

*State and Community in Rural Resource Management: The Asian Experience* edited by S. Hirashima and W. Gooneratne, New Delhi, Har-Anand Publications, 1996, 329 pp.

As Marco Polo discovered, surprise, luck, and chance often await the curiosity of the traveling observer. In July of 1997 I found myself visiting rural irrigation schemes in the central highlands of Kenya. After having worked on similar projects in Brazil's São Francisco river valley, there were many surprises to be found in a new continental location. But first there was a stroke of luck to have come across, by chance, a recently arrived copy of the book by Hirashima and Gooneratne in the United Nations Centre for Regional Development (UNCRD), African Office library in Nairobi. A new situation was then created. The observer from a Latin American continent was looking at situations in the African continent using "eyes" provided by the experiences of Asian case studies.

This book in fact does not provide one set of "eyes" but six sets drawn from the widely different contexts of Japan, the Philippines, Thailand, Indonesia, Sri Lanka, and India. However, the introductory discussion by Professor Shigemochi Hirashima from Meiji Gakuin University in Yokohama, Japan does provide a universal perspective which allows not only a specific appreciation of the Asian experience based on concepts of community and the state, but even allows the reader to apply, in appropriate ways, lessons drawn from these Asian experiences in other continental circumstances. In this sense, this work is an important "guide" for understanding many of the issues in local resource management in countries faced with the challenges of rural development and urbanization change. Given the widening debates on the usage of natural resources this book helps our understanding of many social, economic, and environmental constraints which should allow improved management practice, the design of better renewed policy agendas, and the deepening of the conceptual basis on which development theory depends.

The focus of this book is centered on agency—that is questions related to who and how, more than the peculiarities of why and what development happens in local rural development situations. The latter substantive contextual questions are necessarily presumed, although the initial chapter with an introductory discussion does begin with a brief review of the overall role of agriculture in a developing economy stressing both its potential for contributing to growth and the all important role of labor absorption in a frequently associated context of surging demographic change. Much of the development literature on rural development stresses its links both with urbanization and industrialization processes. The rural sector's necessary contributions include cheap food supplies for the towns and cities, readily-available raw materials for many industrial sectors, abundant supplies of surplus labor, and often foreign currency reserves from primary commodity exports which finance capital and other goods for development purposes. An expanding market economy in agriculture can also provide useful market outlets for urban production goods and services. The discussion of these types of linkages depends very much on agriculture's role in differing development models of change from subsistence economies to primary-commodity-exporting and/or import-substitution-based development.

Both the scope and the focus of this book, however, do not allow a more detailed appreciation of linkages between development strategies and macroeconomic policies with their

regional and local consequences. Instead the focus is on mentioning the forms and types of problems and obstacles which impede, at the local level, the agricultural sector from fulfilling its development role. The summary of local-based problems presented in the initial discussion includes the following: low productivity attainment, the insufficient availability of technical infrastructure, local policy biases more favorable to the use of price mechanisms and basic infrastructure support rather than the use of landownership reform strategies, new environmental concerns inhibiting technical advance, unfavorable terms of trade working against agricultural producers, the lack of social development facilities inhibiting farm management innovation, and the social difficulties of disruption in indigenous communities caused by market penetration of social relations.

Neoliberal pressure favoring market solutions and state investment retrenchment often found dominant during the current decade may tend to exacerbate more than limit the problems briefly cited in the book's initial discussion. A realistic conclusion by the authors is to limit the scope of the book to improving the efficiency of existing public capital stocks and of improving the management and benefits of underutilized local resources. The overall aim of the case study collection appears to be proving empowerment schemes in local communities.

While not ignoring the crucial role of markets, the book's focus on agency leads to a special preoccupation with the concepts of the state and community. One initial difficulty is immediately dealt with in the sense of the spatial configurations of both concepts. State and community territorial boundaries may be contiguous in the case of large villages and urban centers but for smaller settlements "administrative villages" may possess jurisdiction over many "natural villages." As regards the concept of community, the book's Asian context is again stressed by the understanding that community groupings and household units possess a more important role as social actors than individual members. The village unit has a degree of autonomy in local governance and some degree of communality in property relations and in the management of natural resources.

