

Policies for Poverty Alleviation by Montek S. Ahluwalia*

(Article published in Asian Development Review : Studies of Asian and Pacific Economic Issues; Vol. 8 No. 1; 1990)

The phenomenon of mass poverty in developing countries and its relationship to the development process has been the subject of intense study for the past two decades. As a result, a considerable consensus has emerged on a number of issues. The pessimistic view that the growth process in developing countries has the perverse effect of actually accentuating poverty commands far fewer followers today than it once did. It is now widely recognized that the process of growth in most countries, even if not as equitable as might be wished, has at least led to significant improvements in the conditions of living of the poor. However, it is also evident that in many countries the pace of improvement has been slow, and in general much below expectations.

Notable examples of success in overcoming mass poverty can be cited from very different types of development strategies adopted such as in the Republic of Korea and Taipei, China on the one hand, and the People's Republic of China on the other.¹ Impressive gains also appear to have been made more recently in Malaysia and Thailand. But elsewhere in Asia, as also in other parts of the developing world, the record is much less encouraging. This is partly because in many countries the pace of growth, especially in per capita terms, has been only modest. It is also partly because the nature of growth in many cases has been such as to limit the percolation of benefits to the poor. And yet expectations and political consciousness have increased dramatically in all developing countries requiring immediate and visible progress in poverty alleviation.

Against this background, it is not surprising that poverty alleviation is no longer regarded as something that can be safely left to the process of growth and the operation of automatic "trickle down" processes alone. On the contrary, it is now widely accepted that poverty alleviation must be treated as an explicit objective and development strategies must be consciously structured to achieve this objective. Many national plans now have explicit quantitative targets for reduction in poverty and related issues such as creation of employment and provision of basic needs. There is also much greater interest in establishing an explicit linkage between policy formulation and the achievement of poverty-related objectives. But it is not always clear what structuring of policy is most likely to achieve these objectives. This article attempts to throw some light on this issue.

The article first provides a general framework for identifying the major factors which determine the extent of income inequality, and therefore of poverty, in a typical developing country setting. It then uses this framework to identify some of the key elements in the process of development which affect the degree of poverty, and considers how development policy can influence the operation of these mechanisms to ensure a favourable impact on incomes of the poor. Finally, it deals with policies of "targeted intervention", aimed at directly improving the conditions of identified groups of poor households. It is important to emphasize that the article focuses principally on the determinants of poverty and the scope for poverty alleviation. The related issues of the degree of inequality, and policy prescriptions in this regard, are not addressed in this article.

Asset Ownership, Income Generation and Poverty

The income of a household is the sum of what it earns from the various income earning assets which it commands, e.g., land, capital and labour of various levels of skill. In an accounting sense, therefore, the distribution of income across households or the extent of poverty is simply the resultant of two outcomes of the development process: (i) the distribution of income-earning assets across households; and (ii) the rate of return or income earned by these assets in the relevant factor markets. To influence the extent of inequality or the extent of poverty in the process of development, it follows that we must either seek to influence the factors which determine the distribution of income-earning assets across households or the

* Special Secretary to the Prime Minister, Prime Minister's Office, Government of India. The views expressed in this article are those of the author in his personal capacity.

¹ References to Taipei, China are to the island of Taiwan.

factors which determine the earnings of these assets.

This approach provides a simple framework for identifying the characteristics, and to some extent the proximate causes, of poverty in developing countries. A household is poor if the sum total of income earning assets which it commands, including land, capital and labour, cannot provide an income above the poverty line. The poor in rural areas are those who do not own any land, or at any rate, not enough of it. Lack of land would not by itself imply poverty if their labour could command a high enough wage income. However, the labour endowment of the poor consists essentially of unskilled labour, which typically does not provide a high enough level of wage income, both because wages are low and also because enough employment may not be available even at the going wage rate. Similar problems limit the earning power of the poor in urban, areas. Most of them are dependent on poorly paid and irregular wage employment, typically in the informal sector. Large numbers are also engaged in the petty commodity production, or in the supply of the simplest services, in both cases severely constrained by lack of capital and low technology.

Inadequate ownership of income earning assets is not however the whole story. The poorest households also suffer from a problem of "lack of access" which compounds problems arising from insufficient ownership of physical and human assets. One dimension of lack of access relates to social services such as health and education which directly affect household welfare. The poor typically get much less than a fair share of such services. This is partly because governments do not invest enough to ensure an adequate supply of these services and the limited supply available is pre-empted by non-poor households. Even where the quantitative availability of the services is not a constraint, the poor may not have adequate access for a variety of reasons.

