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# GROWTH AND EQUITY IN AGRICULTURAL DEVELOPMENT

PROCEEDINGS

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## Institutional and Organizational Framework for Egalitarian Agricultural Growth

#### INTRODUCTION: THE PROBLEM

In Asia, as in much of the developing world elsewhere, few countries have evolved an appropriate institutional framework for equitable growth of the agricultural sector of the economy. Much of the South Asian experience in recent decades can be characterized as relative stagnation with inequality while the typical South-East Asian experience is perhaps not too inaccurately characterized as growth with inequality.<sup>1</sup> Certain East Asian experiences have been claimed as solitary examples of growth with equality. The Taiwan area and South Korea are often cited as examples of non-socialist institutional reform leading to egalitarian growth of agriculture. Closer analysis, however, has made it increasingly clear that these are very much in the nature of special cases not likely to be easily replicated elsewhere. For quite some time it was believed that China held out an alternative. socialist example of reasonably rapid growth with a very high degree of equality. While the achievement of China must still be regarded as remarkable, recent official indictments raise serious questions about the effectiveness of the institutional-organizational framework of the commune system in generating an acceptably high rate of growth.

Institutional constraints on growth and equality in the agrarian societies have been a major concern of development theories. Such theories have frequently argued that existing institutions prevent both the attainment of higher output and its better distribution. To give an example, one of the widely held views among development economists is that the existing inequality in the distribution of land and the consequent prevalence of widespread labour-hiring in the countries of Asia not only perpetuate inequality but also limit output below the potential level by restricting the use of labour below the level that would obtain under egalitarian peasant farming based on family labour (because the market wage that dictates the quantity of labour hired for use is higher than the 'cost' of family labour). The implication is that an institutional change such as land reform, ushering in peasant farming based on family labour to replace currently widespread labour-hiring by larger farms, would promote both higher outputs and its better distribution.

This paper will argue that the above position represents an overly optimistic view. It neglects the important aspect of the cost of institutional change. Such cost arises out of a number of factors. Firstly, there is the cost of transition which is often critical for those poor Asian countries which cannot absorb such cost, in the form of lower output during the transition phase, without going through large-scale starvation. Secondly, every institution has its own systems of infrastructure and incentives which break down when the institution is overthrown. The new institution has to be provided with its alternative infrastructure and incentive systems. This entails cost in terms of the necessary time for adjustment and resources. The lack of these considerations makes the attraction of institutional change as the supposed sufficient vehicle for spearheading the process of egalitarian growth deceptively appealing. In reality the above costs almost always force a trade-off between growth and equality thereby robbing such institutional reforms of the attraction of appearing to promote both these objectives. The purpose of the paper is not to preach that one should abandon the path of promoting egalitarian growth through institutional change but to argue that the policymakers must be adequately aware of the costs involved and try to limit them as far as possible by avoiding over-optimism.

#### INSTITUTIONAL CHANGE THROUGH EGALITARIAN LAND REFORM

An institutional change that is often recommended for those agrarian societies which are unprepared for or unwilling to make a basic change in their social systems is an egalitarian land reform of the Japanese-South Korean-Taiwanese type. It is argued that equality will be promoted by the egalitarian distribution of ownership of land to which, due to its scarcity, accrues a very high proportion of net output and that production will increase due to the much greater application of labour and effort as a result of the replacement of hired labour by family labour. The highly plausible theoretical argument is reinforced by the practical experiences of South Korea, the Taiwan area and Japan.

The fact that the experience has not been replicated elsewhere has generally been attributed by analysts to the lack of political will on the part of the political leadership and the power of those who own much of the land. It is frequently argued that in the above cases the problem of political will was solved by the presence of an occupation army and the power of the landowning classes had been eroded by the fact that they were (or were the collaborators of) the militarily defeated parties. The problems presented by the lack of political will on the part of the government and the political power of the landowning classes are real obstacles to land reform. However, to attribute the success in these East Asian cases entirely to the solution of these problems appears misleading.

In these East Asian cases, even in the pre land reform days, the

operational landholdings were by and large small family farms, without much inequality in their size distribution, although the ownership units were distributed unequally. This is in rather sharp contrast to the phenomenon obtaining in contemporary developing Asia (particularly, South Asia) where the distribution of operational holdings is very unequal. In most cases the degree of inequality is greater in ownership distribution than in the distribution of operational holdings but the absolute inequality in the latter is very high.

