AGRICULTURE AND GOVERNMENTS IN AN INTERDEPENDENT WORLD

PROCEEDINGS
OF THE
TWENTIETH
INTERNATIONAL CONFERENCE
OF AGRICULTURAL ECONOMISTS

Held at Buenos Aires, Argentina
24–31 August 1988

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INTERNATIONAL ASSOCIATION OF
AGRICULTURAL ECONOMISTS
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UNIVERSITY OF OXFORD

1989

Dartmouth

ELMHIRST MEMORIAL LECTURE

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*Community, Market and State**

It is both dazzling and daunting for me to be able to present the fifth Elmhirst Memorial Lecture. Indeed, when I received the invitation to this honourable occasion from President Michel Petit, it was hard to think of following the footsteps of the previous four great lecturers – Theodore W. Schultz, W. Arthur Lewis, Keith O. Campbell and Amartya Sen. All these four spoke on some broad themes of common interest to our profession. Following this tradition I will discuss today the interrelationship among market systems, rural community institutions and government activities in agricultural and economic development with a focus on developing economies. Trying to prepare a broad perspective on such a grand topic, I feel as if I am the reckless frog in Aesop's fable, bursting out his belly in a vain effort to match the size of a cow. As a pedestrian agricultural economist I know little about preferences and decision rules of politicians, bureaucrats, and business executives in the metropolis. Rather, I am familiar with work and life of peasants and petty traders and their petty politics at the level of a village microcosm in the monsoon areas of Asia. Inevitably the perspective presented here is circumscribed by my narrow observations from Asian paddy-fields. To the audience who may legitimately expect a broader perspective as presented in the previous Elmhirst Lectures, in advance I express my apology.

RIVAL VIEWS ON COMMUNITY AND MARKET

Since the eve of modern economic growth, two rival views have contested about the relationship between community and market. One view, which may be called the 'community-yoke' thesis, considers traditional institutions in precapitalist and preindustrial communities to be the feudal yokes preventing realization of not only the economic but also the moral potential of mankind. In this view the market is not only efficient in resource allocations but is also the 'rules of justice' that emancipate people from the yokes of traditional community ties and the

*For the preparation of this lecture, I owe much to comments and suggestions from Dale Adams, Gary Anders, Robert Bates, Martin Bronfenbrenner, John Dillon, David Feeny, Douglas Hedley, Shigeru Ishikawa, Justin Lin, John Mellor, Yonosuke Nagai, Keijiro Otsuka, Michel Petit, Gustav Ranis, Vernon Ruttan, Theodore Schultz, Bernard Stanton and Anthony Tang. I regret that I was not able to incorporate fully into this lecture several insightful comments partly because of space limitation and partly because of my insufficient capacity. Those comments will be invaluable inputs for my continued research on this subject in the future.

arbitrary command of despotism, thereby enabling them to develop virtues such as industriousness, frugality and probity. This view has been asserted by great thinkers from early enlightenment philosophers like Montesquieu and Adam Smith to contemporaries such as Friedrich von Hayek and Milton Friedman.[1] In this view the 'Protestant ethic' identified by Max Weber as underlying modern industrial development is seen to be acquired through market exchange.[2]

Diametrically opposite to the community-yoke thesis is the view that we may call the 'evil-market' thesis. In this view, the morals that are considered necessary for the efficient functioning of a market economy based on contracts among free individuals, such as honesty, trust and restraint, are not something to be learned from commerce and market but are virtues nurtured through social interactions in precapitalist communities bound by common religion and mutual love. Since those traditional virtues are undermined by market forces based on the unrestricted release of self-interest and material greed, the capitalist market system is demoralizing, and hence, self-destructive.[3]

While the community-yoke thesis asserts that the transition from precapitalist communities bound by hierarchical status, traditional customs and personal ties to modern market economies is beneficial to a majority of the poor as it emancipates them from the inferior occupations to which they are consigned by their low status at birth, the evil-market thesis argues the contrary. Indeed, a deep-rooted popular belief is that the destruction of traditional community relations, such as mutual help and income sharing, due to commercialization results in greater inequality and misery for the poor. Since Thomas More in his Utopia lamented the misery of peasants whose lands were enclosed into a large pasture for commercial wool production in sixteenth-century England, this view has been expressed repeatedly by Russian *Narodniks*, US Populists and the followers of Mahatma Gandhi in India. Karl Marx recognized the emancipating role of market from the yoke of feudal regulations, but the freedom gained by a majority of the emancipated peasants meant to him nothing but the freedom for them to join the industrial reserve army of lumpen-proletariat.[4]

