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GROWTH AND EQUITY IN AGRICULTURAL DEVELOPMENT

PROCEEDINGS

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Gower

V. S. VYAS

*Growth and Equity in Asian Agriculture:
a Synoptic View*

Growth of agricultural production in south and south-east Asia¹ during the past decade or so has been quite satisfactory. In most countries of this region agricultural production outstripped population growth; in a number of countries the rate of growth in production was higher than that of the growth in domestic demand; the food self-sufficiency ratio for the region and for the majority of countries improved; the growth of agricultural exports outpaced the growth of agricultural imports; some of the countries where agriculture had stagnated in the 1960s turned the corner, and others could maintain the high tempo of the previous decade. This presents a sharp contrast to other developing regions such as the Middle East or Africa. In a continent of Asia's size and diversity, there are bound to be major inter-country differences in pace and pattern of growth. What is remarkable is the all-pervasive picture of buoyant agriculture with only a few notable exceptions.

An equally remarkable feature of development during the past decade is that it made very little impact on the extent of poverty in this region. Barring a few very fast growing economies like Malaysia where the problem in any case was not very acute, there is hardly any country in Asia where a remarkable dent in this problem could be made during the course of a decade of sustained growth. There were marginal gains in a few countries, but there were no dramatic changes. This is in regard to the absolute poverty. When it comes to relative inequality as expressed in terms of skewness in income distribution, with few exceptions the countries of Asia, fast growing as much as slow growing, did not show any improvement. There are problems in definition, in reliability of data, and in methodologies to process and interpret the information. There are legitimate differences among the specialists on all these counts. However, the facts of poverty and income inequality are too robust to be explained away by subtleties of definition and measurement.

On this occasion I will be addressing myself to the problems of absolute poverty, that is the problems of the households who do not have an adequate intake of calories, who cannot afford adequate clothing and shelter, whose opportunity cost of sending their children to school is prohibitive and who

in all matters of social and political significance are at the periphery. A large majority of these households, as the large majority of the total population, are located in rural areas. The main groups comprising the rural poor are the households of landless labourers, rural artisans, and marginal, non-viable farmers. There is no evidence to suggest that the dependence of these households on agriculture has declined. The occupational diversification in the rural areas, even in the fast growing economies, has been slow. The basic questions to be asked, therefore, are (a) Why could not the rural poor have an equitable share in agricultural growth? (b) Why could not more employment opportunities be provided for the rural poor in non-agricultural occupations?

To answer these questions we will have to understand the sources of growth in agriculture in Asia. It is not only the rate of growth but also the pattern which determines the distribution of gains among various factor owners and factor users. During the decade of the 1970s the main source of growth was the HYV technology centering around high-yielding varieties of seeds and fertilizers. This technology spread rapidly in regions where adequate and controlled availability of water could be ensured.

Apart from sizable gains in productivity per hectare, this technology claimed three distinct advantages. In the first place, it was suggested that this technology was, by and large, a labour intensive technology, in any case it was not a labour displacing technology like, say, mechanization. It depended on larger labour disposition as complementary to larger doses of non-labour inputs, it favoured more labour intensive agronomic practices, and post-harvest labour content was distinctly higher because of larger yields. From all available evidence the per hectare labour absorption in the areas covered by this technology was high. However, it should be remembered that the new technology was not extended over all the arable area. By the end of the 1970s, in the wheat growing regions the coverage was around 60 per cent, while in the case of rice growing regions the proportion was less than half. The area under other crops had hardly any comparable labour intensive high yielding technology. For the major countries of Asia till the end of 1970s coverage under HYV was between one-third and one-half of the cropped area. Adequate investment in infrastructure, particularly irrigation, and availability of delivery outlets, conditioned the spread of the new technology. Since in large regions these prerequisites were not available in sufficient measure, the limits to the spread of HYV were soon reached.

