

Book Review

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A Rice Village Saga: Three Decades of Green Revolution in the Philippines, *Yujiro Hayami and Masao Kikuchi*, Published by the Macmillan Press Ltd., in association with the International Rice Research Institute (IRRI), 2000

The book gives a microscopic view of the transformation of a traditional rural village economy as forces of modernization penetrate the fabric of rural life. The major aim of the volume is to trace how the diffusion of modern rice technology has interacted with the four forces of modernization that caused economic and social changes in a rural household village economy (p.1). The forces of modernization are (1) the continued population pressure on limited land resources; (2) implementation of land reform programs; (3) development of public infrastructure such as irrigation systems, a school, and roads; and (4) penetration of urban economic activities (p.13). The most important finding is that the new rice technology as well as the forces of modernization, which are commonly believed to be the major causes of inequality, can actually be the forces that promote economic growth and equality in rural communities (pp.13-15).

The volume is based on a detailed long-term household data set, which is a rarity in village-level studies. The data were collected in eleven rounds of surveys conducted between 1966 and 1997 in an irrigated rice village in the Philippines, named the East Laguna Village (pp.18-19). The data set covers a sufficiently long period of time to capture the important epochal periods corresponding to the emergence of forces of modernization. The authors are highly knowledgeable economists with many years of association with the village people. Thus, there is no question that this book represents the most comprehensive economic analysis of how a traditional village community has been able to adapt to the emergence of forces of modernization.

The book consists of ten chapters and the major findings are succinctly summarized in Chapter 2. It is uncommon to place the summary at the beginning rather than at the end of the book, but this arrangement helps the reader obtain an overview of the issues at the outset and understand easily how the issues are presented in the chapters. The findings from the major chapters may be briefly summarized as follows:

The high rate of population growth in the presence of fixed land resources interacting with the implementation of land reform, has led to a class segmentation in the village through a disproportional increase in the number of landless agricultural laborers' households relative to that of farmers' households, and the emergence of a unique class of non-farm worker households dependent on urban jobs (Chapter 3). The major impact of the implementation of land reform has been a redistribution of income from landlords to the former sharecroppers, since the land reform laws

suppressed the land rent at the time when rice yields were rising as a result of the diffusion of modern rice technology (Chapter 4). The early diffusion of modern varieties of rice (MVs) doubled the rice yield, but a decade and one-half since the release of the first MVs, yields began to stagnate while progress in mechanization accelerated in response to rising wages (Chapter 5). The interaction between village communities and state agencies in the development and management of local irrigation systems is investigated in Chapter 6. A close examination of changes in labor employment contracts in rice harvesting indicates that village communities and markets interact to achieve an efficient allocation of resources through changes in contractual arrangements (Chapter 7). The development of public infrastructure such as transportation and communication systems increased urban influences in the village, as exemplified by highly contestable rice marketing channels and the emergence of rural-based industries (Chapters 8 and 9). On the other hand, the improvement in educational facilities increased the access of villagers to higher levels of schooling and as a consequence, the occupational pattern of the labor force shifted away from agriculture.

The book is highly interesting, and all chapters are important. However, Chapter 10, 'Income Growth and Distributional Change', is probably the most significant since modernizing factors should eventually be analyzed through their effects on the level and distribution of household income, which are major determinants of the welfare of individual households. The following comments will thus be centered on the analysis of income.

It is worthwhile to mention that the trend in household income inequality reported in East Laguna Village (Table 10.6, p. 240) follows a pattern similar to that of the whole Philippines [Estudillo 1997], indicating that the village economy is integrated with the outside economy. In general, the Gini coefficient of household income inequality in the Philippines declined from the early 1960s to the mid-1980s but began to increase in the late 1980s to the early 1990s. The decline in income inequality was due to the rise in the share of the middle-income groups at the expense of that of higher-income groups. More importantly, the rising trend in household income inequality in the 1990s is attributable to the rise in the proportion of urban households (or non-farm worker households in the case of East Laguna Village), among whom income inequality is higher.

One of the volume's major finding is that the expansion of non-farm employment opportunities enabled the landless agricultural households to increase their income in both absolute terms and relative to the farming households. As a result, total household income inequality in the village did not rise appreciably despite the marked increase in inequality in the distribution of landholdings resulting from the rapid increase in the number of landless households (Figure 10.3, p. 241).

The authors, however, did not attempt a rigorous decomposition of income sources to further substantiate their claim that the expansion of non-farm employment has an equalizing impact in the distribution of income. While the authors emphasize the increasing dependence of landless agricultural households on non-farm jobs, it is also important to note that farming as well as the non-farm households also benefit from the increased availability of urban jobs. In fact, the households of large farmers are more dependent on regular formal salaried employment, while the landless

agricultural households are more dependent on informal irregular non-farm employment, where the returns to labor are relatively low. This is because the members of large farmer households have higher levels of schooling than landless agricultural households (Table 3.9, p. 63). Overall, if non-farm incomes of all the household groups are pooled and an income decomposition technique is applied, wage income from non-farm work may well be an important source of income inequality.

A similar study, on income distribution was made using household data collected in five rice-growing villages in the Philippines in 1985 and 1998 [Estudillo, Quisumbing and Otsuka 2001]. Similar to the findings of the book, the study found a structural shift of household income away from land in favor of non-agricultural labor income. Using the Gini decomposition technique, we found that such a shift resulted in an increase in income inequality, which implies that the major determinant of income inequality in rural economies changed from the difference in access to land to the difference in schooling.

It is also highly likely that an increase in non-agricultural income has a negative effect on asset distribution. In fact, the authors point out that one of the major changes in the village land-tenure institutions between 1976 and 1995 was the large increase in the number of land purchases by resident landowners, who financed the purchases from remittances coming from family members working in urban areas and overseas (p.84). Remittances, particularly from overseas, are a major component of non-agricultural income and an important source of income inequality. Agricultural landless households presumably cannot afford to purchase land partly due to their low income with meager remittances and the increase in land prices as a result of increased demand in agricultural lands for urban purposes.

Needless to say, it is easy to point out the shortcomings of any book. This volume, however, provides numerous important findings and useful insights based upon a truly rich and detailed longitudinal study of data from a village economy, one that is unprecedented in village studies in Asia. It is difficult to emphasize the importance of this book sufficiently. The reader will enjoy and greatly benefit from reading this book, which is indispensable for any student of agricultural development and rural economy in Asia.

References

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