The battle between the community-yoke and the evil-market theses resounded again in a recent debate between so-called 'moral economy' and 'political economy' approaches to peasant communities.[5] The former approach, advocated by James C. Scott among others,[6] assumes that social relations in precapitalist peasant communities are geared to secure minimum subsistence for all community members. Normally, peasants eke out their living at a near-subsistence level. They are exposed to the constant danger that their income may decline below the subsistence minimum, because of external variations such as weather or internal incidents such as the sickness of family members. The compelling demand of the peasants to avoid subsistence crises is said to have resulted in a 'subsistence ethic' under which social arrangements designed to insure against these crises are considered fair and legitimate.

In the view of moral economists, common features of village communities such as the exchange of labour, the use of communal property for the livelihood of the orphaned or the widowed, and rent reductions in a year of crop failure are institutionalized patterns developed under this ethic. The basic principle 'claims that all should have a place, a living, not that all should be equal'.[7] To the extent that a landlord protects the poor members in the community (tenants) against ruin in bad years, he is considered a legitimate patron.

Thus, moral economists assume a pervasive tendency in village communities to set informal social controls on the better-off members to redistribute wealth or to impose specific obligations to provide for the minimum needs of the poor. With the intrusion of the market economy, the moral principle of securing minimum subsistence is replaced by the hard economic calculation of maximizing profit. The well-to-do members of the community tend to rely more on external legal means to protect their property. They become more concerned about increasing their incomes in order to purchase modern goods from outside than about buying goodwill among their fellow villagers. Mutual-help and patron-client relationships are weakened, and the poor are exposed to the risk of subsistence crises. Some of the small landholders are compelled to sell their land and become landless workers selling their labour in the labour market, while others accumulate land to become market-orientated farmers. Peasants stripped of the protection of traditional village institutions and patron-client bonds and faced with subsistence crises feel ill-treated and may eventually rise in revolt. Thus, moral economists view peasant uprisings as the desperate efforts of peasants to restore traditional rights destroyed by capitalism.

The moral economy view has been challenged by Samuel Popkin among others.[8] In his so-called 'political economy' approach, Popkin denies that the precapitalist peasant community is moral-orientated to protect the poor. He insists that traditional village institutions and patron-client relationships have been neither motivated by nor effective in guaranteeing the subsistence need of community members. It is his essential contention that even in the traditional peasant community, people are predominantly motivated to seek personal gain rather than group interests; peasants rely on their families or groups smaller than the village community for their subsistence guarantees because the village-wide scheme to insure against risk is bound to be ineffective because everyone tries to be a free rider or to claim profit from group action without bearing the cost; elites exploit such village institutions as community property for their own profit rather than to protect the poor. As a result village procedures reinforce, rather than level, differences in income and wealth. In this view the market system is beneficial to a majority of peasants to the extent that it emancipates them from the control of village elites and enables them to engage in transactions based on their own economic calculations.[9]

MARKET FAILURE AND COMMUNITY CORRECTION[10]

While the perspectives of the community-yoke and the evil-market theses are diametrically opposite, one point in common is to regard community and market as rival institutions in terms of both growth and equity. My basic doubt is whether they are absolute rivals or whether they are complementary to a significant extent, at least in the early stage of economic development. In my view the conditions of production and exchange faced by semi-subsistent peasants are such as to make the failure of market pervasive in achieving the efficient allocation of resources. Community relations are often relied upon to correct market failures.

One major source of market failure in an agrarian community in developing economies (which will hereafter be referred to as 'village') is pervasive externalities. By nature, agricultural production activities are strongly interdependent due to the ecological interdependence of biological processes. Overgrazing in a mountain pasture may increase the incidence of flooding in nearby crop fields. Diversion of irrigation water upstream may result in a water shortage for downstream farms in a river valley. An individual peasant is usually too small a production unit to internalize much of such production externalities It becomes imperative for the village to co-ordinate and reduce conflicts over the use of such resources.

Because production externalities are pervasive, and because possible conflicts are numerous and variable, customs or accumulated precedents tend to be a more effective means of settling conflicts than the stipulations of formal laws. Because villagers' property in the form of standing crops and grazing animals is often physically unprotected in open fields, morals and taboos can be the most effective means of policing. Thus, the institutions that govern the use of resources efficiently in the village are customary rules and moral principles rather than formal laws and explicit contracts.

