Land Tenure and Agrarian Reform in Asia*

A Re-appraisal of Priorities in Agrarian Re-organization for Rural Development

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Introduction

Land tenure and agrarian reform are among the most prevalent topics of discussion in developing countries of today. This indicates the importance of the pertinent problems for development in its economic, social as well as political aspects. A large number of different organizations and groups of population participate in the discussion: it is popular in newspapers, scientifics at academic conferences; it is taken into account in development plans and plays a role in assemblies of political parties; it is discussed in a very revolutionary tone by radical political groups and is paid lip service even by those who are reluctant to change the existing agrarian structure.

Before joining this discussion for a review and re-appraisal of the land tenure and agrarian reform situation in Asia at the beginning of the Second Development Decade, some conceptional clarification seems to be indicated. The more so as there is no general agreement on the relevant terms and popular usage sometimes differs from scientific definition.

Land tenure means all the relations established among men to determine their various rights in the use of land. These rights may be fixed by custom or law and are often explained as a complex or bundle of rights which, together, constitute the property, i.e. the right to control an economic good, in this case, land. This bundle of rights is often shared by contract with others. For instance, the owner might transfer the right to cultivate the land to a tenant or the right to cross his field to a neighbour whose land is not directly connected with the road. For our discussion, it is of importance to recognize that in an agrarian society, the type of tenure which a man has determines to a great extent his social status and his economic well-being.

Agrarian structure is a much broader concept and covers all the structural conditions for production in agriculture and for the livelihood and social situation of the rural population. It includes the conditions of land tenure, i.e. problems of ownership, tenancy, inheritance of land, labour relations, etc. and the conditions of land operation, i.e. the pattern of cultivation, size of holdings and institutional framework of agriculture, such as credit and market structure, institutions for promotion of cultivators, like co-operatives, extension service, etc.

Agrarian reform may be defined as a measure to overcome obstacles to development which arise from defects in the prevailing agrarian structure. This concept has become popular during the last ten years superseding the former concept of land reform.

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It is an outgrowth of the awareness of the need for economic development and planning which again requires the study of the whole agrarian structure as it relates to development. Thus, agrarian reform includes reform of land tenure and reform of land operation and management. Within the development process, the latter are of special importance because land operation and management reforms often determine the success of the tenure reforms.

This enlargement of the concept has been criticized: it opens possibilities to label a simple measure to increase production with the term "agrarian reform" and thus disguise a negative attitude to real changes in the agrarian structure. Indeed, the wide definition of agrarian reform includes such different measures as:

- *instruments of agrarian policy* which are of qualitative character and supposed to refer to smaller changes, like subsidies, tax rates, etc.;
- *structural changes* to alter the structure of agriculture, like credit programmes, investments in infrastructure, extension services, etc.;
- *institutional reforms* which change the foundation of the rural economy and society, like land redistribution, change in tenancy, collectivization, etc.

The economic concept of the term "agrarian reform" has sometimes been unjustly blamed for repressing the predominant political and social character of agrarian reforms. This criticism, however, loses importance if one defines development not in economic terms, but from a socio-political standpoint.

That agrarian reform is not limited to economic goals is obvious from the objectives of agrarian reform which include:

- changes in the power structure and freedom from exploitation;
- greater equality in access to resources, income, status and security;
- an increase in production and productivity;
- contribution to economic growth.

It is quite often claimed that welfare and humanitarian goals are in conflict with those of economic growth. This subject will be dealt with in detail somewhat later.

After defining the basic concepts used in this paper, the discussions will be elaborated in three chapters:

- first, a short review of the nature of defects in the land tenure system will be given, together with a discussion of the reform measures;
- in a second chapter, a reconsideration of land tenure relationship and agrarian structure in the context of recent technological changes, usually termed "green revolution", will bring the discussion up to date;
- the third chapter is an attempt at re-appraising the issue of land reform in the light of the new priorities arising from today's challenges.

### I. Defects in Land Tenure System and Land Reform Measures

Asia is no uniform region but is made up of countries with different cultural and historical backgrounds, levels of economic and social development and density of population. Keeping this limitation in mind, land tenure problems can be summarized as follows:

In most areas of Asia density of population is high in relation to cultivable land. Ownership of land, however, is often concentrated in the hands of few
landlords who usually do not cultivate their land as one large farm, but rent it to numerous small tenants. They hardly take the opportunity to influence the management of the holdings by the tenants who are often untrained. Often the owners do not even live on their land but in the cities, and limit their activities to rent collecting. Due to the high demand for land concomitant to the rise in population, even small landowners sometimes find it profitable to lease their land and live on the rent as petty landlords.

The most prevalent form of tenancy in Asia is sharecropping, where the rent is determined as a share of the product. Usually, the tenant has no security as contracts are not laid down in written form and are often on a one-year basis only. The rent is frequently as high as 50 per cent of the harvest, even if the landlord does not share costs of cultivation. Increasing pressure of population on land was the main reason for the development of so-called intermediaries, persons who stand between landlord and tenant and are more or less without any economic functions, but who nevertheless collect a share of production and thus increase the rent of the actual tiller. In some countries, administrative procedures, especially tax policy, have led to the formation of a class of tax-collectors with right to revenue and/or land; at the beginning this right was often given as remuneration for services, later it became a mere rent.

Insecurity of tenancy and the fact that share tenants receive only a part of the proceeds of their investment, leads the tenant to cultivate the land less intensively and hinders investments in agriculture. The low income, drawn from the small holdings, is the cause for general poverty and indebtedness. In addition, if the landlord acts as money-lender, he has full power over his tenants.

Even in areas with owner cultivation, the situation is often not much better. Population growth and the inheritance system led to a continuous reduction of farm size. Often farms become reduced below the size of an economic holding so that they cannot supply satisfactory subsistence for the families, especially if fragmentation of plots, less intensive use of land and low level of technical training of the peasants are taken into consideration. If these small holders incur debts, the high interest rate may cause a loss of ownership.