The causes of this very different pattern of tenancy between East Asia and the contemporary developing Asia are not clear and is a priority area for interdisciplinary research. However, it is quite clear that the task of carrying out a highly egalitarian land reform was rendered a great deal easier in East Asia by the special characteristics of tenancy prevalent before land reform. The redistribution of ownership units could not have created much disorganization in so far as the operators of landholdings – the actual farmers – did not have to be disturbed significantly. Nor was it necessary for the new owner-operators to acquire entrepreneurial and technical knowledge which they, as tenant-operators, already possessed.

In much of the contemporary developing Asia the circumstances are vastly different in so far as the size of the operational landholdings – the farms – are highly unequally distributed. An egalitarian land reform of the East Asian type must bring about extensive redistribution among operational landholdings. Thus, some kind of a social upheaval is inevitable in carrying out land reform in these countries. This means that in order to face up to the task a much greater political will and organizational power will be required under these circumstances than was necessary in the East Asian cases.

Secondly, even in the unlikely event of finding the political will and organizational power, a good deal of time and resources would be required to replace entrepreneurship, knowledge and the overall infrastructural network. Those becoming farmers as a result of redistribution will need time to acquire entrepreneurial ability and technological and marketing knowhow. More importantly, new channels of credit and investible resources will have to be established. All these will require time and resources. Although some of it will probably be offset by the greater labour use promoted by the institution of peasant farming based on family labour it is highly likely that aggregate output will fall in the short run. The extent of such fall and the length of the time period over which it takes place may be limited if the political will of the reforming government is adequately backed by a strong organization and sensible policies to improve skills, entrepreneurial abilities and command over resources of the new peasant owners. It is, however, unrealistic to think that such a major social change can be brought about at no cost to society.

On balance, the problem of adequate political will would appear to be the decisive factor. It should, however, be recognised that the need for greater political will derives from the greater obstacle arising out of the more highly unequal distribution of operational landholdings in these countries as compared to the successful East Asian cases.

#### COLLECTIVE AGRICULTURE

The presence of political will, so rare a phenomenon in the contemporary non-socialist countries of Asia, is a frequent characteristic of revolutionary socialism. This has often led to thoroughgoing land reforms under its banner. However, revolutionary socialism looks upon egalitarian land reform as nothing more than a brief interregnum marking the transition towards the collective organisation of agriculture. An outstanding example is the case of the Peoples Republic of China which completed a land reform by 1952. According to all available evidence it resulted in a very egalitarian redistribution of rural income and the generation of a high rate of surplus for national investment.<sup>2</sup> And yet within 5 years – by the end of 1957 – private farming and land ownership as the partial basis of income distribution were virtually abolished. By then 96 per cent of the peasant families had been organized into advanced co-operatives under which land and other means of production ceased to be privately owned and the collective product came to be distributed entirely on the basis of work performed.

The arguments in favour of such rapid transition towards collectivization can be divided into two broad categories: those based on considerations of efficiency and those claiming that it would facilitate greater egalitarianism and quicker transition to socialism and, ultimately, communism. The first set of arguments emphasize the economies of scale, the greater ease in generating high rates of investable and marketable surplus to facilitate industrialization and the mobilization of labour to undertake capital construction. In the Soviet case these considerations - indeed the narrower ones pragmatically contributing to the needs of rapid industrialization were decisive. Even in the Chinese case much of the arguments were based on considerations of efficiency and technical transformation of agriculture. Thus Mao Zedong, in his famous report 'On the Question of Agricultural Co-operation' in July 1955, argued that socialist industrialization was incompatible with peasant agriculture which would neither generate the required surplus nor create sufficient demand for the output of industry. But Mao also argued the case for collectivization on grounds of equity:

As is clear to everyone, the spontaneous forces of capitalism have been steadily growing in the countryside in recent years, with new rich peasants springing up everywhere and many well-to-do middle peasants striving to become rich peasants. On the other hand, many poor peasants are still living in poverty for lack of sufficient means of production, with some in debt and others selling or renting out their land. If this tendency goes unchecked, the polarization in the countryside will inevitably be aggravated day by day. Those peasants who lose their land and those who remain in poverty will complain that we are doing nothing to save them from ruin or to help them overcome their difficulties. Nor will the well-to-do middle peasants who are heading in the capitalist direction be pleased with us, for we shall never be able to satisfy their demands unless we intend to take the capitalist road (Mao Zedong, 1971). The argument that egalitarian peasant farming after land reform is an obstacle to the distributional goals of revolutionary socialism needs to be understood more clearly. At first, it would appear puzzling. A sufficiently egalitarian peasant farming could do away with wage labour so as to eliminate exploitation in the Marxist sense of the appropriation of surplus value. By continued enforcement of a land ceiling it should be possible to ensure this particular objective.