Those customary rules and moral principles are enforced through intensive social interactions in the small village community where everyone is watching everyone and where gossip about one's misconduct is circulated by word of mouth faster than via modern communication means.[11] In such an environment it usually entails a significant cost to violate time-honoured village rules. Even if an individual expects large material gains from violating the rules, he may not dare to do so because of the risk of social opprobrium and perhaps ostracism.

The close social interactions that reduce opportunism, cheating, and shirking are not only effective in preventing free riders in the provision of public goods but also are instrumental in enforcing contracts on the transaction of private goods and services. In the economic environment of rural villages in developing countries, transaction costs among anonymous agents in the market tend to be high. ('Market' is here defined rather narrowly to refer to the concept conventionally used in both the neoclassical and the Marxian economics texts.) First of all, the marketable agricultural surplus of semi-subsistent peasants is usually small in volume and variable in quality. Therefore, it is impractical to introduce modern marketing practices such as grading and brand names, aimed at reducing uncertainty about product quality. A market tends to be inefficient or vanish altogether because of high transaction costs due to the absence or asymmetry of such quality information.[12]

The problem of quality uncertainty is even more serious in labour markets. In urban industries characterized by the machine process, work is highly standardized and relatively easy to monitor. The biological process of agricultural production, however, is subject to infinite variations in ecological conditions. Very different treatments for a crop or an animal are required in response to slight differences in temperature and soil moisture. It matters a great deal whether a labourer performs his work with careful attention and adjustments in response to variations in plants, animals and ecology. Such work quality is extremely difficult to monitor. The scattering of agricultural operations over a wide space adds to the difficulty of monitoring.

If an employment relationship is limited to a spot exchange among anonymous agents in the marketplace, it is difficult to avoid hiring workers who are dishonest or shirkers, not so much in the duration of physical work but in its quality. The scope of substituting market transaction by hierarchical internal organizations such as 'firms' is limited, partly because of the small market size and partly because of production uncertainty and the difficulty of delineating and standardizing production operations in the biological process.[13]

The presence of severe quality uncertainty, coupled with the small market size makes it unprofitable for specialized agents to engage in the marketing of various goods and services separately. Consequently, a strong tendency emerges in the village community for various transactions to be interlinked in a highly personalized relationship. A typical arrangement is a sharecropping tenancy. Usually a landlord does not simply receive a share rent for his contribution of land, but also bears a part of production cost and advances credit. Moreover, he often patronizes his tenant in such ways as giving gifts at the birth of a child or the death of a father and using his connections and influence to solve a tenant's problems with other villagers or with outsiders. The tenant reciprocates with loyal services and supports to the landlord.

In such a patron-client relationship, exchanges are multi-stranded and the balance is cleared in the long run. Multiple transactions between the same parties permit the saving of transaction costs because much of the cost of information collection and contract enforcement is common to all the transactions.[14] Moreover, once the patron-client relationship is established, not only will it make a client morally obliged to conform to the implicit terms of contract but also it will work as a penalty on their possible commitment of moral hazards since the loss of his patron's protection would mean a very high cost in the economies in which the poor client has to face subsistence crisis and yet has no access to well-developed insurance and credit markets. On the other hand, if the patron fails to provide sufficient protection or to pay legitimate remuneratlon, he will not only be resisted by his client's cheating, shirking and stealing but also be penalized by social opprobrium.

I share Samuel Popkin's political-economy perspective that peasants in the precapitalist society are as egoistic as any hard-calculating capitalists in seeking personal gains. However, the fact that the peasants are egoists does not necessarily conflict with their apparently altruistic behaviour as observed by moral economists like James Scott. If a village community is characterized by a high degree of social interaction, a well-to-do villager may try to simulate the behaviour of a benevolent patron in terms of traditional norms if he is a wise egoist. Likewise, a poor villager may simulate the behaviour of a conscientious and faithful client.