Due to limited land and primitive techniques of farming, peasants usually lack sufficient work and underemployment is widespread. This holds especially true for the landless labourers who are employed during the rest of the time. A large number of them migrate to the cities hoping for better employment: usually they are not successful, so that the employment problem is only transferred from the rural to the urban areas.

The contribution of such an agrarian structure to capital formation and general economic development is limited. The greater part of the population is too poor to pay taxes and landlords use their political influence to prevent rigid tax laws. Even their private profits often do not promote economic development because they are devoted to luxury and conspicuous consumption or are transferred abroad. The masses of the peasantry have neither the possibility nor the incentive to increase their production. The whole rural
economy is in stationary condition and hinders the dynamic growth of agriculture. The consequences are not limited only to the economic aspects but reach into the social and political fields as well.

In order to attain the desired development of economy and society, the rural sector needs the right institutional framework:

In the economic field, production and productivity have to be increased and resources have to be transferred to other sectors.

The prevailing agrarian structure is obstructing this because of:
— uneconomic size of holdings;
— fragmentation of fields;
— lack of credit and marketing facilities resulting in low investment;
— lack of incentive because of tenure systems;
— low mobility of men, land and capital;
— lack of technical training and knowledge of peasants.

On the social side, the aim is to increase the standard of living of the rural population and to improve their position in society.

The agrarian structure counteracts these aims by:
— maldistribution of ownership causing unequal distribution of income and wealth;
— poor output of petty holdings leading to meagre incomes;
— exploitation by and dependence on the landlord;
— indebtedness to money-lenders;
— insufficient opportunities for work and unemployment.

The political goals are: changes in the power structure, removal of feudal structures, political freedom and justice. But the agrarian structure results in:
— concentration of power in the hands of landlords;
— economic power based on control of resources and means of production;
— political power based on economic power;
— distribution of income and wealth according to power instead of contribution to production.

Problems resulting from the agrarian structure are not new. A land tenure system is the institutional framework which society creates to make agricultural production possible and which reflects the level of development in society, economy and technology. As the last three are continuously changing, the institutional framework for agricultural production has therefore to be constantly adapted to the new situation. Because of the persistent nature of institutions, such adaptation usually takes place with a time lag after the high pressure for reform or revolution makes changes inevitable and external forces create a favourable climate for reform. Such a situation developed in the region after the Second World War, when many Asian countries became independent. During the last twenty years, quite a number of reform measures have been applied in different countries proving more or less successful. They
can be grouped under three headings: abolition of intermediaries, ceilings and redistribution of land and tenancy reform.

1. Abolition of Intermediaries

In South Asia, measures for abolition of feudal and semifeudal tenures have been taken as a first step in land reform. In India, where more than 40 per cent of the total area was held in zamindaris, jagirs and inams, laws were enacted in 1951—52, by which these tenures were converted into ryotwari, i.e. the cultivators (more than 20 mio.) became owners with direct relation to the state.

In East Pakistan, where more than 90 per cent of the land was held in zamindari tenure, its abolition was enacted in 1951: the West Pakistan Land Reform Law also abolished jagirs and similar intermediaries. In Nepal, birta tenure was abolished in 1960 and zamindari tenure in 1964. While in Nepal implementation is still under way, it has been completed in India and Pakistan.

These measures were quite successful in abolishing the anachronistic tenures. Cultivators are no longer subjugated to mere rent receivers and exploitation has been reduced. Direct contact between cultivators and Government has also strengthened the rural administration because the areas are now under government administration, while formerly, the jagirdaris executed administrative duties, but often failed to fulfil their obligations. There was a change also in the rural power structure, with the smaller, but local landlords replacing the absentee landlords in the local hierarchy. However, not all wishes have been fulfilled. The laws were intended to abolish specific tenure forms, but not landlordism in general. In fact, the problem of landlordism was not tackled at all.

Allocating land to the cultivating tenant does not necessarily place it in the hand of the tiller, since under South Asian conditions, protected tenants often rent out their land. Transfer of title to the so-called cultivating groups of the population improved the position of the higher rural classes while the underprivileged tenants and sharecroppers did not benefit. With the exception of East Pakistan, where sub-letting was specifically forbidden, sub-tenancy continued to prevail. In East Pakistan, many sharecroppers descended to the status of labourers because of restraints with respect to sub-letting. A related problem arose from the fact that the intermediaries were allowed to resume land for personal cultivation. This term was not properly defined. This provision again caused eviction of many tenants because intermediaries started cultivating with the use of labourers, so as to qualify under the provision for personal cultivation. In many countries a long period of litigation on the question whether the law was constitutional ensued giving the landlords sufficient time to change from sharecropping to cultivation with labourers as well as to distribute the land among relatives.

Compensation was paid on the basis of graded rates, in relation to the net income from the estates, but at higher rates to those with smaller incomes. Compensation was generally quite generous and this caused a liability of 5,000 mio. rupees to the Government of India and of 363 mio. rupees to Pakistan. No provision was made to ensure the investment of these compensation so as to promote economic development.
2. Ceilings and Redistribution of Land

The majority of Asian countries have issued laws fixing the maximum size of land holdings. Ceilings have been fixed as follows:

- **West Pakistan**: 200 ha irrigated or 400 ha non-irrigated land (reduced in 1972 to 150 acres irrigated or 300 acres non-irrigated land);
- **India**: about 3 family holdings varying with the conditions and between states;
- **Philippines**: 75 ha (in 1971 lowered to 24 ha);
- **Indonesia**: 5—15 ha irrigated land, 6—20 ha upland, varying according to population density;
- **Nepal**: varying with different regions from 2.7 ha to 16.4 ha for owner-cultivated holdings, and from 0.5 ha to 2.7 ha for tenanted land;
- **Japan**: 3 ha;
- **Korea**: 3 ha;
- **Taiwan**: 3 ha (this restriction has been relaxed subsequently).

