

BOOK REVIEW

A Rice Village Saga: Three Decades of Green Revolution in the Philippines by Yujiro Hayami and Masao Kikuchi, Basingstoke, Macmillan Press in association with the International Rice Research Institute, 2000, xviii + 274 pp.

I

This study presents the results of unprecedented, comprehensive surveys undertaken on the social and economic changes of a rice-growing village in the Philippines over the last quarter of the twentieth century. The authors are two Japanese researchers who were affiliated to the International Rice Research Institute (IRRI) in the Philippines.

In the authors' words, the purpose of their surveys is "to gain a concrete grasp of the total process of the way that the dramatic diffusion of modern rice technology has interacted with population pressure on limited land resources, the implementation of land reform programmes, the development of public infrastructure, and the penetration of urban economic activities to cause major economic and social changes in irrigated rice areas in the Philippines, with a view to developing insights on the modernization process of other developing economies which are under pressure from similar forces" (p. 15).

The general impression produced by this study is that the purpose has been substantially achieved as intended. In an environment in which it was difficult to obtain desired data and information on a constant basis, a total of eleven round surveys of village households were conducted, with the unsparing cooperation of villagers, the authors note, as well as the help of many researchers from IRRI and other institutions.

The book has ten chapters. The first chapter, entitled "Approach to a Village," is followed by the second "Chronology of the Village" in which a span of over a century from the 1880s to the 1990s is divided into five periods (the 1880s to the mid-1950s, the late 1950s to the mid-1960s, the late 1960s to the late 1970s, the 1980s, and the 1990s). These periods of time are characterized by their respective modernizing forces, including population pressure, land reform, diffusion of modern rice-growing technology, growth in public infrastructure, and penetration of urban economic activities.

The following chapters expound in specific terms how these modernizing forces worked in their different aspects: Population Growth and the Evolution of Households (chap. 3), Agrarian Structure and Land Reform (chap. 4), Diffusion of New Rice Technology (chap. 5), Community and State in Irrigation Management (chap. 6), Community and Market in Labour Relations (chap. 7), Farmers and Middlemen in Rice Marketing (chap. 8), and the Emergence of Rural-based Industries (chap. 9). The final chapter discusses what changes these forces have brought on the villagers and their income, under the theme of Income Growth and Distributional Change (chap. 10).

In short, these changes represent the course of transformation from a rain-fed rice mo-

noculture village called East Laguna Village, originally settled on the marshy lowland on the shore of Laguna de Bay, into a village, about a century later, whose inhabitants are mostly agricultural laborers and non-farm workers. Even in 1966, the place was a purely agricultural village, which was engaged primarily in rice cultivation, embracing 46 farmer households, 20 agricultural laborer households, and no non-farm worker households. In 1997, the number of total households was about four times as large, but the number of farmer households was down to 41, or only one-sixth of the total. At the same time, the number of agricultural laborer households jumped dramatically to 163 and that of non-farm worker households to 62.

A question here is how the total village income, the average income per household, and the average per capita income changed in nominal and real terms during the period under review. The authors' detailed investigation of this question has determined the following five features.

- (1) The village's average per capita income in 1995/96 stood at U.S.\$470 (12,200 pesos), which was equal to about 40 per cent of the Philippines' per capita GNP. An estimate of real income growth per year, using rice price as a deflator, for the entire period of 1965/66 through 1995/96 showed fairly rapid rates of growth—7.9 per cent for the village total, 3.3 per cent for the household average, and 4.2 per cent for per capita income. Such favorable results reflect the fact that the price of rice as a deflator was lower than the consumer price index (CPI) for the entire period. It is true that if a CPI deflator is used, the growth rate of household income would become nearly zero. However, it is notable, as the authors argue, that an unfavorable impact of strong population pressure on limited land resources has been avoided. According to the authors, even on this CPI basis, the ratio of villagers' real consumption must be higher than suggested by the CPI standard, because the ratio of rice in their consumption expenditure is higher than that of average households in the Philippines.
- (2) A comparison of large-scale farmers (holding two hectares or more of land), small-scale farmers (holding less than two hectares), and agricultural laborers indicates that the CPI-based per capita income of agricultural laborers expanded by more than 30 per cent between 1974/76 and 1995/96, while that of large-scale and small-scale farmers showed even greater rates of growth. These gains by agricultural laborers were made possible by the increases in income from non-farm origin and earnings from hired employment. Consequently, the share of non-farm income in the average household income soared from 13 per cent in 1974/76 to 64 per cent in 1995/96. By contrast, agricultural laborers' income from farm origin sharply dropped by 21 per cent during the same period because of increased mechanization and lower agricultural wages for rice production.
- (3) A more fundamental change is seen in the integration of East Laguna Village into the urban labor market after the 1980s, which prompted non-farm workers to emerge as a new social class. The authors expound on this meaningful change: "Their average household income, earned mainly from permanent salaried jobs in local towns, was about the same as that of small farmers and more than twice as large than that of agricultural labourers, whose earnings were based mainly on casual daily-wage employment. These non-farm workers and small-scale farmers together composed a middle