To the extent that opportunism and moral hazards are suppressed by such community mechanism, market failures due to pervasive production externalities and high transaction costs are reduced. Thus, strong social interactions with a common belief in traditional customs and moral principles in a small community may be considered a basis for its members to arrive at and maintain the agreements of mutual advantage or to avoid the occurrence of 'prisoner's dilemma' due to mutual distrust.[15]

Such a role of the community relations is not limited to preindustrial society but is also important in industrial and/or post-industrial societies. As the work required for modern times has shifted from that based on muscles to that based on brain, it has become increasingly difficult to enforce work rules through a hierarchical command system. It has become necessary to design the forms of contract that incorporate incentives to improve unobservable work efforts by improving morale.[16] One possible direction is to establish relations of a community type within a firm. A typical example along this line is the Japanese-management system. In the Japanese system employment is life-long with no explicit contract, but both management and employees are assumed to follow the customary rules of the company; a boss is supposed to develop a patron-client relationship with workers under him so that a section or a division or even a whole company simulates a family or a village. Such a system, which was once regarded as premodern, feudalistic and hence inefficient, is now considered to underlie the high efficiency of Japanese industries as it minimizes the X-inefficiency arising from the prisoner's dilemma situation.[17]

COMMUNITY FAILURE AND MARKET CORRECTION

Of course, in the real world no community is perfect in eliminating opportunism, cheating and shirking. The community with zero transaction cost, completely free from the prisoner's dilemma problem, is as much an abstraction as a perfectly competitive market.[18]

First of all, the traditional customs and the moral principles that govern the village community are, by nature, slow to change. These community rules and institutions might have promoted efficient resource use when created, but they often become its fetters as institutional adjustments tend to lag behind changes in resource endowments, technology and market conditions.[19] For example, overgrazing of common pasture in a village may be explained by a lag in the shift from the traditional rule of free access to the village property to a system that facilitates resource conservation such as private property rights, corresponding to increasing population pressure on land.

Second, the community mechanism of rule enforcement based on common belief and intensive social interactions is bound to be limited to a small community. While the community system may be effective in co-ordinating resource use within a village, it is largely incapable of solving conflicts between this village and other villages or the outside world in general. The prisoner's dilemma tends to emerge among different villages or among different tribes, especially when they belong to different ethnic groups. One village alone may be able to develop and enforce rules to regulate the number of animals in a grazing land. But, this village may not dare to do so for the fear that other villages will react by increasing their own stock to take advantage of the first village's conservation effort. Indeed, I have often encountered cases in which an irrigation system covering the area of one village is efficiently administered, while another nearby system covering several villages is very poorly maintained and the abuse of water in upstream villages results in shortages in downstream villages. This general tendency for a village community to allow or even encourage the exercise of opportunism by its members against outsiders is also a serious constraint on the development of a market over a wide area. The need for setting and enforcing common rules to prevent the inter-community opportunism is considered one of the major factors underlying the emergence of the state endowed with coercive power over a wide area.

Third, although the community mechanism may be effective in reducing transaction costs within a village, it does not guarantee efficient resource allocation in the Pareto-optimum sense. Because potential participants in the patron-client contracts are few in a small community, the implicit contracts to be reached through subtle bargaining tend to be similar to those of bilateral monopoly. If land and capital are concentrated in the hands of the few elites, resource allocation would be close to that of pure monopoly and/or monopsony in the interlinked-factor and product markets, especially where it is easy for the landed elite to collude through intensive social interactions. Penetration of the market system, or exposure of landless villagers to wide market opportunities, will strengthen their bargaining position, and hence bring equilibrium closer to that of perfect competition. In such a case the development of the market will have the effect of increasing both efficiency and equity.

Further, if a community is artificially segregated from market competition, the likelihood is high that the community principles, such as mutual help and reciprocity, may turn out from the mechanism of mutual work enforcement to the mechanism of mutual shirking; this may explain, in part, relative inefficiency in collective or state farms in socialist economies as well as in Japanese agricultural co-operatives operating under strong government protection.[20] It must be pointed out that the incorporation of community relations into the internal organization of a firm alone is not sufficient to explain the efficiency of Japanese industries. The efficiency is explained rather by the success of the management in developing a community morale among employees to work hard without costly supervision for the sake of survival of their company under fierce market competition.[21]

ANTI-COMMUNITY AND ANTI-MARKET POLICIES

The community and the market systems play critically important roles in co-ordinating rural people for the efficient use of scare resources. Of course, no system is free from failure. The community-yoke and the evil-market theses have concentrated on condemning the failures of each system on entirely different grounds, without due consideration of their complementarity. Under the influence of these rival views, governments in developing countries have often tried to suppress altogether the mechanisms of community and market in order to correct their failures with the result of destroying their positive functions.