Apart from lack of access to social services, the poor also suffer from problems of access which directly reduce their income earning capacity from their given asset endowment. The poor often lack access to information and other support services which could directly help increase their incomes in their existing production activity, e.g., information on feasible technology improvements or information on marketing. They also lack access to credit which is a key requirement for upgrading the income potential of any production enterprise.

Lack of access to credit as a factor accentuating the poverty of many socioeconomic groups is particularly important because the economic structure of most developing countries is such that the poor are not exclusively engaged in wage employment. A large number of poor households subsist as independent but very small producers in agriculture or in other sectors and lack of credit makes it difficult for such producers to invest adequately in fixed capital, or to obtain larger working capital, both of which are needed to increase production and income levels in their enterprise. This lack of access often arises from institutional biases which prevent financial institutions such as banks from responding to the needs of the poor, even for projects which are economically viable. There are "attitudinal biases" of managers which are often deeply entrenched, and may even be unconscious. Established norms and practices of commercial banking can also present constraints as in the case of requirements for lending on the basis of collateral security which may make it impossible for poor households to obtain credit from banks even for projects which in themselves have a high enough rate of return. Even when the requirement of collateral security is formally done away with, situations can arise where for example share croppers are unable to obtain crop loans from banks since they cannot provide documentary evidence of their tenurial status and therefore their right to the crop. Such evidence often cannot be provided mainly because landowners are reluctant to provide it for fear that it may become the basis for the tenant to establish some tenurial rights.

Unavailability of institutional credit not only limits the ability of poor households to improve their incomes through higher productivity but can also have a compounded adverse impact on other sources of income if credit markets are interlocked with other markets. Shareholders unable to get access to institutional credit may be forced to take credit from the landlord, which in turn may weaken their bargaining power in other areas, leading, for example, to the payment of abnormally high rental shares for land, or acceptance of abnormally low wages in various types of "bonded labour" arrangements. Similarly, small farmers and sharecroppers, forced to take credit from moneylenders, may become vulnerable in selling their marketed surplus by being forced to accept abnormally low prices fixed in advance.

This static picture of the factors affecting income levels of the poor points to two possible types of poverty alleviation strategies. One is the "direct approach" based on the perception that since the poor lack land, capital, credit and employment, the strategy for poverty alleviation must be to fill these gaps directly through government intervention. Typically, this involves direct intervention in the form of targeted programs aimed at giving land (either title or security of tenure), credit in support of self-employment schemes, or direct employment in government funded employment programs.

The second direction which poverty alleviation strategies can take is what Bhagwati has called the "indirect approach".² This approach focuses on the poverty reducing potential of the growth process by appropriate choice of policies and development strategies which would enhance the flow of benefits to the poor. The indirect approach thus defined should not be interpreted as a passive reliance upon "trickle down" processes alone. Rather it should be interpreted as making a conscious attempt to identify the total policy framework which is most likely to ensure that growth takes place in a manner which also ensures significant progress in poverty alleviation. The difference between the direct and the indirect approach is principally that the former focuses directly on the present production occupations of the poor, and seeks to enhance their income earning capacity in those occupations whereas the indirect approach focuses on identifying strategies which will influence the total operation of the economy to strengthen the poverty reducing impact of growth.

The Indirect Approach: Poverty Alleviation through Growth

Detailed prescriptions for the policy framework which maximizes the impact of growth on poverty alleviation would necessarily vary from country to country but some broad generalizations are possible based on what we have learned from experience. In this section we examine five key factors which are likely to have a powerful impact on incomes of the poor and consider the scope for policy intervention in each area. These areas are the availability of land, the scope for employment generation in agriculture, the pace of employment generation in the non-agriculture sector, human resource development and population control.

Availability of Land. We have already noted that ownership of land is an important determinant of poverty among rural households. Unfortunately, this is also an area where the dynamics of the growth process is unlikely to operate in favour of poorer households. On the contrary, in a situation where land is already scarce and demographic pressures are mounting, one would expect to see continuing fragmentation of landholdings for most categories of landholders, with a consequent increase in both landlessness and the extent of marginal sized holdings. Growing pressure of population on land also weakens the position of smaller tenant farmers, especially in a situation where tenancy reforms have either not been carried out or are ineffective.

It is not always possible to say unambiguously whether the process of fragmentation will make the overall distribution of land more or less concentrated since the process involves large farms splitting up into middle-sized farms and middle-sized farms into small-sized farms. Much therefore depends upon the concentration index we use. But it is unambiguously the case that the availability of land as an income earning asset for the poorer segments of the population will only decrease. There are only two ways of countering this process. One is to redistribute the existing stock of land through land reforms, and the other is to rely on technological change to have a "land augmenting" effect increasing the productivity and income and employment generating capability of each hectare of land.