In some countries, expropriation of land of absentees was higher than that for resident landlords, or the absentees were even totally expropriated as, for instance, in Japan, Taiwan, and Indonesia.

These ceilings, which are rather high in view of the shortage of land in most countries, are even further raised in a number of countries by special concessions in favour of landowners. Sometimes, orchards, seed farms, mechanized farms, etc. are exempted (West-Pakistan). Quite often landlords are permitted to redistribute land among the members of their family or to organize cooperative farming societies before the application of the ceilings law. Often landlords can decide what part of their land they want expropriated, so that they can choose the least productive land. Thus, a great deal of waste land, cemeteries etc., useless for distribution, has been confiscated. Compensation has usually been fixed at a high level and only a few countries provide for its investment to the benefit of the general economy. The best known example is Taiwan where part of the compensation was in shares of industrial undertakings, and the Philippines, where the interest rate for government bonds increased proportionately with the period during which these bonds were retained without being sold.

To prevent an increase in the number of uneconomic holdings, some countries have fixed minimum size of holdings, it being provided that holdings of a minimum size should not be further reduced by partition due to inheritance.

Implementation of ceiling laws was often prevented by the vested interests of landowners, who took advantage of political power, lack of records on ownership and the shortcomings in the administrative system. Especially in South and South-East Asia, ceiling legislation has therefore not been very successful. The area expropriated and redistributed to new owners is limited. Some tenants, usually those belonging to the privileged class of occupancy tenants, became owners, i.e., land was distributed mainly to those who already possessed rights on the land.
Ceiling legislation hardly affected inequalities at the village level: the laws did not seriously affect the rural upper class (except some absentees or very big landlords). The peasant landlords could retain their property and power. At the same time, the law rarely benefited sharecroppers, and nearly never improved the situation of landless labourers. Due to a variety of factors the limited area available for redistribution, the desire of the rural upper classes to have access to cheap labour, and the high purchase price for land asked from beneficiaries, sharecroppers and labourers were prevented from becoming landowners. Consequently, the ceiling laws had only a limited influence on production: in some cases, the former occupancy tenants may have invested more after becoming owners and landlords may have developed more interest in agriculture after changing to self-cultivation, but these cases are few and far between. The frustration of the rural poor, whose hopes had been raised and who were disappointed by the meagre outcome of the land reform laws, is a factor of much greater importance. Even worse, the emphasis placed by propaganda on ceiling laws to quite an extent diverted attention from other measures which would have benefited much larger numbers of rural population.

3. Tenancy Reform

To a limited extent, the laws abolishing intermediaries and establishing ceiling on land ownership have improved the situation of tenants by granting them ownership or occupancy rights. However, considering the widespread tenancy in Asia — 30 to 50 per cent of the land is cultivated by tenants — the impact has been limited. In most countries, therefore, special measures to improve the situation of the masses of tenants had to be implemented. One can distinguish between reforms which aim at improving the situation of tenants by regulating the relations between landlord and tenant and thus preventing exploitation, and reforms eliminating tenancy completely by giving ownership rights to tenants.

The regulatory approach which was applied by most countries involved the enactment of various laws and regulations. Thus, security of tenure was improved by prescription of written lease contracts, registration of lease contracts (Taiwan, Korea, Malaysia), minimum duration lease contracts (Viet-Nam, Korea) and stipulation of reasons for eviction (Taiwan, Ceylon), tenants were sometimes granted permanent and heritable rights, rents were regulated by changes in form of payment — usually converting share-rents into cash-rents or fixed produce-rents (Korea) — and/or by establishing ceilings on rents which were sometimes intended to limit rent to as low as 16 per cent while in other cases the ceiling of 50 per cent merely confirmed the existing level. To increase tenant's incentive, some laws granted them the right to make land improvement and compensation therefore in case of eviction.

The success of all these regulatory measures is limited. It proved difficult to enforce the reforms and in quite a number of cases the laws remained unimplemented. The basic difficulty is that the tenant has a low bargaining power. A regulatory approach requires alternatives for the tenant. But alterna-
tives can be created in the course of development only. The vested interests of the peasant landlords who are locally more powerful than the former absentees, turned out to be insurmountable for the tenants.

Experience showed that rent regulation, security of tenure and credit programmes have to be organized jointly to be successful. Tenants will not insist on lower rents if they are not sure that the tenure is secure and if they are indebted to the landlord. Most tenancy reforms, however, did not institute supporting services to stop financial dependence on the landlord. Thus, the previous rent of 50 per cent of produce often continues to be charged and security of lease has not improved.

Part of the reason for this failure is the weak administration and the fact that local officials often care more for the interests of landlords than for those of tenants. Where there is a better record of regulatory measures, the administration has usually strongly backed the implementation of the laws assisted by local committees which represent group interests. If tenants’ interests are backed by tenants’ associations, there is a much better precondition for the successful implementation of tenancy regulations. Experience in Ceylon and Nepal has shown that, with the help of local committees, rent regulation is possible, even in the absence of cadastral records.

In a number of cases, tenants had the opinion either to buy the land or be evicted in order to enable the landlord to cultivate the land himself. If there is no time limit fixed for the landlord’s decision to personally take over cultivation, the resulting insecurity is especially great. This provision often proved dangerous and many tenants surrendered their holdings “voluntarily”. The lack of proper definition and identification of the tenant constituted a limitation to many tenancy reform laws. As a result, large numbers of tenants who had land under various crop-sharing arrangements did not benefit at all from tenancy reforms.