On the basis of the community-yoke thesis, it has been considered necessary to suppress the 'feudal and exploitative' rules and institutions of traditional village communities. A typical example is the prohibition of sharecropping tenancy stipulated in the land reform laws of many developing countries. Share tenancy has been considered both exploitative and inefficient because landlords derive an unfair share of the product of tenants' efforts and hence reduce the tenants' incentive to apply labour and other inputs below optimum levels.[22] However, recent empirical as well as theoretical studies tend to support the hypothesis that the share contract can achieve the same degree of efficiency as the fixed-rent contract and owner farming and that share tenancy can be more beneficial for tenants because of its features of risk sharing and utilization of the landlord's credit.[23] Furthermore, the prohibition of share tenancy closes the possibility for landless labourers to climb up the 'agricultural ladder' via sharecropping to leaseholding and eventually to becoming owner farmers.[24] An emerging consensus is that the artificial limitation on the choice of contracts, such as the prohibition of share tenancy, reduces both efficiency and equity.

On the other hand, the market system has also been condemned by the popular image that middlemen and/or money lenders exploit peasants through the practice of monopoly/monopsony pricing and usury. This evil-market perspective has often underlain pervasive government interventions into the market in developing countries, ranging from controls on farm product prices, interest and land rent, to government monopolies in marketing agricultural products, distributing inputs, and providing credit.

However, accumulated empirical evidence in the past has been largely inconsistent with the hypothesis of monopoly/monopsony exploitation by middlemen/moneylenders. Rather, private marketing in developing countries has been found to be fairly competitive and efficient.[25] Government regulations of markets have often proved detrimental not only to efficient resource allocations but also to equity. For example, the prohibition of 'usury' has increased the effective rate of interest to the poor by the amount of expected penalty risk to moneylenders; rent control reduced landowners' incentive to rent out their land, thereby reducing the opportunity of landless labourers to become tenant farmers; and controls on food prices have benefited relatively rich urban dwellers at the expense of peasant producers.[26]

More wasteful has been the substitution of governmental agencies, such as marketing boards and parastatal organizations for private marketing channels. This has resulted in the substitution of high opportunity-cost resources such as modern equipment and educated manpower for low opportunity-cost local resources, especially labour in off-farm season. We need not mention increases in X-inefficiency due to a shift from private to governmental monopoly firms. It is well-known that those governmental agencies have been used as a means to procure food from peasants at lower-than-market prices for delivery to urban dwellers. Also, the governmental monopoly of credit and input supplies has been used by politicians to reward their supporters selectively and centralize power and resources in their hands.[27]

Government interventions and regulations in indigenous community and market relations have created large institutional rents for bureaucrats and local elites. The other side of the coin is that interventions and regulations have multiplied as the result of bureaucratic and political rent-seeking activities.[28] In the calculation of politicians in developing countries about maximizing the probability of their staying in office, the support from bureaucrats, rural elites, urban business, and organized labour, should weigh more heavily than the support from unorganized peasants and labourers in rural areas.

Because the former group consists of a small number of educated resourceful people, it is relatively easy to organize political lobbying for the rules and the institutions that are expected to yield institutional rents for its members at the expense of outsiders. The latter group, though large in number, is weak politically because it is poorly organized. In general, as the theory of Mancur Olson predicts, the large group is more difficult to organize because of the difficulty of preventing free riders.[29] Moreover, peasants and agricultural labourers in developing economies are mostly uneducated and live sparsely over a wide area with poor communications and transportation infrastructure. It is, therefore, too costly for them to organize themselves for countervailing group action against a political campaign by the elites.[30] Inefficient and inequitable institutions and policies thus result as an equilibrium of the political market.[31] This is the basic source of 'government failure' in achieving socially efficient resource allocations. It is important to recognize that ideologies in such forms as the community-yoke and the evil-market theses have been highly instrumental for the politicians and the rent-seekers in providing a rationale for suppressing opposition to their anti-community and antimarket policies.[32]

TOWARDS COMMUNITY AND MARKET DEVELOPMENTS

My argument does not imply that governments should reduce their rural development efforts. On the contrary, governments should expand their efforts in the spheres in which both community and market fail to achieve socially efficient resource allocations. In this endeavour, governments should try to supplement rather than to replace indigenous community and market systems.