Land reform is a potentially powerful direct instrument for improving access to land for the poor and creating a set of favourable initial conditions for egalitarian growth. Where the land reform leads to a shift from large-scale farming to smaller sized but viable family farms, its total effect could also be efficiency enhancing. However, the experience with land reforms shows only a few examples where it has been carried out with success. The land reform carried out in the Republic of Korea and Taipei, China in the early stages of their development was thoroughgoing and successful and laid the foundation for a fairly egalitarian growth in agriculture. In both cases, there were special historical and political circumstances which made such land reforms possible. Apart from these countries,

² Jagdish Bhagwati , "Poverty and Public Policy", *World Development*, vol. 16, no.5 (1988).

however, the record of land reform in the market economies of Asia is far from impressive. In India after the initial, and notable, success in the abolition of intermediary tenures (Zamindari Abolition) in the 1950s—also a situation where political circumstances were exceptional in the immediate aftermath of Independence—there has been only very limited progress. Land ceiling laws were promulgated, but lengthy delays in courts, and the ease with which land records were alterable, enabled most large landholders to split their holdings in the names of family members, retainers, etc., so that very little land could actually be declared surplus and even less actually distributed to the poor. Much the same is true for land reform efforts in Bangladesh, Indonesia, Pakistan and Sri Lanka.³

The scope for land reform as a redistributive measure is also steadily becoming more limited in the densely populated countries of Asia because of mounting pressure of population on limited land availability. In India, for example, the average size of operational holding had already declined from 2.5 ha in 1961 to 1.82 ha in 1981, and is even lower today. While there is considerable variation around the average, there is no doubt that the percentage of total area under farms of larger sizes has been steadily declining because of fragmentation. Under the circumstances, even if a vigorous effort were made at implementing land reform laws, the total amount of land likely to be released may be quite limited unless land ceilings are drastically reduced.

In the absence of land reforms the only scope for improving the effective availability of land for the poor is to encourage and support what Ishikawa has described as "land augmenting" and labour-using technological changes, i.e., technical changes which increase yields per hectare while also increasing the labour input per hectare.⁴ Examples of such technical changes are changes associated with better irrigation and drainage, application of higher yielding varieties and also shorter duration varieties (which allow for multiple cropping), application of fertilizer and improved cultivation practices. Extension of such technological change to small and marginal farms has a directly favourable impact on the incomes of the rural poor as most of these farm households are below the poverty line or at any rate not much above it. A policy which aims at increasing production and productivity on small farms therefore simultaneously achieves the objectives of growth and poverty alleviation.

The importance of small farmers in anti-poverty strategies is by now well recognized, and most developing countries have consciously built special programs for small farmers into agricultural development strategies. These programs could be classified as belonging to the "direct targeting" variety, but they are perhaps better thought of as part of the general strategy for agricultural development since they usually aim at ensuring that small farmers get their fair share of benefits from general schemes for agricultural development. For example, irrigation development or watershed management have to be planned on an area basis which would include both large and small farmers. Research and development efforts aimed at developing new and improved varieties of seeds are directed at agricultural requirements in general. Similarly, provision of credit, which is a key requirement for supporting agricultural transformation, requires building an extensive institutional network for making credit available both to large farmers and to small farmers. The success of a small farmer strategy is therefore crucially dependent upon the overall policy toward agriculture being supportive.

Employment Generation in Agriculture. The objective of raising incomes of the rural poor is also served by the expansion of employment opportunities in agriculture in general. In fact, as demographic pressures lead to an increase in landlessness,

³ Rizwanul Islam and Eddy Lee, "Strategies for Alleviation of Poverty in Rural Asia", in *Strategies for Alleviating Poverty in Rural Asia*, ed. Rizwanul Islam (Bangladesh Institute of Development Studies and International Labour Organisation/Asian Regional Team for Employment Promotion, 1985).

⁴ Shigeru Ishikawa, *Essays on Technology Employment and Institutions in Economic Development: Cooperative Asian Experience* (Tokyo: Kino Kuniya, 1981).

the dependence of the rural poor on wage employment is likely to increase. Since the bulk of the land area under cultivation is in the non-small farm sector—in India, for example, 75 per cent of the land is in operational holdings above the 2.5 ha cut-off level which defines small farms—a large part of the employment in agriculture must necessarily come from other than small farms. The pace of expansion of this sector and the employment effect of technological changes taking place in this sector are therefore of crucial importance for the rural poor.

Since land is scarce, we can assume that technological changes will tend to be land augmenting, in the sense of improving yields per hectare, but they need not also be labour using. The introduction of mechanization in the process of land preparation or harvesting can have a significant labour displacing effect though even in such cases a simplistic conclusion that such changes are undesirable can be misleading. For example, mechanization in land preparation displaces human labour, but if it also displaces bullock labour, it may enable land earlier used for pasture to be released for crop cultivation, thus adding to total employment generation. Similarly, mechanization may help to reduce the time required for land preparation and may thus facilitate the sowing of a second crop. In this case labour per hectare per crop may decline, but total labour use per hectare in all crops may actually increase. The total effect upon demand for labour obviously depends upon the net effect of a number of interacting forces and is not easy to document even after detailed study.