The limited or sometimes negative results of measures to regulate tenure resulted in the adoption of a different approach in some countries. These countries assumed that under the prevailing socio-economic conditions tenancy is an impediment to society and development and should therefore be eliminated. This abolition approach — sometime selective, sometime total — (in case of absentees or those holding land above the ceilings) has been applied in Japan, Korea, Taiwan, and in some Indian states. Compared to the regulatory approach, tenancy abolition proved much more successful. Apparently, it is possible for the administration to execute tenancy abolition when a political decision has been reached. Abolition has less loopholes for evasion than regulatory measures. However, the provision of the option to tenants to either buy the land or to give up their rights proved a failure in some Indian states and caused much voluntary surrendering of land by tenants.

In some countries, a partial abolition of certain tenancy forms was aimed at by making sub-tenancy illegal. In view of the high demand for rented land, many disguised forms of subtenancy limited the success of these provisions.
4. Conclusions

An attempt to evaluate the results of twenty-five years of agrarian reforms can result in differing conclusions depending on the viewpoint held.

a) In view of the existing political situation in most countries, especially the prevailing power structure, and considering the level of administration at the time of the enactment of land reform laws, one cannot but appreciate the progress made in the change of land tenure in Asia.

— In most countries, feudal and semi-feudal tenures and intermediaries have been abolished. The tenants now hold their land direct from the State and thus exploitation and dependence have been partially abolished.

— As a result of ceilings legislation, big landlords and especially absentees have been expropriated, their power reduced and their land distributed to tenants and small owners.

— In some countries, as a result of tenancy legislation, a large number of tenants acquired ownership rights and had their rights recorded or improved their security in other ways.

— Last, but not least, the reform laws have had an important psychological effect. Their enactment has acted as a warning to landlords, so that many of them realized, for the first time, the limits of their power. To small peasants and tenants, it was an indication that they are not completely at their landlord's mercy. This recognition was, in many cases, an important step to improve the relations at the village level.

b) An evaluation of the achievements may result in quite different conclusions if one takes into account the need for tenure changes, the increasing tension of the political situation in many countries, the fact that the underprivileged people are becoming more and more aware of their condition and the rapid population growth which increases continuously the problems of rural Asia.

— Taking these factors into account, one has to admit that little has been accomplished which has brought really penetrating changes in the rural structure.

— It must be admitted that the rural upper class, except its top-most strata, has hardly been touched. The situation of the peasant landlords has some times even been strengthened. A noticeable improvement has only been achieved in respect of some rural middle-class sectors, especially the privileged tenants who became owners of their land. The conditions of the small peasants have hardly changed.

— There has also been little change for the lower class in rural areas. Tenants of lower standing have usually not improved their situation and have been evicted in large numbers. The same is true for share tenants and croppers who, often, are not even mentioned in the reform laws and wage levels, too, have not been much affected.

Summing up the results, one can say that

— maldistribution of ownership has changed little;
— the rural power structure and exploitation are about the same;
— economic power is based on control of resources and is an important factor in determining political power;
— distribution of income and wealth remains about the same;
— the uneconomic size of holdings and lack of supporting services results in poor output, poor income and indebtedness;
— the few changes in tenure did not create enough incentive for the masses to do more work and to increase their investment in agriculture;
— because of lack or insufficient supporting services, agriculture in most countries has generally retained the status of traditional agriculture without technological change.

Judging from this line of thinking, one cannot help feeling that the past twenty-five years of agrarian reform in Asia have not met the challenge.

II. Land Tenure Relationships in the Context of the Green Revolution

Agrarian reforms discussed so far had, as one of their goals, the increase of agricultural production. As most reforms (Japan and Taiwan are exemptions) are more or less mere reallocations of control over land among people, without changing the traditional form of agriculture, the increase in total amount produced was meagre. During recent years, in many countries there has been a technological change in agriculture which has considerably influenced the level of production. This change, which is usually termed the "Green Revolution", was made possible by the development of new seed varieties with a high yielding potential and their application in a bundle together with other complementary inputs, such as fertilizers, water, etc.

The effect of these inputs on production is considerable. Under suitable conditions, the yield of wheat and rice is two or three times as high as before. In view of such differences in yield and supported further by incentive prices for the products, it is no wonder that the innovations were adopted rather quickly and their application was limited more by the availability of the new seeds and other supplies than by the willingness of the farmers to apply it. Double or treble yields explain the prosperity which is so obvious to the visitor to the centres of the Green Revolution.

So far, the Green Revolution has taken place without institutional changes in agriculture, but is the result solely of the application of the input package by the agriculturists. Because of this spontaneous development some circles have come to the conclusion that development of Asian agriculture is possible without institutional changes. Contrary to this opinion, it is the belief of the author that the Green Revolution makes a change of land tenure and other rural institutions, including the creation of new ones, still more pressing.

If one analyzes the Green Revolution somewhat deeper, one comes across numerous bottlenecks caused by the existing agrarian structure and insufficient institutional arrangements.
The experience, so far, shows an extremely uneven distribution of the fruits of the Green Revolution among the different classes of the rural population and this leads to a rapid and severe widening of the existing disparities.

The adoption of innovations takes place usually more rapidly on large holdings than among small peasants. This holds true as well for the Green Revolution. The owners of large and medium-sized holdings soon realized the possibilities of the new technology, had the necessary capital or access to capital and succeeded in obtaining seeds even at the time when there was still a shortage.

When they were convinced of the profitability of agriculture under modern technology, these "progressive farmers", as they are sometimes called, changed their approach towards agriculture. They began to pursue agriculture as a business rather than as a way of life. Many of them used the increase in income to invest in more tube-wells in order to increase further their output and income by making more water available. Often, as a next step, a tractor was purchased with the aid of which cultivation of the soil was improved and double cropping possible. The purchase of a thresher and other machinery soon followed in a process which led to considerable increase in agricultural production. It was only logical that these progressive farmers should begin to reappraise their labour organization and, from their standpoint of capitalistic agriculture, reach the conclusion that under the changed conditions, personal cultivation with labourers is more profitable than cultivation by sharecroppers. With the new level of output, a sharecropper receiving 50 per cent of the yield was an expensive worker. Besides, changes in the traditional crop-sharing system which were made necessary by the introduction of tractors and tube-wells, often proved difficult so that many landowners evicted their tenants and offered to re-employ them as wage labourers. Tenants sometimes tried to resist and organized strikes during harvest time; but such incidences increased the landowner's desire to become independent of labour problems by employing combines, for example.