More importantly, the labour intensiveness of agricultural production was over-estimated. The figures of labour coefficient in agricultural production in Asia vary from 0.75 to 0.40 depending on the extent of irrigation and the nature of technology. However, the most common figure used is 0.5. This means that even if agricultural production is rising at the rate of 4 per cent per annum – a rather optimistic rate for most of the Asian countries – and the rural labour force is growing at the rate of 2 per cent – a figure closer to reality – no dent will be made in the overall rate of unemployment and underemployment. For wage paid agricultural labour,

therefore, there was no hope for fuller employment if sole reliance was to be placed on agriculture. We shall comment presently on the reasons for the lack of diversification of the rural economy.

Another advantage claimed for the HYV centered technology was that due to their short-maturing characteristics these varieties facilitate introduction of multiple cropping. This advantage was not reaped to the full in most of the countries of Asia as is evidenced by the fact that the index of multiple cropping has not improved in a significant way. In any event, it lagged behind the index of irrigation. Sometimes blame is put on the dearth of draft power to complete the post-harvest and pre-sowing operations between two cropping seasons in time, and a plea is made for the introduction of mechanization on this ground. The results from several studies in this region have questioned the need for mechanization of agricultural operations as a prerequisite for extension of the area under multiple cropping. In fact, multiple cropping and mechanization of agricultural operations have progressed independently. The major bottle-neck in the expansion of multiple cropping is proper water management and investment in the complementary infra-structure (that is in land shaping, drainage and so on).

The third main advantage claimed in favour of the new technology was its scale neutral characteristic. However, this was of little avail for the marginal farmers who constitute the large bulk of rural producers in most of the densely populated large countries of this region. Very substantial increase in productivity would be needed if their miniscule holdings were to yield enough surplus for sustaining a tolerable standard of living. It is estimated, for example, that in the case of India, if the agricultural production rises at the rate of 3.4 per cent per annum and if the share of the small farmers in total production is increased substantially, from their present contribution of 10 per cent to, say, 15 per cent, still at the end of the year AD 2000, nearly 30 per cent of the rural households will remain below the poverty line. The situation in other Asian countries is not likely to be qualitatively different.

There is, however, a class of small farmers which can be termed as potentially viable farmers, who with application of modern technology can raise productivity to a level which will permit them to cross the poverty line. The new technology can, presumably, assist this group. But the scale neutrality of technology does not mean resource neutrality. For the small farmers access to modern inputs (fertilizers, irrigation, improved seeds) is not easy. Their handicaps in respect of these inputs may be less severe, as compared to the handicaps in relation to land input. Yet whether it is a transaction relating to the purchase of inputs or sale of marketable surplus, or availing of extension or credit facilities, present institutions are biased against the small farmers. For example, credit availability is made difficult because of the requirements of land as the security. On paper a number of countries have dispensed with land as a collateral and are prepared to advance crop-loans, but in practice this rarely happens. In the matter of input supply and output marketing this group of producers is discriminated

against because of the small, inconsequential lots which they demand or supply. The extension agencies do not pay particular attention to these groups as their contribution, even if enhanced, will remain marginal to total production.

A number of studies have shown that the small farmers growing wheat and rice have also adopted high yielding varieties in these crops, although after a time lag. These studies have also shown that the small farmers do not use a package of practices and the productivity of HYV crops on these farms is low. One can infer from these findings that the HYV had led to larger employment and higher yields and to that extent had a positive impact on the small farmers as well as on the landless labourers. But their gains were marginal when looking at the immensity of their problem. By itself improvement in agricultural productivity has not yielded any measurable results for this disadvantaged section. It should be admitted, however, that the direction of the technological change because of the scale neutral character was in favour of the poor. However, the supporting institutions of extension, credit, and marketing did not play their role.