The Indian literature illustrates the difficulties in coming to any general conclusion on whether the process of technical change in agriculture is labour displacing.⁵ Vaidyanathan concluded that the net effect of mechanization in agriculture was labour displacing. However, Bhalla, in an insightful analysis of the period 1971/72 to 1983/84, reveals a variety of experience among 13 different States covering the entire spectrum of possibilities⁶. One group of States (Punjab, Haryana and Uttar Pradesh) which experienced reasonably good growth in agricultural production (exceeding 3 per cent per year) shows clear evidence of labour-saving processes implying little growth in total labour absorption in response to output growth. Another group (Andhra Pradesh, Gujarat and Maharashtra) shows good production growth apparently combined with adoption of labour-using technologies leading to continuing labour absorption in agriculture. The other seven States show low or modest growth in production, with a mixed picture of the extent of labour absorption. However, the overall picture seems to be that elasticities of employment with respect to output in Indian agriculture are declining. Ishikawa had envisaged an inverted U-shaped relationship in which initially new technologies inducted in agriculture would be labour using, to be followed at a later stage by induction of labour-saving technological changes. The Indian experience suggests that the induction of labour-saving technology appears to have come sooner than expected.

Whatever the reasons for the faster than expected appearance of labour-saving technological changes, it has to be recognized that such changes cannot be ruled out by fiat. It may not even be appropriate to discourage them actively where they provide the only way to break the land constraint, even though this may mean that this may lead to less employment generation than one would have wanted. It is probably true that labour-saving technology, once it comes easily available, may be adopted even when prevailing wage rates do not justify it on strictly economic grounds. One reason for this could be the perceived difficulty of dealing with labour and enforcing labour contracts though this is probably not very important in most rural situations.

Despite these problems, there is scope for policy intervention which will promote greater employment generation in Indian agriculture. Irrigation indisputably has the net effect of increasing labour absorption and there is still considerable potential for expanding irrigation in India as also in most other low-income countries. This is clearly an area where the

⁵ A. Vaidyanathan, "Labour Use in Rural India: A Study of Spatial and Temporal Variations", *Economic and Political Weekly*, Review of Agriculture, vol. 21 (1986).

⁶ Shiela Bhalla, "Trends in Employment in Indian Agriculture, Land and Asset Distribution", *Indian Journal of Agricultural Economics*, vol. 42, no. 4 (October-December 1987).

requirements of agricultural growth virtually coincide with the imperatives of poverty alleviation. Agricultural strategy needs to give higher priority to implementing schemes for expansion and improvement of irrigation facilities, moisture conservation and watershed development all of which will enable a more rational management of water resources. In practice, this requires a major effort at bringing about organizational improvements in planning and implementing irrigation development schemes and also in the operation of irrigation systems once created. It also requires a much larger allocation of resources. Fortunately, this is an area where the benefits can also be expected to flow in a relatively short period.

Employment in the Non-Agriculture Sector. Since agricultural growth will provide only limited possibilities for labour absorption, because of the considerations outlined above, the burden of absorbing additions to the rapidly growing labour force must be shared by rapid employment expansion in the non-agriculture sector. This was the process envisaged in the classic dual economy growth models with rapid growth in the non-agriculture sector leading to progressive shifts of the labour force from the low-productivity low-income agriculture sector into high-productivity high-income non-agricultural employment. The process was expected to provide expanding employment opportunities for the poor in the non-agriculture sector, while simultaneously easing the pressure of population in agriculture, thus leading sooner or later to higher wages for those who remained in agriculture. There are obvious virtuous circles here which could become very strong over time. As the size of the non-agriculture sector increases relative to the agriculture sector, its growth has a greater potential impact on poverty through a larger capacity to absorb surplus labour from agriculture.

Such a mechanism does appear to have worked in the experience of the Republic of Korea and Taipei, China, both of which experienced rapid growth in output and employment in the non-agriculture sector, laying the basis for a relatively egalitarian growth process in which rising demand for labour ensured full employment and rising real wages. However, this mechanism has not worked nearly as well in most other countries. Very few developing countries have been able to achieve comparably rapid growth in the non-agriculture sector over a sustained period. More disturbingly, non-agricultural growth in many countries has not been nearly as employment intensive. In fact, the recent experience of many developing countries seems to be one in which the employment elasticity with respect to output seems to be falling considerably below targets. This is reflected in the growing concern about urban unemployment in most developing countries in Asia.