The result of this process is an increase in prosperity for the large and middle farmers in the irrigated areas, i.e. the rural upper and upper middle class. They have been able to use the possibilities offered by the Green Revolution and did so in a rather rapid and penetrating way. The participation of small farmers in the Green Revolution is much less. In principle, the new seed is available to everyone and is not subject to economies of scale. But in practice, the small holders suffer from lack of information, lack of managerial ability, lack of capital and access to credit and lack of ability to take risks. If their fields, as is often the case, are not consolidated, it is impossible to construct a tube-well, even if the capital is available.

Because of these factors, participation of small farmers in the Green Revolution is much more limited. In addition, the taste of the new rice varieties and the suitability of the wheat varieties for chapattis did not appeal to the peasants. This is an important consideration for small peasants who use most of their output for home consumption. It is obvious that these arguments hold even more true for tenants. The fact that sharecroppers have been evicted in the course of the Green Revolution has been mentioned already.
The majority of the agricultural labourers reaped little benefit from the Green Revolution. Certainly the technological changes involved an increase in labour requirements — application of fertilizers, double cropping, intensification of irrigation and other innovations resulted in more work hours per cultivated area. Even tractors often do not lead to reduction of work requirements but to an increase in workload because of the intensification of farming which is only possible with mechanical power. In addition, much secondary employment has been created by the Green Revolution in such fields as expanded rural trade and transport, the construction of wells and houses, the construction and repair of machinery, etc.

But its impact on different groups of rural labour varies and is generally not very favourable. There are a small number of former labourers and tenants who are now employed as specialists for tractor operation, tube-well operation, etc. and have a better paid and more secure job than before. However, in view of the ample supply of labour in most Asian countries, the increase in labour demand has resulted in a very limited increase in wages for the majority of labourers, often not exceeding the rate of inflation.

At the same time, the large group of casual labourers have actually been adversely affected. Previously they were in high demand during the short harvest time and received, during the harvest period, three times the rate of their normal wages, amounting up to 50 per cent of their annual income. Because of the long periods of unemployment over the rest of the year, this income earned during harvest time constituted the basis of their annual livelihood. If by mechanization the peak of labour requirement is reduced during harvest time, the seasonal wage rate will also be lower. In conclusion, it may be stated that the disparities in income in rural areas have increased in the course of the Green Revolution. In general, the upper classes who were already in a favourable position before, have improved their economic condition considerably. The underprivileged majority have gained little or nothing from the agricultural revolution.

If this process continues in the areas which are affected by the Green Revolution, we can expect the development of a dualistic agriculture: On the one side, the progressive sector, consisting of larger holdings with educated farmers using modern farm management, having access to capital and inputs, earning high incomes and achieving high yields which make further investment and still higher incomes possible; and, on the other, the subsistence sector consisting of small holdings and untrained peasants lacking capital and other resources, following traditional agricultural techniques and having lower yields and smaller incomes.

Both sectors would develop in the form of spirals in opposite directions and augment the contrast between each other. The existing maldistribution of income in rural areas would be intensified and the meagre level of living of the lower classes remains unchanged.

Such widening disparities in income and standards of farming as a consequence of the Green Revolution can already be observed in the different regions of the countries. The precondition for participation in technological
advancement is availability of irrigation. By definition areas depending on rainfall cannot participate in the Green Revolution. Even in irrigated areas, application of high yielding varieties is often difficult, especially in the case of rice. The new varieties are very demanding as far as quality of irrigation is concerned: they are adversely affected by too little as well as by too much water. What is needed is controlled irrigation, while most existing irrigation systems in Asia are designed to provide a constant flow of water from the upper to the lower fields, whereby the quantity of water depends on the amount of rainfall in the higher areas. Under these circumstances, the improvement of the existing irrigation facilities is an urgent necessity since controlled irrigation is a precondition for successful participation in the Green Revolution.

What has been said so far about growing disparities holds true for regional development as well as for the different classes of population: the already well-off parts of the country becoming still richer while little or no change takes place in the poor and depressed areas.

The widening disparities and increasing economic power of the progressive farmers are by-products of a process which, for the first time in many years, brought a considerable increase in agricultural production and put an end to continuous shortage in staple food. In this respect, the progressive farmers have done a great service to their countries by following the advice of their governments and by increasing their efforts to raise agricultural production. As mentioned above, high returns, favourable prices and subsidies for inputs made it easy for them to adopt the new technology. An improvement of the food situation was associated with considerable personal gains for the farmers who participated in the Green Revolution.

This increase in the economic power of the progressive farmers caused an important development. In order to retain the advantages of their relative affluence, they increasingly used their economic power to attain political power. They are members of decision-making bodies, from district councils to parliament or influence members of these bodies, and succeeded, in many cases, in retaining their profit instead of transferring part of it to the public. Undoubtedly, part of the gains are due to increased efforts, to risks taken and to investments made by these farmers, and the proceeds of these activities should be retained by them. But part of their increased income is the result of public investment in irrigation systems, electricity, fertilizer plants, experimental stations, extension service, subsidized credit, etc. and at least this part should go back to the public for reinvestment. So far, the political power of progressive farmers has prevented measures, such as higher taxation, large-scale programmes to improve the situation of small farmers and tenants, etc., to equalize the situation between rich and poor farmers.

Until now, progressive farmers have tended generally speaking to reinvest their profits in agriculture in the form of land, tube-wells and machinery, i.e. in the agricultural production, and increase in consumption is limited. But not all forms of private investment are at the same time beneficial to the public or can be justified by over-all development considerations.