At a more detailed level one of the book's major contributions is a check list, presented in Hirashima's initial discussion, of factors which can help characterize village communities. The ten-point check list includes basic key factors such as resource endowment, climate and topography, and scale and type of settlement and location. These basic factors influence others such as production orientation, land tenure systems, social organization, and outside employment opportunity together with the other remaining factors in the check list which can be seen as elements in producing shifts or changes in the existing character of the village community settlement. These change-producing factors include technology, social infrastructure, and public investment in physical resources of transport, communications, and energy which are amenable to change through public policy.

However, even apart from regional disparities in the provision of public investment and its often inadequate levels of availability, there are other problems of state management of existing infrastructure such as irrigation facilities where organizational deficiencies may occur at the local level and where locally available skills and resources are often left underutilized. To see these questions at a more detailed level the six case studies provide more detailed information in the country specific reports.

The first study by Kunio Ohkama and Masao Kikuchi deals with Japan in a historical

study of the 1920s when agriculture still played a very significant role in the economy and when local social development was based on the close relationship between the public institutions of state organization and the local communities. The authors in this case stress the mediation and representational role of administrative villages in a hierarchy between local communities and state organs responsible for the formulation and implementation of public policies. This study also stresses the important role of community leaders where leadership is often the consequence, rather than the cause, of a higher-than-average level of household income and assets with rewards on a prestige more than on a material basis. A strong community identity can be seen in the local community agenda of preoccupations which emphasize social development in terms of schools, vocational training, and health and sanitary conditions. In order to function adequately, household participation in community development seems to have required a clear view of benefit visibility together with a sustained degree of both administrative and financial stability. At the same time the case study shows the necessity of a considerable degree of evident "fairness" in the distribution of both burdens and benefits not necessarily totally equal for all households but immediately related to each household's abilities and needs.

In the case of the Philippines the case history prepared by Ruth Ammerman Yabes focuses attention on the *zanjera* system of rice production based on the local management of traditional brush dam irrigation techniques. As in the Japanese case, household participation requires equity in the burden-benefit relation with a comprehensive degree of household involvement in all stages of the communal project planning, operation, and maintenance activities as well as in the setting of responsibilities and the attribution of penalties and sanctions. A degree of equity in the distribution of water resources is achieved by the allocation of land in the higher, medium, and lower ranges of irrigation channels. Ruth Yabes also stresses the importance of the *zanjera's* communal nature in ensuring an efficient usage of construction, repair and maintenance resources and services while the same characteristic ensures sustainability when faced with climatic and natural topographical risks and dangers, requiring communal defensive and preventive actions. This social cohesiveness is largely attributed to cultural factors of common identity with the active participation of households in extra-economic rites and ceremonies. In concluding this study with a comparison between the relative success of the *zanjara* as opposed to other more ambitious irrigation schemes—both based on more "technological" and even on "participatory" criteria—the main lesson to come from this case history is the importance of the cultural dimension of communal identity.

The Indonesian case study by I Gde Pitana focuses on the *subak* system found on the island of Bali. This form of irrigation is located within a system composed of the administrative village unit (the *banjar dinas*), the communal villages (*banjar adat*), and the association of irrigation producers (the *subak*) with its own particular rules and regulations called the *awig-awig*. Between these three types of institutions there is a considerable degree of relative autonomy with different power structures in each case. The *subak* is not a village-based institution although many *subak* members may come from the same village. Each *subak*, with its own *awig-awig* rules and regulations, sometimes has sub-offices known as *tempek* and an office for inter-*subak* affairs known as the *subak gede*. State relations with the *subak* system have increased in recent decades and there are now two types:

the joint-state and local-producer *subak* as well as the communally managed type. Even in the case of the joint-management type, now responsible for 70 per cent of rice land cultivation in Bali, state participation does not necessarily involve direct participation but implies that *awig-awig* regulation follows a state-produced norm.

The scope and activities of the *subak* appear to be somewhat similar to the *zanjera* and Thailand cases. In the case of Bali, the state has actively strengthened the communal nature of the producers associations and the *subak* has demonstrated a high degree of flexibility, facilitating crop alterations now including higher-priced vegetables and fruit (*palawija*) as a second crop in paddy lands.

Improved environmental management has also been introduced without major difficulties due to the traditional philosophy of harmonious development with nature based on *tri hita karana* values. The peculiarity of this Indonesian case study has been the increased solidarity of the *subak*'s cultural base which appears to have facilitated beneficial modernization change more than hindered it.