However, the two kinds of bourgeois rights that Marx talked about in the *Critique of the Gotha Programme* are preserved under this kind of peasant farming as sources of inequality. The first of these rights refers to the inequality in the distribution of rental income among peasant households due to unequal land and resource endowment. In a vast country like China anything remotely resembling strict equality in the distribution of land and assets would be impossible to ensure however thorough the land reforms may be. To curtail this right one must begin by collectivizing land and other assets and then gradually transfer their ownership from lower levels of collectives (for example teams) to higher levels (for example brigades and communes) until the level of ownership by all the people is reached.

The second type of bourgeois right arises out of the principle of relating earning to ability in so far as the latter is not proportionate to need. On this Marx was quite explicit in the *Critique of the Gotha Programme*:

one man is superior to another physically or mentally and so supplies more labour in the same time, or can labour for a longer time... Further, one worker is married, another not; one has more children than another, and so on and so forth. Thus with an equal performance of labour, and hence an equal share in the social consumption fund, one will in fact receive more than another, one will be richer than another, and so on. To avoid all these defects, right instead of being equal would have to be unequal (Karl Marx, 1972).

Let us now examine these efficiency and equity arguments against the continuation of the post land reform egalitarian peasant agriculture in the context of achieving the goals of revolutionary socialism. The economies of scale argument is exaggerated in the context of a typical Asian agriculture characterized by a low degree of mechanization. Indeed, it is doubtful if there is any significant economy of scale in farming activities (excluding capital construction). In the mobilization of labour for capital construction there are significant economies of scale that can be taken advantage of under collective institutions. However, such advantage is at best a practical one: in principle, it should be possible to organize such activities by promoting co-operation among equal peasants. In terms of the mobilization of investable and marketable surpluses, again, there are clear practical advantages of collective institutions. It is far easier to collect marketable surplus from a few collective enterprises than from a vast number of peasants. A collective organization, like that of the Chinese communes, provides a framework for a simple system of concealed tax on lower collective units (for example teams) through the drafting of labour (who are

given work points by their teams) for work at the higher collective units (for example communes).

While the substitution of peasant farming by collective farming provides some of the advantages of a practical nature noted above from the standpoint of efficiency, it has to face up to a very basic problem of efficiency in the organization of production, namely, the setting up of an incentive system. The nature of agricultural work is such that, as one moves out of the organizational framework of a peasant family into that of a collective, the evaluation of performance, the institution of a system of payments, the organization of management decisions and related matters become exceedingly difficult. If the basic accounting unit is small, as in the case of the *teams* of the Chinese communes, the problem of organizing an efficient system of incentives can still be approached. As the size of the basic accounting unit increases, supervision and evaluation of work become very difficult and the cleavage between payments and performance becomes large. The organization of incentives on a conventional basis becomes impossible.

From the standpoint of equity collective agriculture has little advantage over egalitarian peasant farming. The two kinds of bourgeois rights that are the sources of inequality under private peasant farming are also preserved under collective agriculture. The bourgeois right arising out of unequal access to land and productive assets need not be any greater under private farming than under a system of collectives in which the basic accounting unit is relatively small (for example an average team in the Chinese communes consisting of about thirty households). For such a small community in a homogeneous location it should always be possible to make land reform so egalitarian as to provide each household with roughly equal amounts of land and assets per person. The second type of bourgeois right is preserved under collective agriculture in so far as payments are based on the work performed (that is the socialist principle of 'to each according to his work').

Indeed, both in the Chinese communes and in the Soviet Kolkhozy evidence has been found that the income from personal plot is more equitably distributed than the collective income.<sup>3</sup> The present writer has tried to explain this phenomenon as follows:

The distribution of income in the socialized sector, *in principle*, is proportional to the individual members' capacity to work. Individuals differ in terms of such capacity. In the socialized sector such differences in capacity result in larger income differentials because individuals work with relatively large amounts of capital and other resources. Thus the resulting distribution can be as unequal as individuals are in terms of ability. In the non-socialized sector there are such severe limitations on the volume of means of production per person that the differences among individuals' capacity to work cannot be fully translated into differential results of work. As a consequence, the distribution of income can be less unequal than that of the ability to work (Khan and Ghai, 1979).