The process of the Green Revolution has met with a number of bottlenecks, which seem to increase further as the Green Revolution spreads to less suitable
regions and smaller farms. Such bottlenecks have occurred especially in the rural service structure and the institutions which serve the small farmers. The old institutions which sufficed for the needs of a traditional agriculture are unable to cope with the requirements of technologically dynamic agriculture. The sudden increase in the volume of production marketed requires a corresponding organizational change in rural trade, often a change from a trader with a donkey to a businessman with trucks. The same is true for rural transport. This change, which concerns private trade, co-operatives and public enterprises alike, involves a change from low risk to high risk enterprise, without a simultaneous increase in the trader's management abilities. Moreover, in the case of input trade, in many regions there is no tradition since the old traditional agriculture hardly used inputs from the market. In fact, after the introduction of new technology in many regions, the level of agro-techniques is higher than that of agro-business, i.e. the trade and business side of rural development has not yet caught up with the technological advancements in agriculture. The lack of institutional prerequisites is responsible for other bottlenecks in the Green Revolution. Modern controlled irrigation, successful measures of plant protection as well as supply and marketing require the farmer's co-operation and joint action for which the necessary institutions have to be created. In the course of time, market-oriented agriculture will come into competition with other sectors of the economy for prices, subsidies, etc. Agriculture will need institutions to formulate and present its point of view and these do not exist so far.

Finally, the development of capitalistic agriculture needs a counterbalance to safeguard the interests of labourers and tenants, in the same way as capitalistic industry needs labour unions. Without such counter-checks, the inherent forces of capitalism will lead to rapid rate of development of a small progressive sector in agriculture, without the rest of the population having a share in it. It is an open question how such a representation of agricultural labourers and tenants can be organized in view of the lack of training and leadership.

An attempt to evaluate the land tenure and agrarian structure in the context of changes brought about by the Green Revolution results in highlighting positive as well as negative effects. Tremendous increases in production have resulted in an improvement in the food situation in several countries, an achievement which cannot be rated high enough. In addition, the Green Revolution has put an end to the stagnation in agriculture and started a development which had been repeatedly attempted, by numerous previous schemes, but without success. The high output and returns have made agriculture a profitable business, making agriculture interesting for many people as a field for investment. Farmers who have participated in the development process have increased their income considerably. This prosperity in the regions of the Green Revolution has caused secondary increases of income for agro-business, construction and agricultural labour as well.

This favourable record should not, however, be allowed to conceal a number of other consequences which are less favourable: it is an indisputable fact that mainly the rural upper class has benefited from the Green Revolution. They
were able to make use of the possibilities offered, so that the rich became richer. Small farmers and tenants have hardly had a share in the increased prosperity, sometimes even losing their status and being evicted. Similarly the majority of rural labourers have experienced only a very limited increase in income. In addition, the Green Revolution is limited to the irrigated areas, thus widening the difference between already prosperous regions and regions dependent on rainfall for their water supply.

Emphasis on private enterprise in the development of capitalistic agriculture causes a dualism in agriculture which might have serious social and political consequences. The lack of suitable institutions of different kinds not only fails to support the smaller farmers and labourers but hinders even the operation of progressive farmers.

With respect to the defects in the agrarian structure (as listed at the end of Chapter I) the Green Revolution has not only failed to reduce them, but even intensified these defects:

— maldistribution of ownership has now an even stronger impact than before since it enables the larger landowners to further increase their profits;
— the rural power structure has become even more rigid as progressive farmers with their increased economic power have gained political power;
— the belief that economic power in rural areas is based on the control of resources and is important for determining political power has been confirmed;
— distribution of income and wealth has become even more uneven than before;
— insufficient supporting services have made participation of smaller farmers impossible so that owners of small holdings and tenants have hardly participated in the Revolution and are as poor as before;
— rural labourers in general have experienced only a limited increase in their wages.

It may be said that the Green Revolution, with all its benefits, has done little to solve the problems of land tenure and agrarian structure, but often made them more serious and more obvious to the rural population.

III. Re-appraisal of Agrarian Reform in the Light of Today’s Priorities in Rural Development

From the preceding discussion the following conclusions may be drawn:

— Asian agriculture is hindered by serious defects in land tenure and agrarian structure;
— the reforms of the last twenty years have only brought very limited improvements;
— the recent technological changes in agriculture have not solved the problems of land tenure and agrarian structure but made reforms even more pressing.
Contrary to the opinion sometimes advanced that the Green Revolution by its inherent force can solve the problems of agricultural production without necessitating any changes in land tenure, the issue of agrarian reform today is as topical as ever.

In the following section an attempt will be made to appraise agrarian reform and its possibilities to help in solving the current issues of rural development. It is not intended to make a complete list of all the factors involved, but rather to limit attention to some aspects which seem to be of special significance. This does not exclude the existence of other aspects which may be equally important. The idea is to cast doubt on some widely held opinions by formulating some provocative theses.

To name priorities in rural development is a matter of judgment. Without denying other important aspects, in the author's opinion, three tasks are of top priority in Asian rural development today.

— **Increase of Agricultural Production**

Many Asian countries have a history of food shortage which not only hindered the development process but brought grief to millions of human beings. Today, because of the Green Revolution, the food crisis has been relieved, although not all over Asia. Besides, the rapid population growth and increasing income raised the demand for food and a well balanced diet, calling for diversification of cultivation, so that crops other than staple food grain are being produced.

— **Better Utilization of Rural Labour Force**

The Green Revolution has shown that higher production is not enough. It brought food on the market but not necessarily to the homes of the hungry who lack purchasing power. The cause for their poverty is lack of employment. In view of the increasing number of un- and underemployed, the rapid growth of population and the slow development of non-agricultural sector, most of them can only find employment in the agricultural sector. Agriculture has the difficult task of absorbing the masses who cannot find employment elsewhere and provide them with the basis for livelihood.