As discussed before, individual village communities are often incapable of building large public infrastructures covering several villages. For these, the government should take the responsibility. In this case, too, efforts are needed to mobilize the collaboration and the participation of local communities to the greatest possible extent. For example, while major dams and canals for large-scale irrigation need to be built and maintained by governmental agencies, collaboration with local communities must be deliberately designed for the operation and maintenance of subsidiary canals and farm ditches. A critical role of government in reducing community failure is to enhance collaboration, or at least to reduce antagonism and distrust among small local communities through effective persuasion and education on the need for co-operation in the efficient use of a large infrastructure.

Also, plenty of room exists for government to improve the efficiency of local markets. Marketing margins for agricultural products are large in developing countries, usually much less because of private monopoly than because of high transportation costs as well as the high cost of collecting the agricultural surplus in small lots from small producers. Monopoly emerges typically in isolated villages in which the agricultural surplus is so small (relative to the cost of transportation) that no more than one middleman can profitably operate. When this is the case, the way to improve marketing efficiency is for the government to invest in transportation and communication infrastructure, as well as in agricultural research and extension for increasing agricultural output, productivity and marketable surplus.

The supply of credit, especially from outside a village, is often constrained by the absence of adequate institutions to stipulate and enforce collateral. In such a case, government efforts to improve the registry of real assets and the procedures of civil courts to enforce collateral contracts will contribute greatly to the reduction in credit costs. In general, the stipulation and enforcement of private property rights by the government are the basis for efficient functioning of the market.

A paramount danger is to overemphasize the failures of existing community and market systems while ignoring the possibility of government failure. Such arguments have been used to justify the displacement of indigenous community and market institutions by so-called 'modern' institutions heavily loaded with bureaucracy. The imposition of the 'modern' institutions imported from developed countries or founded on ideological preconceptions, without due consideration of traditional norms and organizational principle, is bound to be met by widespread noncompliance or sabotage by local people, as evidenced by the repeated failures of institutional credit programmes and the rapid deterioration of some modern large-scale irrigation systems.

Self-sustaining growth of the rural economy in developing countries cannot be expected without a policy that makes positive use of indigenous community relations and local market organizations as a basis for modern rural development institutions. The search for an appropriate policy design should begin with serious investigations into the reality of the grassroots in each developing country.

NOTES

[1]For the contesting views on the role of market in general, not especially focused on its relationship with community, see Hirschman, Albert O., 1982 'Rival Interpretations of Market Society: Civilizing, Destructive, or Feeble?,' *Journal of Economic Literature* 20, pp. 1463–84; and Inoki, Takenori, *Keizai Shiso*, 1987 (Economic Thoughts), Tokyo: Iwanami-Shoten, Chapter 1.

[2]For this perspective, see Rosenberg, Nathan, 1964, 'Neglected Dimensions in the Analysis of Economic Change,' *Oxford Bulletin of Economics and Statistics* 26, pp. 59-77.

[3]For this perspective, see Hirsch, Fred, 1976, *Social Limits to Growth,* Harvard University Press, Cambridge.

[4]Karl Marx, *Capital,* Vol I, Kerr, Chicago, 1909, (original publication 1867).

[5]The following review of the two approaches draws heavily on Yujiro Hayami and Masao Kikuchi, 1982, *Asian Village Economy at the Crossroads,* University of Tokyo Press, 1981, and Johns Hopkins University Press, pp. 17-20.

[6]Scott, James C., 1976, *The Moral Economy of Peasant,* Yale University Press. Also see Migdal, Joel S., 1974, *Peasants, Politics and Revolution,* Princeton University Press; Wolf, Eric 1966, *Peasants,* Prentice-Hall, Englewood Cliffs, New Jersey. .

[7]Scott, J.C. *ibid.*, p. 40.

[8]Popkin, Samuel L., 1979, *The Rational Peasant,* University of California Press.

[9]For further debates between the moral and the political economy approaches, see the proceedings of a symposium on this subject published in the August 1983 issue of *Journal of Asian Studies.*

[10]This Section draws heavily on Hayami and Kikuchi, *Asian Village Economy,* Chapter 2.

[11]Following Becker, Gary S., 1974, 'A Theory of Social Interactions,' *Journal of Political Economy* 82, pp. 1063–93, the term 'social interactions' is defined here in terms of the utility function of a person to include other persons' reactions to his action. For example, A's welfare depends not only on his own personal consumption but also on how B looks at A's income and consumption levels. If A enjoys B's good will or fears his envy, A may transfer a part of his income to B up to a point where A's marginal loss from utility from the income transfer to B equals the marginal gain in A's utility due to the improvement in B's evaluation of A.