It is beyond the scope of this article to provide a detailed explanation of why most developing countries have found it difficult to emulate the success of the Republic of Korea and Taipei, China, either in terms of rates of growth of output or employment intensity. It is well known that both the Republic of Korea and Taipei, China followed growth strategies which gave high priority to exports, whereas most other developing countries relied much more, albeit to varying extents, on import substitution. The modalities used by the Republic of Korea and Taipei, China were not identical. Taipei, China adopted much more open trade policies, while the Republic of Korea relied to a much greater extent on state control and intervention, combining protection of the domestic market with strong incentives to export. In both cases, however, the industrialization strategy implied a strong commitment to export performance which ensured that inefficiency in domestic production was not tolerated beyond a point. The concern with exports also ensured that the structure of industry remained relatively labour intensive, reflecting the nature of the comparative advantage of the two economies. The strong export orientation of these economies therefore helped to ensure that the growth process generated a strong demand for labour.

Imitation is not always a good principle for learning from international experience and there are good reasons why much of what was possible in the Republic of Korea and Taipei, China probably cannot be replicated in the same way in other developing economies today. But there is no doubt that there are important lessons to be learnt. The most important is that an excessive emphasis on import substitution can be wasteful of resources, and especially so if the degree of bias toward import substitution is open ended, as is typically the case when imports are restricted by extensive use of licensing rather than by tariffs. These lessons are gradually being learnt, and most developing countries are moving away from heavy reliance on import substitution toward more rational trade policies, with lower average levels of effective protection and also less dispersion in effective protection. Member countries of the Association of Southeast Asian Nations (ASEAN) have already moved substantially in

this direction. South Asian countries, which have typically been much more protectionist, are also doing so though more gradually. As these shifts in policy gather momentum and are perceived as permanent signals for the pattern of future industrialization, we can expect greater efficiency, greater export orientation and more rapid industrial growth. The pattern of industrial investment is also likely to shift away from more capital-intensive to less capital-intensive sectors. The total effect of these developments is likely to increase the extent of labour absorption in the manufacturing sector.

While underscoring the importance of reducing trade distortions, it is important to recognize that the problem does not really arise solely because of a mistaken perception about what is good trade policy. It is more accurate to say that trade distortions are introduced specifically to support inefficient investment decisions which are ordained in pursuit of other objectives. For example, the conscious pursuit of a policy of regional dispersal of industrialization may lead to deliberate location of a number of sub-optimal size units in different parts of the country. This decision is then supported by providing whatever protection is needed to support the resulting high-cost production units. Similarly, a conscious decision to develop domestic production capability in a particular area may lead to the establishment of a high-cost unit which then needs "tailored protection" in order to survive. Effective reform of trade policy is only possible if the range of conscious intervention by governments in favour of particular investment choices can be substantially reduced, or at any rate made only within a strict discipline of efficiency imposed by a relatively more open trade policy.

In addition to trade policy reforms, it is also necessary to guard against other biases in policy which operate in favour of capital-intensive investment choices and discriminate against labour-intensive choices. Real interest rates should reflect the scarcity of capital as far as possible. Arguments for lowering interest rates below this level, on the grounds that it will promote investment, need to be viewed with scepticism. The fiscal system frequently contains other biases in favour of capital intensity. Many direct tax regimes contain special allowances or deductions in addition to normal depreciation, which are expressed as a percentage of the total value of investment. These deductions have the effect of reducing the effective tax rate of a more capital-intensive unit to a much greater extent than for a less capital-intensive unit. There is a case for abolishing such incentives and substituting them by an overall reduction in corporate tax rates, which is at least neutral between capital-intensive and labour-intensive businesses.

The operation of the labour markets in many developing countries also introduced biases against labour intensity and these are in some ways the most difficult to handle. The organized urban sector often constitutes a high-wage island, with strongly unionized employees earning wage levels much above the levels prevailing for similar occupations in the informal sector. Maintenance of artificially high wages in the organized sector creates an obvious bias in favour of greater capital intensity. This bias is further strengthened if the overall state of industrial relations is such that managers feel there are high costs associated with handling a large work force. It is interesting to note in this context that Hong Kong; Republic of Korea; Singapore; and Taipei, China, all of which have been highly successful in managing labour-intensive industrialization, had relatively weak and politically docile labour organizations.

It is difficult to quantify the impact of any one of these biases and it may not be practical to remove all of them in a short time. It is reasonable to conclude, however, that significant progress in removing these biases, combined with a macroeconomic framework conducive to high growth, will produce a growth process which favours greater employment generation. This would undoubtedly help to raise labour incomes and accelerate the process of poverty reduction.