— **More Social and Economic Equality for the Rural Population**

The tension amongst the rural population in many countries has reached the level where a higher degree of social and economic equality becomes a precondition for economic development. Only then will the political climate, in which increases in production and employment can be achieved, be secured and maintained.

According to theory, these three priority goals are incompatible. Agrarian reform literature often suggests that higher production and more equality are contradictory goals. As a first thesis, it is suggested here, that under Asian conditions, higher production, more employment and more social and economic equality are complementary goals. Higher production, whether achieved with modern technology or within traditional agriculture, requires the application of more labour and can be reached in the long run only if the necessary
social and economic equality provides incentives and the possibility for more effort on the part of the producers.

A precondition for this thesis is the possibility to reach higher production by higher inputs of labour, i.e. agriculture produces below the production possibility curve because of unutilized resources in labour, land and capital.

A second thesis is that often it is technically possible to increase production by more inputs of labour. This is possible without investment and innovations, i.e. within the framework of traditional agriculture because of unused resources. This is evident from a comparison of good and poor holdings under equal conditions, by comparing optimum yield and average yield and from the fact that resources of land and water are insufficiently or incorrectly used. Underutilization of available irrigation, limited application of double cropping and unused arable land indicate that agriculture in Asia is often not as intensive as it could be. If we apply modern technology, the possibilities to raise production by applying more labour increase even further. Fertilizers, improved varieties, pesticides, better utilization of water, double cropping, etc. require larger amounts of additional work.

If these two theses are accepted, the next logical step is to ask why the potential is not used by many Asian peasants. This question is all the more relevant as it becomes more and more accepted that Asian peasants behave quite rationally within the given framework. It is suggested that institutional factors hinder the application of more labour in agriculture.

Among the institutions hindering a higher input of labour, land tenure systems play an important role. We believe that the prevailing unequal distribution of land and water is a major hindrance for the application of more labour. Many holdings in Asia are so small that the labour force available cannot be used up. As the opportunity cost of labour in many such cases equals zero, the family will apply more labour until the marginal productivity nears zero. Even then the small holdings often provide no opportunity to use the labour available. On the other hand, large farms offer less possibilities for work because they tend to be labour extensive. The cropping pattern of large farms favours crops requiring less labour than those typical for small holdings, and large farms tend to keep fewer livestock, which is labour consuming.

It is often argued that reduction of farm size is against the needs of economic development. It seems, however, that this cannot be generalized. Larger holdings are the first to apply modern techniques and are often examples of good cultivation. On the other hand, usually with increasing size of farms, the intensity and yield per acre diminish. There is experience to show that after dividing large holdings into smaller ones, productivity was maintained or even increased (Japan, Taiwan, Egypt). If it is sometimes claimed that production has been reduced after reforms, it is usually because of confusion between production and marketed production. Another important factor in this connection is that the conditions for production are very often more in favour of larger holdings while the service structure necessary for small holdings is not available.
On a closer scrutiny it is apparent that the positive features attributed to larger farms do not generally hold true. Although, in areas of the Green Revolution, larger farms usually apply modern technology, and even in rain-fed areas, some large farms offer examples of good cultivation, this is more the exception than the rule. The majority of large holdings in Asia are not centrally managed, but cultivated by a large number of small tenants and often with little advice or influence by the landlord. In all such cases, the advantages of large farms in achieving improved production do not apply since there is no large farm as an operating unit but only a large ownership holding. Since this applies to the majority of cases, it is suggested that under Asian conditions, reduction of farm size by redistribution of land of large holdings is in agreement with preconditions for economic development because this will increase production and labour input. Economies of scale in general are primarily related to labour saving techniques, while land saving techniques, such as improved seeds, fertilizers, pesticides, etc., in principle can be applied by all farm sizes. Besides, it seems that increasing farm size belongs to a later stage of development than that reached by most Asian countries.

If one accepts the fact that agriculture has to absorb the majority of the increasing population, an allocation of land to farm sizes on the basis of their capacity to employ labour seems to be indicated. This would be in favour of small farms which are also the best choice if production increases have to be attained with a minimum of resources in short supply. The question remains how far the farm size can be reduced without production suffering. This obviously varies with the prevailing conditions and especially with the rural service structure, but it can be taken for granted that the minimum size is much lower than the ceilings instituted in many countries.

Next to farm size, the prevailing system of labour organization is of importance in this connection. The thesis is advanced that the widespread insecure tenancy and sharecropping hinders the application of more labour. High rental charges, danger of further augmentation and the dependence of their status is, to quite an extent, responsible for the low level of labour utilisation. The tenants have no incentive to increase their efforts as they are not sure that they will earn the proceeds of their investment of work and capital. For the same reason, they are not likely to accept new labour-intensive techniques. In some cases, landlords are even interested in maintaining traditional agriculture because they can better control the crops thus cultivated.

Restrictions on the amount of work performed apply not only to small farms. As further thesis it is suggested that the existing status hierarchy, decision-taking based on seniority, and attitudes towards labour, especially manual labour, hinder the application of more work in agriculture. It is sometimes incompatible with the status of the landowner to perform manual labour so that his functions are limited to the supervision of the work of others. This is the case not only for big landlords, but often for all those whose property is above the average in the village. Within the traditional structure of the extended family it often occurs that the older, more traditional members of the family prevent innovations which are suggested by younger more progressive members.
The application of more work to agriculture would, in many cases, increase production, even under conditions of traditional agriculture. The Green Revolution has shown that an even higher increase in production is attainable by applying modern technology in agriculture and that this technology requires more labour per unit of land than traditional farming.