If the main thrust of technology was neutral between large and small farmers, the posture adopted by most of the countries in Asia in regard to institutional change was distinctly pro-poor. The legislation enacted in different countries concerning the relationships in land illustrates this point. In virtually every country there were enactments imposing ceilings on land, and ensuring security of tenure and a fair share of produce to the tillers. Barring centrally planned countries including China, and countries where conquering powers, for reasons of their own, had implemented radical land reforms, that is South Korea, Taiwan (China) and Japan, no other country in Asia has had a very creditable record of implementation of land legislation. But in a number of countries the process of enlargement of holdings by the big farmers was halted. This, coupled with technological factors favouring intensive rather than extensive farming and demographic pressure on land, led to a weakening of the hegemony of large farmers and emergence of capitalist type of medium-range holdings in a number of Asian countries.

The loosening of the grip of large farmers did not help the small farmers. Growing population pressure could not be contained by marginal growth in productivity or slight improvements in employment opportunities in irrigated agricultural regions. In countries where dispossession of land of the small farmers became difficult, it led to impoverishment of the peasantry; where land market was not frozen, there was a growing army of landless labourers. The choice before a sizable section of rural producers was between pauperization and proletarianization.

Barring two city states of Singapore and Hong Kong, the only country of the Far East which entered the club of newly industrialized nations in the 1970s – Taiwan (China) and South Korea had made the grade in the 1960s – was Malaysia, which had very special features; the most distinct being abundant mineral and natural wealth and low pressure of population on land. Other countries in the ASEAN region also seem to have been doing

well in terms of industrial growth during the past 3 – 4 years. It is too early to predict the course of development. The reason why countries of Asia, in general, could not experience an export-led growth as was experienced by South Korea, would include large and rapidly growing populations, lack of investment in social and physical infrastructure, and inequitable distribution of purchasing power.

The slow growth of industrial production in a majority of the countries can be traced to lack of effective domestic demand, particularly from the rural areas. This statement needs to be elaborated. Concentration of assets in a few hands meant concentration of purchasing power in a relatively small number of households. The demand pattern of these households, both rural and urban, was oriented towards high capital and skill intensive goods and services. Because of the weak backward and forward employment linkages it could not provide employment opportunities for a large number of rural artisans and craftsmen. As a consequence, rural artisans who had lost their market swelled the ranks of agricultural workers or floated to urban areas to constitute a significant proportion of the urban poor. This also acted as a brake to the rise of real wages in the countryside, further weakening the demand for goods and services from the large mass of rural poor.

An indication of the capital and skill intensive demand generated in an inegalitarian society is the changes in the product-mix in the consumer goods industry. One could see it reflected in the growth of superior varieties of clothes at the expense of coarse clothes, machine-made shoes at the expense of village cobblers' products, hydrogenated oil in place of oil expelled in the village expellers. The examples can be multiplied. The new products which entered into the consumer basket of the rural and urban well-to-do sections were hardly labour intensive. Thus, the type of development which has been witnessed in a large number of Asian countries has not done anything to break the essentially dualistic nature of these societies. True, in the rural areas a viable group of middle peasantry has emerged. These are co-opted in what has come to be known as the U class. But there is hardly any evidence to suggest that the plight of the bottom two or three deciles has improved in a remarkable way.

This led in a few countries to specific, target-group orientated, programmes, for example programmes for landless labourers, and marginal and small farmers. Where the poor were concentrated in a geographical area, mainly the areas which had severe physical handicaps (for example arid areas), the programmes were made area specific. The main thrust of these programmes was to generate employment opportunities by public works or to increase productivity on the small landholdings of the poor by introducing modern technology. In the latter case, apart from more concentrated extension efforts, major reliance was placed on subsidizing modern inputs like fertilizers. There is enough evidence to suggest that these programmes proved to be socially costly and the advantages were preempted by the non-poor.