For a sufficiently egalitarian peasant farming, under the usual kind of land and capital constraint observed in a typical Asian country, the same result would obtain in comparing the outcome of egalitarian peasant farming with the alternative of collective agriculture. The present writer has argued that in China the main gain in terms of improved rural income distribution was achieved by land reform and that since then further gain during successive phases of collectivization has been minimal (Khan, 1977).

Bourgeois rights can be restricted under the system of collective agriculture by raising the level of the basic accounting unit and by the gradual replacement of work done by need as the principle of payment. These, indeed, were tried in some advanced communes in China. It is, however, clear that these practices directly conflict with the conventional principles of organizing an efficient system of incentives. Both these restrictions on bourgeois rights result in the deviation of compensation from effort to such a degree that the material basis for efficient production breaks down unless the human agents of production cease to respond to the usual assumptions of being actuated by self interest (including the interest of the family and, perhaps, the immediate clan). Marx himself was so keenly aware of this problem as to realize that 'right can never be higher than the economic structure of society and its cultural development conditioned thereby'.<sup>4</sup> The precondition of successfully curbing the bourgeois rights is to bring about such a basic change in the attitudes and responses of the members of the labour force as to make them cease to behave in accordance with the standard assumption of orthodox economics that individuals. households and groups work for higher material consumption. In spite of the brief periods of experimentation in China this is by and large an uncharted path. No human society has yet succeeded in organizing itself on this basis for a substantial length of time and/or on a sufficiently wide scale.

For collective agriculture to provide significantly greater equality than a highly egalitarian, post land reform, peasant agriculture, bourgeois rights will have to be curtailed to such an extent as to make it impossible to set up an efficient system of incentives (in the absence of sufficient preparatory work in effecting basic change in human behaviour of proportions not experienced by any human society to date). This will render the collective system a far less efficient organization for productive efficiency in comparison with peasant agriculture. Attempts at hastening the path towards higher levels of collectivization, prompted either by considerations of expediency or by doctrinaire belief in the urgency or feasibility of curbing bourgeois rights, could easily create such great problems of productive efficiency as to require a backward step in the direction of restoring much of the elements of egalitarian peasant farming as the only available method of ensuring efficiency. Recent experiments in China with the so-called responsibility system indicate evidence of this. The lesson seems to be that revolutionary socialism should look upon egalitarian peasant farming, ushered in by post-revolution land reform, as a less temporary stage of agricultural organization and begin transition towards collective agriculture

only after the subjective conditions have been fulfilled. As already indicated, a sufficiently egalitarian peasant farming is non-exploitative in the Marxist sense of eliminating the appropriation of surplus value. The bourgeois rights preserved under it can be modified significantly by using the instrument of fiscal policy. In any case, the existing forms of collectives are not able to curb these rights much more significantly.

#### SOME CONCLUSIONS

1 Stagnation and growth with inequality in the rural economies of the contemporary developing Asia can be attributed, in substantial degree, to the prevalence of inappropriate institutions that are characterized by a high degree of inequality in the distribution of land and assets.

2 The change in these institutions - in particular, in the unequal distribution of land and assests - is highly desirable from the standpoint of the promotion of equality.

3 The hope that an appropriate institutional reorganization would *automatically promote egalitarian growth* is unrealistic.

4 Much of the hope of a non-revolutionary solution of the institutional problem of agriculture is based on the experience of East Asia. This hope is unlikely to be realized in contemporary developing Asia. Historical difference between East Asia and the contemporary developing Asia makes the cost of such reform in the latter a great deal higher in terms of the necessary political will, organizational ability and resources for an alternative infrastructure.

5 At least from the standpoint of the necessary political will revolutionary socialism appears to be a superior medium of instituting successful land reform. Such movements have, however, seen land reform as a short-lived transitional phase on the way to collective agriculture. The rapid transition to collectivization has by and large been promoted by the expediency and pragmatic need to generate high enough rates of investible and marketable surplus. The arguments of greater equity and efficiency have rarely been valid. The generation of greater equity without a loss of efficiency would require fundamental changes on the 'subjective' side by way of changing the responses of the human agents. Little preparatory work has ever gone into this. The problem is on the very frontier of human experience. But without some idea as to whether and how it can be resolved the transition to collective agriculture would appear to be premature.