Modern technology has a high demand for rural services, such as trade, marketing, provision of credit and extension services. It seems that much of the difference in efficiency in large and small holdings can be attributed to differences in access to the rural service structure. Regardless of many attempts to organize schemes for the provision of the necessary services to small farmers, competition for these services always ends with larger farmers having them at their disposal while they are less easily obtainable by small holdings. Without access to rural services, however, smaller farmers have hardly a chance to share in the modern productive and labour-intensive agricultural technology. Small farmers are either driven entirely out of agriculture or revert back to traditional subsistence farming. If small holdings are to participate in modern technology and benefit from higher productivity and intensive utilization of labour, a modification of the rural service structure seems necessary. In view of the inherent difficulties in supplying rural services to small farms without larger farms reaping the maximum benefit the thesis is advanced that a dual system of rural service structure is necessary, especially for credit and for the supply of inputs and marketing, in order to let small farms have a share in modern technology. The service system for small farms should not be accessible to large holdings, should have other terms and conditions to satisfy the special needs of small farmers and may very well include subsidies.

It is beyond the topic of this paper to discuss possible forms of organization for rural services. In passing, the opinion shall be expressed that organizations with the village as a basis of their activities — like village co-operatives — seem to have a poorer record than those which serve small regions. The latter are above intra-village rivalry and have a turnover which is large enough to allow the employment of trained professional staff. Farmers’ Associations and the Comilla scheme are examples of the latter type.

The need for dualistic service structure includes research which up to the present tends to promote larger farms. To let small farmers participate in the development of agriculture, a reallocation of research efforts seems to be indicated. The experience made in Japan shows that it is quite possible to develop modern technology for small holdings.

These measures to improve the rural service structure for smaller farmers are part of the reform of land operation which attains special importance if intensification and modernization of agriculture and not merely land redistribution is aimed at. But these measures can be of benefit only to those peasants and tenants who have control over the organization of their holding and security of their tenure. This hardly applies to sharecroppers and insecure tenants whose position has to be improved before reform of farm operation can be of use to them. In order to let them share in the modernization process of agriculture, so that they can apply labour more intensively and attain
higher yields and income, successful measures of tenancy reform are a prerequisite.

Experience in Asia shows that tenancy reforms have a good record if tenants join in special organizations to represent their interests against landowners. The thesis is advanced that tenants’ associations are a prerequisite for successful tenancy reform, because only the increased bargaining power of the masses of tenants is strong enough to withstand the landlords. The establishment of such associations seems very urgent in order to attain the conditions which make it possible for the tenants to apply their labour for their own betterment.

These and other checks on the power of the rural upper classes are indicated for several reasons. A contribution of the affluent progressive farmers to over-all development and the transfer of part of their gains to public ends will be possible only if political and economic power are separated and economic power is limited to a level which is not destructive to society. This has to be attained in a way that maintains the economic performance of progressive farmers which is so necessary for the economy; but it should also be ensured that the activities of the progressive farmers are not only to their own personal benefit but to the welfare of society at large. This new aspect of land reform will be more difficult to implement than the abolition of intermediaries. It was relatively easy to mobilize public opinion against them but it will be much more difficult to get support against progressive farmers who have done everything the government asked them to do to improve the food situation and who are therefore praised as having great merits. However, if the goal of increased social and economic equality has any meaning, part of their gains in finance and power have to be transferred to society as a whole.

Concerning the landless, the same holds true as for tenants. The necessary economic and social equality of agricultural labourers is attainable only if they associate in organizations which can bargain with their employers. This is a repetition of experiences in industry where capitalistic industry required labour unions to function as a counterbalance. The task, however, is much more difficult in view of the lack of training and experience of rural labourers.

Provisions for suitable land tenure systems and agrarian structures along the lines indicated above will undoubtedly increase employment, production and income and contribute to more social and economic equality. However, the limitation of the factor land in many regions sets a limit to this process. Even with complete utilization of all employment possibilities in agriculture by necessary agrarian reform measures in some regions, not all the available labour force can be employed. Here, unemployment and underemployment will continue with their adverse effects on progress in agriculture. Agrarian reform can contribute to the employment problem but not solve it. The employment problem can be solved only in the framework of the comprehensive development process of which agrarian reform is one important aspect. If rural employment projects, such as transfer of "overflow" irrigation to "controlled" irrigation, control of salinity and waterlogging, building up of rural infrastructure, etc., are used to improve the agrarian structure, these measures can promote the development of agriculture which in turn can help
industry by raising the purchasing power of the rural masses. With this in mind, as a last thesis, it is suggested that successful agrarian reform has to be incorporated in the over-all planning of development. Agrarian reforms as limited measures are always of limited effect.

Summary

After an introduction in which the concepts used are defined, the paper is divided into three parts:

Part I gives a short review of the nature of deficiencies in the land tenure system and the reformatory measures applied until the beginning of the Green Revolution are discussed. Considering the pressing needs, it is concluded that the past 25 years of agrarian reform have not met the challenge.

Part II is a reconsideration of land tenure relationship and agrarian structure in the context of the Green Revolution and brings the discussion up to date. It is concluded that, in spite of all its benefits, the Green Revolution has done little to solve the problems of land tenure and agrarian structure, but often aggravated them and made them more obvious to the rural population.

Part III is an attempt to reappraise the issue of land reform in the light of the new priorities arising out of the challenges and goals of the Second Development Decade. The emphasis is on the possibilities which an agrarian reform offers for the solution of the current problems of rural development. In this process, a number of theses are suggested which cast doubt on some widely held opinions.

Zusammenfassung

Nach einer Einleitung mit Definition und Diskussion der verwendeten Konzepte besteht der Aufsatz aus drei Teilen:


Teil II betrachtet Grund Eigentum und Agrarstrukturverhältnisse im Lichte der Grünen Revolution und bringt so die Diskussion auf den neuesten Stand. Trotz aller Vorteile — so wird gefolgt — hat die Grüne Revolution wenig getan, die Agrarverfassungsprobleme zu lösen. Diese wurden eher schwieriger und für die Agrarbevölkerung offensichtlicher.