It is tempting to put blame for the failure of these and similar poor-

orientated programmes on defects in the designs of the programmes, and/or on the inadequacy of the implementing agencies. Both explanations are substantially true. For example, when designing these programmes the poor were considered as a homogeneous mass. That there were differences in the groups of disadvantaged households based on asset holding, skills, social and cultural milieu, physical location and so on, were seldom taken note of when identifying and formulating the projects. The programmes were translated in terms of 'schemes' with a more or less uniform format. Evidently the utility of such schemes in varied and dissimilar circumstances was severely limited.

In all these countries bureaucracy is the main implementing agency for development programmes. The role of voluntary action of people's own initiative is marginal. Bureaucracy, by its social background and culture, would have inherent limitations in implementing programmes for the poor. There have been exceptions among the bureaucrats and a few could fully identify themselves with the interests of the poor. But this has not been the common trait.

While all these negative experiences cannot be wished away, there are certain positive features in the current situation which also merit recognition. The first and foremost is the nature of technology. In HYVs we have a technology which is labour intensive, land augmenting and scale neutral. The failure of other institutions to supply basic wherewithals to support this technology has already been indicated. But the technology cannot be faulted. The major cause of worry is not the nature of the technology but the fact that the HYVs are available only for a few crops (mainly cereal crops) and that too for irrigated areas. There is a need to pay greater attention to the dry areas and to non-cereal crops. Efforts in these directions by the national agricultural systems and by the international agricultural research centres can make a significant contribution.

Barring a few notable exceptions the countries of Asia have failed in their efforts to implement redistributive types of land reforms. With growing land values and a better organized kulak class the prospects for introducing such reforms are becoming bleak. At the same time it ought to be realised that as agriculture modernizes, the importance of non-land inputs grows and that of land as an input declines. The capacity of the modern states in Asia to orientate the distribution of non-land inputs in favour of the poor is pronouncedly better than their capacity in redistributing land. Given all the limitations in the input programmes to which attention was drawn earlier, skewness in distribution of credit, fertilizers or irrigation was less acute than the skewness in landholding.

Major difficulties, then, are in the field of organization. The delivery systems, as they exist today, are adequate to meet the requirements of the medium to large farmers. But they fail when it comes to small farmers or landless workers. Apart from the class bias of those who man these institutions, the very large number of the recipients in the latter category make the task of the existing systems very difficult. One way to cope with the problem is to design delivery systems which can serve the numerous

small recipients meaningfully. For certain types of enterprise (for example dairy) or for certain commercial crops (for example sugar, cotton), there are examples of successful co-operative efforts which are able to serve even the small producers effectively. But such organizations are too few and obtain in special circumstances, notably when producers or beneficiaries belong to the same asset group. The real test of such organizations comes when they have to operate in a milieu in which large producers of a commodity are members of the organization along with numerous small-scale producers. Invariably in such circumstances the organisation tilts in favour of the rich.

The crux of the problem is the mobilization of the poor to exert the pressure of their numbers on the delivery systems so that the latter may meet their requirements. Our understanding of the mobilization efforts and group action is extremely limited. Organizations for collective action like co-operatives or trade unions have not yielded the desired results. It is in this area that the countries of South and South-East Asia may learn useful lessons from the countries of East Asia. Small groups of producers having a common social background, with a more or less equal asset base and a common interest in a specific economic activity, provide the base for building the micro-level rural producers' groups in these countries. These primary groups, in turn, can protect the interest of small producers in secondary organizations. As the conditions in various countries differ, the social scientists in these countries will have to give serious thought in evolving the guidelines for group action among the poor. More likely, they will have to work with the activists to understand the dynamics of social organization.

Finally, so far as agricultural policies are concerned, particularly those pertaining to prices and subsidies, since the beginning of the 1970s the countries of Asia have been pursuing a sane policy package. The earlier notion of using the price mechanism to transfer resources to the non-agricultural sector was dispelled in the light of the actual performance of the agricultural sector which, under the régime of unfavourable prices along with technological and institutional handicaps, stagnated and thus made the countries concerned spend their scarce foreign exchange resources in importing food and other essential commodities. The price policies pursued since then do provide a favourable climate for agricultural investment without making them too adverse for rural and urban consumers. There are still problems in the area of agricultural policies, particularly those pertaining to risk and uncertainty, in the structure of inter-commodity prices and in the area of taxes and subsidies. But, by and large, the basic policy thrusts have been in the right direction and have contributed to favourable results in agriculture as witnessed during the last decade.