- class in the village, comprising about a third of the population and earning nearly half of the total income in the village in 1995/6” (p. 238).
- (4) In terms of size distribution of household income, the top 20 per cent accounted for over 50 per cent of the total and the bottom 20 per cent less than 5 per cent in 1966. This relative distribution remained unchanged in 1995. In contrast, in terms of size distribution of operational landholding, the top 20 per cent continued to expand from 51 per cent in 1966 to 99 per cent in 1995, indicating this bracket’s virtual monopolization of the villagers’ total operational landholding. Such an overconcentration of land in the hands of a certain class of the villagers can be partly explained by the fact that strict imposition of land reform regulations deactivated the land rental market. Over 50 per cent of the villagers are as yet below the poverty line, but this percentage steadily declined from 68 per cent in 1974 to 56 per cent in 1995.
 - (5) Finally, the authors note, “The experience of East Laguna Village since the 1960s suggests strongly that the misery of the poor would have been magnified further by rapid population growth with closed land frontiers, if the village had continued to rely on traditional agriculture in isolation from urban market activities” (p. 243).

II

The first two chapters are dedicated to specific and detailed review of the modernizing forces that sustained population growth and income increase in East Laguna Village. In Chapters 3 through 9, greater emphasis is placed on analysis of individual aspects of these factors.

An impressive point about this book is that many factors comprising those modernizing forces have worked opportunely in a certain order of interaction, eventually turning themselves into positive factors. For instance, the construction of the national irrigation system, which was not undertaken through the villagers’ autonomous and voluntary efforts as seen in the construction of roads, not only ensured double-cropping of rice in both the wet and dry seasons, but also made it possible to adopt various rice technologies and apply fertilizers and chemicals. Likewise, the implementation of land reform has accelerated efforts for a green revolution. The improved school education system has also enhanced the villagers’ educational level, which in turn expanded non-farm salaried employment and increased chances to work overseas. The upgraded schooling system also explains the phenomenon of modern houses being built with money from abroad as well as the construction of non-farm factories within the village. It was only after the start of the green revolution that the credit-extension policy began to play a positive role under the Masagana 99 Program. The authors have endeavored to identify subtle and intricate relations between various modernizing factors. Their success in this effort provides valuable suggestions as to procedures to follow in helping the developing countries in their economic development.

Another notable feature of this book is that some interesting examples show how traditional customs have been forced to change in the course of interaction with modernizing forces, and that little significant progress seems likely without such changes. A less remarkable example is the fact that the villagers indeed remained passive toward the irrigation management as a national project, and that with lessened national support, the function of

such irrigation management has actually weakened. A more positive example is the fact that the introduction of a high-yield variety of rice caused a change in the custom that “anyone in the village could participate in others’ harvesting and receive one-sixth of the harvest where he/she worked.” Nowadays only those who have worked for no fee in weeding prior to harvesting are entitled to the reward. However, this change in the custom seems understandable because production of the high-yield variety requires fertilizers and chemicals and thus is more expensive.

In sum, the book reveals the authors’ distinctive efforts in designing and analyzing their detailed surveys. The book thus deserves high marks as a valuable demonstrative study of the process of a pure farming village being integrated into the world market.

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