Human Resource Development. Thus far, we have considered only the factors which determine the demand for labour in the growth process. Action on the supply side of the labour market is equally important to ensure a viable, labour-using growth process. There are limits to the extent to which unskilled or poorly trained labour can be absorbed productively in the non-agriculture sector. On the other hand, an abundant supply of skilled and well-trained labour is likely to encourage the establishment and expansion of labour-using activities, generating both wage employment and self-employment possibilities.

The success stories of the Republic of Korea and Taipei, China bear out the importance of investment in upgrading human resources as a precondition for supporting and stimulating a labour-using growth process. Both economies were characterized by much higher levels of

literacy and spread of primary education at the early stages of their development than is the case in most of the low-income countries today. Adult literacy in 1960 was 70 per cent in the Republic of Korea and 54 per cent in Taipei, China. By contrast, in 1980, it was only 26 per cent in Bangladesh, 36 per cent in India and 24 per cent in Pakistan. It is interesting to note that in 1980, adult literacy rates had reached levels between 60 per cent and 70 per cent in Indonesia, Malaysia, Philippines and Thailand. In this respect, these economies appear to have achieved an important structural precondition for sustaining rapid growth with labour absorption.

There is an obvious lesson here about the emphasis that needs to be given to the achievement of universal literacy and the expansion and improvement of primary and secondary education. This in turn requires a major commitment of public resources to primary and secondary education. These sectors should actually have priority over higher education but often get less than their fair share. The balance between resources allocated to education through the traditional academic stream and resources allocated to vocational and technical training streams may also need to be altered in favour of the latter.

Investment in education may not appear to make an immediate impact on employment generation or the alleviation of poverty. Initially it may even appear to worsen the problem. As increasing numbers of educated youth enter the labour market with high job expectations, the first impact may be to create a visible problem of educated unemployment especially in urban areas. In the longer run, however, there can be little doubt that education and skill development is a powerful instrument for reducing poverty. It is also a major factor in reducing inequality. Human capital typically becomes increasingly more important in the production process as development proceeds. Unlike physical and financial capital, which can expand through accumulation and yet remain highly concentrated in terms of ownership, human capital expansion on any significant scale necessarily involves a wider distribution across the population. The dynamics of human capital accumulation therefore favours a reduction in inequality. In short, the benefits of policies of human capital development take time to materialize, but this should not detract from their importance as instruments for the reduction and eventual elimination of poverty.

Controlling Population Growth. Rapid population growth is one of the most important factors which dilute the flow of the benefits of growth to the poor. At the simplest level, faster population growth obviously means a slower growth in per capita incomes for any given rate of growth of gross domestic product (GDP), and therefore a slower rate of improvement in average living standards. This aggregative relationship hides the fact that rapid growth in population has a specially adverse effect on the incomes of the poor. One reason for this is that demographic behaviour differs by income class. If fertility levels and other demographic parameters were the same in all income groups, then population growth, and its adverse consequences in terms of diluting the benefits of aggregate income growth, would operate against the poor to the same extent as the non-poor. However, demographic pressures are much greater in poorer families. Any given population growth rate therefore implies a disproportionately greater demographic pressure on the lower income groups, with a correspondingly greater dilution of per capita income growth among the poor.

A second reason why population growth hurts the poor to a greater extent is its impact on land concentration in rural areas and on labour markets in general. High growth rates of population add to the already severe pressure on agricultural land in many developing countries worsening the land-man ratio and promoting fragmentation and landlessness, all of which operates against the interest of the poor in rural areas. Rapid population growth also contributes to more rapid growth of the labour force in the economy generally. Since facilities for imparting skills and training are typically limited, the poor are most likely to be squeezed out of access to available facilities. Faster population growth therefore means a larger growth in the ranks of unskilled labour and a slower pace of acquisition of skills among the poor.

Success in reducing population growth is therefore twice blessed. It will not only accelerate improvements in conditions of living on the average but will also have a disproportionately beneficial effect on the poor. Reduction in population growth should therefore be a key element in any strategy for poverty alleviation. It is beyond the scope of this article to indicate what should be the appropriate strategy for bringing about effective population control. We know that this is not simply a matter of providing birth control techniques, but equally of bringing about attitudinal changes in society and economic changes in the status of women, including especially advances in female education and the associated in-

crease in participation of women in the labour force. Once again there are clear synergies here between population control objectives, on the one hand, and some of the other elements of a growth strategy for poverty alleviation such as the general thrust at promoting labour absorption growth and the emphasis on education, on the other.

To summarize, full exploitation of the scope for reducing poverty through the indirect approach requires operating on several critical areas in the growth process. We have dealt above with five such areas, each of which provides substantial scope for conscious design of policy aimed at strengthening the impact of growth on poverty. It is important to recognize that the indirect approach is not one of single-mindedly and simple-mindedly pursuing growth with a passive acceptance of whatever benefits trickle down to the poor. On the contrary, it is one of consciously designing policy to ensure that the nature of the growth process will bring about significant reductions in poverty. As pointed out above, substantive choices do exist in each area and these choices have not always been correctly made.