There is a danger, however, that, under the influence of the new orthodoxy which favours 'high' agricultural prices as a panacea, the pendulum may swing to the other extreme and may result not only in hardship for the rural and urban consumers of foodgrains, but may eventually tell upon the state's capacity to invest in agricultural infrastruc-

ture as more resources get diverted to meet the demand of wage earners to compensate them for high foodgrain prices. It should be remembered that public investment in agricultural research, extension, and infrastructure has played a major role in the agricultural progress of the 1970s, and that in a régime of an organized, or in any case vocal, urban work force, the same resources can easily get diverted to neutralize inflationary trends, set in motion by high agricultural prices. There is no reason to upset the precarious but welcome balance existing between agricultural and non-agricultural prices.

To sum up, during the last decade agricultural growth in Asian countries was not only satisfactory in itself, but it changed the picture of stagnation obtaining in most of the countries during the decade of the 1960s. The change can primarily be attributed to the spread of HYVs in irrigated areas. The emergence of medium-sized farmers who carried the main burden of agricultural growth was a result partly of the professed institutional changes and partly due to the nature of technology which favoured intensive efforts. The policy package was by and large complementary to these changes and stimulated growth; it certainly did not inhibit the process. However, the pattern of growth did not favour the small farmers and landless labourers who continued to be marginal as producers and consumers. The process of polarization could not be stopped, and the lowest deciles of rural households could not participate in the process of agricultural growth or share its benefits to any remarkable extent. At the same time the factors such as the availability of size-neutral technology and the not too discouraging record in the distribution of non-land inputs suggest that it should be possible to bring the disadvantaged sections to the mainstream of agricultural development. The key areas of action seem to be (a) introduction of size neutral technology for more and more crops and regions; (b) investment in rural infrastructure, both social and physical; and (c) organization of the rural poor in such a manner that they can have a meaningful interaction with the delivery systems. A number of countries have progressed in all these directions in a limited way, while some have performed quite satisfactorily in one or other of these prerequisites of a socially desirable pattern of growth. And in this lies the hope.

NOTES

¹ Throughout this discussion Developing Market Economies of South and South-East Asia are referred to as Asian countries.

DISCUSSION OPENING – YANG BOO CHOE

I am very much honoured to be one of the discussion openers for the overall problems of growth and equity in agricultural development in the Third World context.

Since this very first session is assigned to identify problems which are considered to be important, and, therefore, to be discussed throughout the

Conference period, I am obliged to raise certain key questions in a very simple way. Most of my remarks are inspired by the outstanding paper just presented by Dr V. S. Vyas.

Before I left my country I met one of my closest friends, and I told him about my first trip to Indonesia, the Eighteenth Conference, and the main theme of growth and equity in agricultural development. He asked, 'World agricultural economists are going to get together to discuss the growth and equity problems of the rural poor in Bali? Why don't you make a trip to a rural village, spend some time with rural poor, and discuss their equity problems?' I said, 'No, I am not going to Bali, I am going to Jakarta.' But he replied 'Well, anyway, have fun in Bali. Don't miss the beach girls.'

Distinguished participants, the issue of growth and equity is one of the classical problems facing the agricultural economics profession from its beginning. Depressed conditions of rural peoples and small family farms have drawn a lot of intellectual minds which eventually formed this scientific community of agricultural economists. Yet, as stated in the opening addresses, today we are not adequately equipped to solve the problem of growth and equity with satisfaction. The flagrant reality of the disparities in income and quality of life existing between urban and rural peoples, and between the rich and the poor within the rural economy reminds us of the limitations of what we agricultural economists can do about the problem of growth and equity in theory and in practice. Also, the ever widening rural-urban disparities simply suggest that our past theoretical as well as practical attempts have been far less than successful.