The Thailand case study by Vanpen Surarerks comes from the brush dam irrigation projects of the countries northern areas where rice production is based on the *muang fai* communal system. This has considerable differences from the more modern large-scale irrigation projects of Thailand's central plains. The *muang fai* systems share many of the characteristics seen both in the Japanese case study and in the *zanjera* communal system in the Philippines with a long history of complementary relations between the community patterns of irrigation and the state water resources management schemes. While the *muang fai* system has its own particular pattern of rules and regulations (the *sanya muang fai*), when major difficulties and disputes occur these are brought to a higher administrative level of the *amphoe* (district) and resolved using the state irrigation code. Leadership, as in the Japanese case, brings with it increased prestige, responsibilities, and penalties as compared with the individual household's responsibilities.

Within the overall scope of this book the case studies from India and Sri Lanka represent another type of contribution where communal structures are not as firmly entrenched and where state intervention appears to have a larger relative role than in other Asian countries.

The Indian case study by Surendar Singh comes from the Punjab region is characterized by a rich agricultural base with a long tradition of rotation and *warabandi* (water turns) system of canal and channel-based irrigation as well as the deep tubewell water supply resources on the land of individual producers. For historical reasons of India's colonial past and with migration tendencies at the time of independence, there is a lack of established communal structures, and individual producer tendencies have been strengthened by the recent rapid growth in the past decades of the individual tubewell system exploiting subterranean water sources. The state management of the canal system is based on the individual relationship with producers and does not contribute to the growth of community-based organization. However individual progress in agriculture has, in time, produced its own economic and environmental problems with difficulties caused by the over-usage of subterranean supplies as well as localized difficulties in the management of the canal system. For these reasons existing management practice is now considering the revitalization of potential local community organization, such as the *panchayat* to improve relations in the agricultural development process.

In the Sri Lanka study by the book's coeditor, Wilbert Gooneratne, the irrigation schemes in this country are divided into two types based on size: above and below eighty hectare. This study shows that, as in the case of India, the colonial administration heritage of state direction has influenced the relative lack of communal structures in the irrigation schemes. In Sri Lanka it is the tank-based system of distribution which has developed and an increased degree of user's participation has slowly increased in recent decades, especially after new legislation in 1979. The study details many of the problems and difficulties of state direction particularly as regards operation and maintenance. However, the author does see a latent potential for increased community participation because of the "bottom-up" character of tank-based irrigation and suggests the growth of management and organizational participation using the potential of local networks. This change is however only envisaged if the state irrigation authorities show a more sensitive attitude to the potential of participatory forms of state management.

With the variety and diversity of case studies, many basic lessons were learned for application in other non-Asian contexts. After a preliminary reading of the book in the African context of Kenya, many similarities and parallel insights were to be seen while visiting irrigation schemes in the foothill area of Mount Kenya. With Kenya's history as a British colonial, many common traits were seen in lessons drawn from the Indian and Sri Lanka case studies. One large-scale project near Embu involved a total population of more than 20,000 people directly and indirectly involved in the production of various grain projects under the control of the state's Agricultural Ministry Eastern Irrigation Board. In this case with heavy soil conditions making mechanization difficult and with less than potential economic returns, state management practice could possibly be improved by increased participation in the overall management of the project. As in the case of Sri Lanka, the major scale of this project might have to be redesigned so as to allow more localized participatory benefits. At the same time in the context of accelerated urbanization tendencies in Kenya, this state-run project certainly has fulfilled expectations as regards labor retention in rural areas, avoiding new additions to the peripheral population of Nairobi's shanty towns.

In a second case with a smaller and more homogeneous farming unit, local initiatives in extending a town's water supply had led to a small-scale market-gardening production of fruit and vegetables. This later project was extremely instructive as regards the cultural changes involved in a new and successful experience of getting small producers used to credit mechanisms with all the corresponding difficulties of debt management, loan repayments, and the necessity of a producer's surplus. Curiously this experience did not induce plans to expand operations since an increased level of production activity would attract nearby-town dwellers while local-communal-sharing customs would provide major difficulties in the absence of land tenure reform allowing an increase in the project's scale. In many senses this smaller case showed similarities with the *zanjera* structure of communal relations in a new African context. Even for a Latin American context, the cultural dimension of community development provides common themes in local social development. With its applicability to a wide range of developing countries, this new book will be useful for many researchers involved in rural development work. (Philip Gunn)