoly advantage. This practice has been analyzed extensively and it should be noted that it has always been condemned.

Part Five of the book discusses the most important issue faced by the developing countries—food aid. The utilization of food aid by Taiwan and Korea to develop domestic resources which reduced the need for aid in the long run is indeed remarkable. The study by Sang Gee Kim provides a broad outline to all developing countries for the effective utilization of aid. The case study of the Philippines by Mahar Mangahas provides forecasting procedures which can be applied for various crops in other countries. The study related to the agricultural export tax system in Thailand by Bertrand M. Renand and Phiphit Suphapiphat is also of general validity since it suggests alternative policies to achieve the same objective.

The book is generally a very well written, thought provoking, and useful discussion of the agricultural problems of the Asian countries. The editors have done a useful job; the papers have been properly arranged in accordance to the importance of the issues dealt. Most of the conclusions are generally applicable, while the remainder are adoptable for different environments. This scholarly publication will be of substantial value to anyone dealing with agricultural problems in the Asian Societies.

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