This uneasiness and dissatisfaction with the present status of our profession in dealing with the growth and equity problem inevitably prompts us to ask: what was wrong with our theoretical efforts to explain the sources, structure, mechanism of the rural-urban disparities?

As clearly stated by Dr Vyas in his paper, we do not yet have clear answers to such questions as:

- Why could not the rural poor have an equitable share in agricultural growth?
- Why could not more employment opportunities be provided for the rural poor in non-agricultural occupations?

May I add a few more questions?

- Why is it unavoidable to sacrifice small rural family farms in the process of economic growth?
- Why could not agricultural productivity be increased without constantly dislocating the farm population?
- If the introduction of new agricultural technology is the force generating disequilibrium in the agricultural economy, why are small family farms in a constant need of new technology including HYV even under the condition of market distortion?

These are only some examples where our profession has failed to provide clear answers. In this problematic situation, one of the critical questions

about the theoretical front of our profession is: What are the theoretical frameworks upon which we are discussing in vain the equity and growth problem today?

If we turn our attention to the practical front, we can easily find a long list of policy recommendations which should be carried out by the policy makers for the improvement of the welfare of rural peoples. Dr Vyas suggests three key areas of action in the conclusion of his paper: introduction of size-neutral technology, investment in rural infrastructure, and organization of the rural poor.

I am quite sure that all the participants can easily agree with him. Nevertheless, all the participants may also have their own lists and priorities. The real problem is not a shortage of brand new policy instruments, but a lack of action. If this is the case, then, one critical question to ask is: Why does such a list of policy recommendations for the improvement of rural peoples seldom take the form of concrete action in many Third World countries of Asia, Africa and Latin America? Why does such a highly desirable action programme often become a political rhetoric without action? This reality also leads us to the question: What was wrong with our practical policy suggestions and action programmes?

If you kindly agree with me that the theoretical framework provides a basis upon which we formulate a set of practical policy recommendations, then, I may say that probably our theories about the structure, mechanism, and function of the agricultural economy may not be successful at least in Asian, African and Latin American countries. Those theoretical frameworks that I am talking about are the Neoclassical-Keynsian as well as the Marxian economic theories. They created a myth that the small family farm economy is the very source of the growth and equity problems. They recommended that the small family farm economy should be replaced by a large-scale, mechanized, capitalistic farm-firm on the one hand, and by a large-scale, mechanized socialistic state (collective) farm on the other. Under these dominant theoretical frameworks, the general case of the small family farm economy in Asia, Africa and Latin America became the special case. Nevertheless, under the name of the universality of economic theory, these hypothetical and unrealistic theoretic frameworks are taken for granted and shared by most agricultural economists in the Third World countries. However, the reality of the rural poor and small family farms struggling for survival in these Third World countries suggests that we may need to take a fresh look at all our taken-for-granted theoretical frameworks applied to the small family farm economy. We must ask to what extent the neoclassical as well as the Marxian framework is valid, practical, relevant and workable? If they are limited in theory and in practice, we may need an alternative theoretical framework upon which we can deal with the small family farm's growth and equity problem with satisfaction. In this context I would like to ask whether the so-called dependency hypothesis has something to offer for our understanding and solution of the growth and equity problem in agriculture.

Let me conclude my observations by quoting the statement made by

Henry C. Taylor, the founding father of agricultural economics in America, in 1929. His statement still has many insights for the present status of our profession. He said, 'There are . . . many false doctrines which clear thinking will shatter. At the present time some of these false doctrines are being used to keep the farm from securing a fair share of the national income Agricultural economists should test every hypothesis, stated or unstated, which lies behind every theory which is paraded in public.'