[12]For the theory of market failure due to quality uncertainty, see Akerlof, George A. 1970, 'The Market for "Lemons": Quality Uncertainty and the Market Mechanism,' *Quarterly Journal of Economics* 84, pp. 488–500. For its application to agricultural product marketing in developing economies, see Siamwalla, Ammar, 1978 'Farmers and Middlemen: Aspects of Agricultural

Marketing in Thailand,' *Economic Bulletin for Asia and Far East* (UN-ESCAP) 29, pp. 38–50.

[13]For the role of hierarchical internal organization for reducing transaction costs, see Coase, Ronald H., 1937 'The Nature of Firm,' *Economica* 4, pp. 386–405; Williamson, Oliver M., 1975, *Market and Hierarchies*, Free Press, New York. For the difficulty of applying a hierarchical command system to the management of agricultural production relative to industrial production, see Brewster, John M.,1950, 'The Machine Process in Agriculture and Industry,' *Journal of Farm Economics*, pp. 69–81.

[14]This merit is considered a major factor to underlie the emergence of 'interlocked factor markets'.See Bardhan, Pranab K., 1980,'Interlocking Factor Markets and Agrarian Development: a Review of Literature,' *Oxford Economic Papers* 32, pp. 82–98.

[15]The prisoner's dilemma refers to a solution of mutual disadvantage for two persons engaged in a noncooperative game under the situation in which each person fears that the other person may take a strategy to benefit himself at the expense of the other side. The setting of traditional village communities is opposite to the prisoner's dilemma game. Rather it is considered to approximate the 'super game' in which all villagers (players) expect transactions (games) among them to be repeated endlessly so that everybody knows opportunism does not pay because it will sooner or later meet retaliation from others. See Luce, Duncan R. and Raiffa, Howard, 1957, *Games and Decisions*, Wiley, New York.

[16]For the theory of incentive contracting, see Mirrlees, James 'Notes on Welfare Economics, Information and Uncertainty,' in Balch, M. *et al.* (eds.), *Essays on Economic Behavior Under Uncertainty*, North-Holland, Amsterdam, 1974; Nalebuff, B.J. and Stiglitz, J.E., 1983, 'Prizes and Incentives: Towards a General Theory of Compensation and Competition,' *Bell Journal of Economics* 14, pp. 21–43.

[17]For a general perspective on Japanese business and its management system, see Clark, R.C., 1979, *The Japanese Company*, Yale University Press; Hirschmeir, Johannes and Tsunehiko, Yui, 1981, *The Development of Japanese Business*, George Allen and Unwin, London. For its economic analysis, see Aoki, Masahiko, (ed.), 1984, *The Economic Analysis of the Japanese Firm*, North-Holland, Amsterdam. For the general discussion on the X-inefficiency of internal organizations, see Leibenstein, Harvey, 1976, *Beyond Economic Man*, Harvard University Press, and *Inside the Firm: The Inefficiency of Hierarchy*, Harvard University Press, 1987. For interesting discussions on the role of community relations in newly industrializing economies, see Leff, Nathaniel H., 1986, 'Trust, Envy, and the Political Economy of Development: Economic Groups in Developing Countries', Paper presented at the Conference on the Role of Institutions in Economic Development, Cornell University, November 1986 and Ishikawa, Shigeru, 'Problems of Late Industrialization in Asian Perspective', Paper presented at the 8th World Congress of the International Economic Association, Delhi, December 1986.

[18]For example, the general absence of a draft animal rental market is considered as evidence of the difficulty for owners to prevent careless treatment and overwork of the animals by borrowers even in a village community. For the causes of inefficiency or absence of some markets in the rural economy in developing countries, see Binswanger, Hans P. and Rosenzweig, Mark R., 1986, 'Behavioural and Material Determinants of Production Relations in Agriculture,' *Journal of Development Studies*, 22, pp. 503–39.

[19]This problem is inherent in any institutional change, as pointed out by Karl Marx in a famous preface to his *A Contribution to the Critique of Political Economy* but it is considered especially severe in the case of traditional community institutions.

[20]Hayami, Yujiro, 1988, *Japanese Agriculture under Siege: The Political Economy of Agricultural Policies*, Macmillan, London.