The Direct Approach: Targeted Programs for the Poor

While the indirect approach focuses on the policy framework which will generate a growth process which ensures an adequate flow of benefits to the poor, the direct approach relies on targeted programs aimed directly at increasing incomes of identified poverty groups. The distinction between the two approaches is not always watertight. For example, policies such as land reforms and also special programs for small farmers, which were discussed earlier as part of the general policy framework which influences the nature of growth, could also be described as elements of a direct approach. However, there are two types of programs which unambiguously exemplify the direct approach and these are: (i) employment programs aimed at providing wage employment for the poor; and (ii) financial assistance programs aimed at generating additional income for the poor from self-employment. Both types of programs figure prominently in the poverty alleviation strategies adopted by many Asian countries, especially in South Asia.

Targeted programs have an obvious appeal in situations where the growth process is not producing a sufficiently rapid reduction in poverty, and especially so where poverty persists on a large scale. In such situations, there is a good case for a parallel thrust in combating poverty through targeted programs which can reach identified groups in greatest need of support and can do so in the short term. An important element in the appeal of such programs is that they are seen to be a visible response of the government delivering immediate benefits to groups which otherwise may be bypassed, or even actively marginalized, by the growth process. Since the programs require budgetary resources, they compete with other public investment priorities for scarce resources and there is the possibility of a trade-off with other growth promoting activity. However, proponents of these programs argue that they should not be seen as mere doles but as an integral part of the overall development strategy, contributing to the growth process like other productive investments. Thus, employment programs in rural areas, if properly planned as part of a strategy for rural development, can help to create economically productive or socially useful assets for the whole rural economy such as, for example, minor irrigation works, water conservation structures, land development schemes, social forestry, rural roads, schools and rural drinking water schemes. Similarly, self-employment schemes can be viewed as stimulating productive self-employment in activities which fit into and support the overall scheme of development of the area. It is useful to evaluate the experience with these programs against the background of these expectations.

Wage Employment Programs. Direct provision of wage employment is obviously an attractive instrument for poverty alleviation wherever the poor depend heavily upon wage employment for their income and also suffer from considerable unemployment and underemployment. Bangladesh, India and Pakistan have all experimented with direct employment programs aimed at providing supplementary wage employment to the rural poor while also providing productive or socially useful assets to the community.

India's experience is perhaps the most extensive, beginning with the Rural

Manpower Programme in 1960, which was followed by a variety of similar employment programs. At the State level, there is the well-known Employment Guarantee Scheme (EGS) in Maharashtra which was introduced in 1972. At the national level, the Food-for-Work Programme was introduced in 1977 and was replaced by the National Rural Employment Programme (NREP) in 1980. To this was added the Rural Landless Employment Guarantee Programme (RLEGP) in 1983. The NREP and RLEGP were two very similar rural employment schemes, differing mainly in the arrangements for sharing the cost between the Centre and the States. In 1989 these two programs were merged into a single and expanded new program called the Jawahar Rozgar Yojana (Jawahar Employment Programme, thus named after India's first Prime Minister Jawaharlal Nehru whose birth centenary was celebrated during 1988/89).

The new employment program involves an annual allocation of financial resources amounting to about 0.65 per cent of gross national product (GNP). It is estimated to create approximately 650 million man-days of unskilled employment per year, which amounts to about 1.8 million man-days per day. Estimates based on the National Sample Survey suggest that unemployment on a "daily status" basis in rural India is a little over 7 per cent of the work force or approximately 18 million, i.e., on a typical day, 18 million persons are looking for work and unable to find it. The employment program can therefore provide jobs for approximately 10 per cent of the unemployed in rural India. Since some of those reporting unemployment will be from higher income groups seeking better jobs, the impact in terms of actually providing supplemental employment for the poor is probably greater than 10 per cent. Even so, the scale of additional employment provided remains modest in relation to the size of the unemployment problem. This problem is even more marked in Bangladesh where the Food-for-Work Programme is estimated to provide employment for only 2-3 per cent of the unemployed.⁷

An important issue in determining the potential for direct employment programs relates to the resource cost involved. The Indian employment program, which presently caters to over 10 per cent of rural unemployment, already involves a level of expenditure which is about 30 per cent of the annual public sector investment expenditure on irrigation and agriculture. In a situation where total resources for investment are scarce, increased allocations to direct employment generation programs have to be weighed against the equally urgent need to increase investment in other key sectors such as irrigation. In fact, the promotion of labour-using agricultural growth, as discussed earlier, depends crucially upon greater investment in irrigation, water management and land development schemes. How much of a trade-off is involved obviously depends on whether the employment programs are viewed principally as programs for creating employment in the short term or whether they are dovetailed into a program for undertaking investment in the creation of productive or socially useful assets which are needed in any case.