#### NOTES

<sup>&</sup>lt;sup>1</sup> These are broad generalizations to which exceptions can be found. Growth of agricultural production in India during the 1960s and 1970s was about 2<sup>1</sup>/<sub>4</sub> per cent per year or just a shade higher than that in population. This was typical of South Asian growth rate. Agricultural growth

in Pakistan and Sri Lanka was a little higher while that in Bangladesh and Nepal was a little lower. In South-East Asia agriculture in the Philippines and Thailand grew at annual rates of over 4½ and 5½ per cent respectively. Indonesian growth rate was about 3¼ per cent over the two decades but higher during the 1970s. In both the South and South-East Asian countries inequality continued to be very high. This has been widely documented. For example see ILO (1977) and Griffin and Ghose (1979).

<sup>2</sup> See Charles R. Roll Jr. (1974) and Khan (1977).

<sup>3</sup> See Khan and Ghai (1979) for similar evidence in the Soviet Central Asian Republics and Griffin and Saith (1981) for that in the Chinese communes.

<sup>4</sup> The quotation is from Karl Marx (1972). Many Marxists suggest that a higher level of material well-being will automatically make it possible to de-emphasize material incentives. According to this view it will become easy to organize the distribution on the basis of the principle of 'to each according to need' once the economy attains a high level of material production. This, to the present writer, sounds like naive optimism which de-emphasizes the need to organize changes on the subjective front.

#### REFERENCES

- Charles R. Roll Jr., The Distribution of Rural Incomes in China: A Comparison of the 1930s and the 1950s, Harvard Ph.D. Dissertation, 1974.
- Griffin, Keith, and Ghose, Ajit, 'Growth and Impoverishment in the Rural Areas of Asia', *World Development*, Vol. 7, 1979.
- Griffin, Keith and Saith, Ashwani, Growth and Equality in Rural China, ARTEP, Bangkok, 1981.

ILO, Poverty and Landlessness in Rural Asia, Geneva, 1977.

Karl Marx, Critique of the Gotha Programme, Beijing, Foreign Languages Press, 1972.

Khan, A.R., 'The Distribution of Income in Rural China'.

Khan, A.R., and Ghai, D.P., Collective Agriculture and Rural Development in Soviet Central Asia, Macmillan, 1979.

Mao Zedong, 'On the Question of Agricultural Co-operation', in Selected Readings from the Works of Mao Zedong, Beijing, Foreign Languages Press, 1971.

#### **DISCUSSION OPENING – MICHEL PETIT**

Dr Khan's paper tackles an important issue which no society, in Asia or elsewhere, can avoid: namely how to evolve an institutional framework capable of promoting agricultural growth and of reducing the inequalities in its distribution. The author is successful in avoiding the main risk in such a venture, that of being superficial while tackling such a broad issue in only a few pages. His purpose 'is not to preach but to argue that the policy makers must be adequately aware of the costs involved' (in promoting egalitarian growth). One can only applaud such a purpose.

This being said, my main task is not so much to praise the paper but to point out its limitations. Does the author fulfil his purpose? How well founded are his arguments? After an introductory section posing the problem which I have just reported, the second section, entitled 'Institutional change through egalitarian land reform', is very brief. It argues that the examples of land reform in East Asia cannot be easily replicated elsewhere because the costs of transition would be much higher in South and South-East Asia, due to a greater inequality of operational holdings before the reform. This can probably be accepted but does it justify the contradiction between the sentence asserting that it would be misleading 'to attribute the success in the East Asian cases entirely to the solution of the problems' linked to the lack of political will on the part of the government and the political power of the landowning classes as obstacles to land reform and the sentence stating: 'On balance, the problem of adequate political will would appear to be the decisive factor'? Personally, I could accept that these two sentences are not necessarily contradictory but making this clear would require to spell out better the interrelationships between economic and political factors. I shall come back to this later.

The following section deals with 'Collective Agriculture'. It implies that Khan would be happy if one could convince the socialists (the only ones capable of having the political will) to promote egalitarian peasant farming. To support his point of view, he criticizes the arguments usually presented both on grounds of efficiency and equity and taken here from Mao's writings on China. These arguments justify the rapid collectivization of agriculture after an initial period of egalitarian land reform following the socialist revolution. I must admit that the author's arguments on economies to scale and on the problems of setting up an adequate incentive system appear rather convincing to me. This is probably because I share what I believe to be his ideological leaning towards reformism. But are these arguments sufficiently well founded analytically to convince a Marxist? Frankly I doubt it.