[21]For the mode of competition and cooperation among Japanese firms, see Abegglen, James C. and Stalk, George Jr., 1985, Kaisha: *The Japanese Corporation*, Tuttle, Tokyo.

[22]Until recently this view had been common among modern economists, too, based on a misunderstanding of Alfred Marshall's theory. For the review of literature, see Otsuka, Keijiro and Hayami, Yujiro, 1988, 'Theories of Share Tenancy: A Critical Survey,' *Economic Development and Cultural Change* 36.

[23]*Ibid.*

[24]This problem has become serious under land reform in the Philippines. See Hayami, Yujiro, Quisumbing, Agnes R. and Adrians, Lourdes F., 1987, *In Search of a Land Reform Design for the Philippines*, University of the Philippines at Los Banos, Agricultural Policy Research Program.

[25]Selected references include: Ruttan, Vernon V., 1969, 'Agricultural Product and Factor Market in Southeast Asia,' *Economic Development and Cultural Change* 17, pp. 501–19; Lele, Uma

1971, *Food Grain Marketing in India*, Cornell University Press; Jones, William O.,1972, *Marketing Staple Food Crops in Tropical Africa*, Cornell University Press; Mears, Leon A., 1974, *Rice Economy of the Philippines*, University of the Philippines Press; Falcon, Walter F. *et al.* ,1984, *The Cassava Economy of Java*, Stanford University Press; Scott, Gregory J.,1985, *Markets, Myths and Middlemen*, International Potato Center, Lima; Hayami, Yujiro, *et al.*,1987, *Agricultural Marketing and Processing in Upland Java*, United Nations ESCAP-CGPRT Centre, Bogor.

[26]Serious inefficiency due to agricultural price distortions emphasized by Theodore Schultz 'On Economics and Politics of Agriculture' in Schultz, T.W. (ed.), 1978, *Distortions of Agricultural Incentives*, Indiana University Press, has now been widely recognized, for example, in the 1982 and 1986 editions of the World Bank's *World Development Report*.

[27]This point is most lucidly advanced in Bates, Robert H., 1981, *Markets and States in Tropical Africa*, University of California Press. See also, see Lipton, Michael 1977, *Why Poor People Stay Poor: Urban Bias in World Development*, Harvard University Press, and Adams, Dale A. and Graham, Donglas H., 1981, 'A critique of Traditional Agricultural Credit Projects and Policies,' *Journal of Development Economics* 8, pp. 347–66.

[28]The literature on the theories of government failure due to rent-seeking activities is now prolific. For a review, see Buchanan, James M., Tollison, Robert D. and Tullock, Gordon (eds.) 1980, *Towards a General Theory of the Rent-Seeking Society*, Texas A & M University Press; Tollison, Robert D., 1984, 'Rent Seeking: a Survey', *Kyklos* 35, pp. 575–602; Collander, David C. (ed.), 1984, *Neoclassical Political Economy*, Ballinger, Cambridge.

[29]Olson, Mancur, 1965, *The Logic of Collective Action*, Harvard University Press.

[30]This difficulty is emphasized in Olson, Mancur 1985, 'Space, Agriculture, and Organization,' *American Journal of Agricultural Economics* 67, pp. 928–37.

[31]For a model of political market for agricultural policies, see Hayami, *Japanese Agriculture under Siege*, Appendix A. For the general economic theory of politics, see Downs, Anthony 1957, *Economic Theory of Democracy*, Harper and Row, New York; Buchanan, James M. and Tullock, Gordon 1962, *The Calculus of Consent*, Michigan University Press; Breton, Albert 1974, *The Economic Theory of Representative Government*, Aldine, Chicago.

[32]This role of ideology or, more broadly, cultural endowments as instruments for politicians is emphasized by North, Douglas C. 1981, *Structure and Change in Economic History*, Norton, New York as well as by Hayami, Yujiro and Ruttan, Vernon W. 1985, *Agricultural Development: An International Perspective*, revised edition, Johns Hopkins University Press, Chapter 4. See also Feeny, David 'The Demand for and Supply of Institutional Arrangements,' in Ostrom, Vincent, Feeny, David and Picht, Hartmut (eds.), 1988, *Rethinking Institutional Analysis and Development: Some Issues, Alternatives and Choices*, Institute for Contemporary Studies, San Francisco.