In his analysis Khan quotes Marx's *Critique of the Gotha Programme:* 'right can never be higher than the economic structure of society and its cultural development conditioned thereby' in order to support the statement that 'Marx himself was keenly aware of this problem' (that is 'deviation of compensation for effort to such a degree that the material basis for efficient production breaks down unless the human agents of production cease to respond to the usual assumptions of being actuated by self interest'). The question here is that of the interrelationship among economic, institutional and human changes. For Marx and his followers, these relationships are of a dialectical nature. Thus, if one puts the above quotation by Khan in its broader context one can read:

All these problems (referring to the inegalitarian nature of any right) are unavoidable in the first phase of the communist society, when it just emerges from the capitalist society, after a long and painful birth. Right can never be higher than the economic structure of society and its cultural development conditioned thereby.

In a superior phase of communist society, when the enslaving subordination of individuals to the division of labour and so on, will have disappeared, we will be able to escape once and for all from the narrow horizon of bourgeois right and society will be able to write on its banners: 'From each according to his capacities, to each according to his needs.'

Here Marx asserts very clearly the dialectical nature of the relationship through historical time between economic structure and right; (we can say) between economic and institutional changes. And it is the process produced by these interrelationships which brings about changes in the human agent. In my view the very mechanism of this process remains obscure and this obscurity regarding the relationship among economic, institutional and human changes is the main source of our analytical problems today. I would tend to criticize Khan for not emphasizing this point enough. Actually when he advocates 'begin transition towards collective agriculture only after the subjective conditions have been fulfilled', he ignores the main force behind collectivization, namely to establish socialist production relationships which are supposed to promote the emergence of a new man. Without necessarily accepting this Marxist view, I feel that Khan regresses compared to Marx because he seems to ignore the dialectical nature of the relationships among various types of changes and this brings me back to the point I raised above on the relationship between economic and political factors.

In conclusion I would like to repeat that A. R. Khan must be complimented for addressing himself to an extremely important and topical issue which is right at the core of the theme of our Conference on growth and equity. Whether or not he delivers as much as he promises can be disputed but undoubtedly the main limitations of his paper stem from very fundamental theoretical problems, regarding relationships between several scientific fields, which our profession has failed to solve so far. If I may be permitted to extend the argument, I would like to repeat a suggestion made earlier that a (fruitful) approach to these difficulties would be to develop what I have called an analytical political economy.

### GENERAL DISCUSSION\* - RAPPORTEUR: J. P. HRABOUSZKY

The complementary nature of the three papers presented was also clearly reflected in the discussion. Mellor's paper set up a framework for strategies, Islam's paper explained some of the main international issues involved in the implementation of agricultural development strategies, while Khan's paper brought into focus many of the major difficulties of implementing the main steps towards more egalitarian structures in agriculture.

The many interesting comments dealt with the need to recognize the strong influence of demographic growth on agriculture, its impact in driving technological change and affecting many inter-sectoral relations, and also its crucial role on equity. The treatment of inter-sectoral links in relation to labour, capital, consumer goods, foreign exchange and incomes was recognized as the central element in the alternative models for agricultural development. Furthermore, the large variability in diverse situations in the real world needed to be matched by flexible interpretations of alternative models.

It was similarly emphasized that the transferability of experience from

land reforms towards more egalitarian structures is limited, especially with regard to the problems of the landless, and that in some cases second generation problems of otherwise successful reforms need attention. The importance of appropriate incentive structure as part of equality orientated organizational forms, together with development of physical and human infrastructure, were seen as necessary for external economies of scale to be realisable.

The discussion made it clear that the likely driving force for higher agricultural output in developing countries would remain domestic demand, but that exports were needed both in their role as providers of flexibility as well as enabling the exploitation of comparative advantages. Improvements in access to international markets, including intra-developing country trade, were necessary for its success.

The discussion also covered issues of international aid and food security. It was suggested that raising the level of international aid would be difficult under prevailing economic conditions and would be conditioned by the optimal use for growth and equity objectives and by improved domestic economic policies. On food security, comments emphasized the need for a careful balance between reliance on world markets, bilateral contracts and increased local and regional storage operations.

Participants in the discussion included Kirit S. Parikh, H. J. Padilla, George Peters, Ryohei Kada, Ferenc Fekete, H. F. Breimyer, G. Gaitani d'Aragona, H. L. Chawla and Yang Boo Choe.