Past experience in regard to the usefulness of the assets created through employment programs in India has been extensively studied and the conclusions are somewhat mixed. A number of shortcomings have been noted in various studies.

First, a common complaint is that the quality of the assets created under employment programs in the past has been poor and the assets are typically not durable. This has been repeatedly found in the case with rural roads built under these programs which are either washed away or deteriorate impossibly in every monsoon season. One reason for lack of durability is the tendency to maximize the wage component of the expenditure, in order to maximize employment which leads to inadequate provision being made for material inputs which are crucial to ensure durability. It is obviously important to ensure that employment works conform technically with required standards if the assets created are also to be durable. This in turn may mean accepting somewhat less employment from any given level of expenditure.

Second, the programs have not been as successful as they should have been in ensuring that resources are devoted to potentially productive works such as renovation of tanks, minor

⁷ Qazi Kholiqzaman Ahmed and Mahabub Hossain, "An Evaluation of Selected Policies and Programmes for the Alleviation of Rural Poverty in Bangladesh", in *Strategies for Alleviating Poverty in Rural Asia*, ed. Rizwanul Islam (Bangladesh Institute of Development Studies and International Labour Organisation/Asian Regional Team for Employment Promotion, 1985).

irrigation works and soil conservation. Such works constitute investment activity which could greatly increase land productivity and enhance the long-term employment generation capability of local agriculture. However, this can only be achieved if the employment programs are integrated with designed area and watershed plans in which specific works are clearly identified for implementation through employment programs. This calls for considerable expertise in field-level planning and a high degree of organizational efficiency at the implementation level.

Third, employment programs aimed at creating productive assets have also been criticized on the grounds that the assets created, such as irrigation works or even roads, ultimately enhance the value of land and the benefits therefore accrue mainly to upper income land owning groups and not to the poor. This is certainly true, especially where land ownership is highly concentrated, but this problem should not be overplayed if our concern is primarily with poverty alleviation and not with inequality. Effective local level planning of employment works should be able to ensure a reasonably favourable outcome in terms of the distribution of user benefits. For one thing, conscious efforts can be made to ensure that wherever possible, a part of the program should be directed at improvements on land owned by small or marginal farmers. Similarly, where the program involves building houses, a part of the program could be directed exclusively to low-income housing, a device which has been tried in India. Even where the program benefits cannot be targeted, as in the case of land improvement which mainly benefits the non-poor, it should be recognized that the poor could derive some continuing benefits. For example, land improvement based on irrigation is likely to encourage greater total labour use per hectare and the poor would benefit from the additional employment creation.

Fourth, an issue which is sometimes raised is that those employed are very often not from the target group. This is perhaps a less serious criticism than the others. As long as the wages paid are the barest minimum, we can assume that the beneficiaries will be mainly if not wholly from the target group. The real danger of leakage arises less from employment of non-target group beneficiaries than from misappropriation of funds where expenditure is incurred but no employment takes place.

These are undoubtedly serious problems, but many of them can be resolved by improved management in terms of better planning and better monitoring. Even more important is the need for institutional and organizational changes involving greater decentralization of planning and decision making to local elected bodies with direct involvement of beneficiaries in the planning and implementation process. Those issues are currently under consideration in India and major efforts are being made to bring about such decentralization in both planning and implementation of beneficiary oriented anti-poverty programs.

Promotion of Self-Employment for the Poor. Another set of targeted programs aimed at directly generating additional incomes for the poor are those focusing on self-employment possibilities. The basic idea is that members of poor households can be assisted to set up as independent self-employed producers engaged in commodity production or provision of services with a fairly small capital investment. These ventures can be financed by provision of subsidized credit, which is made available on special terms and through special procedures (e.g., without collateral security) in order to overcome some of the problems which limit access of the poor to institutional credit. The administering agency normally also undertakes to examine the technical and economic viability of the project to ensure that it is capable of becoming a self-sustaining source of additional income. In this process, it also provides marketing advice. Typically, the self-employment ventures are on a very small scale, employing mainly family labour.

Such programs are part of the strategy for poverty alleviation in most countries in South Asia. In India there is the Integrated Rural Development Programme (IRDP). In Bangladesh there is the Grameen Bank (GB) and also similar schemes run by the Bureau of Manpower Employment and Training (BMET), Bangladesh Small and Cottage Industries Corporation (BSCIC) and the Bangladesh Rural Advancement Committee (BRAC). In Sri Lanka there are programs of the National Youth Service Council (NYSCO) and others by the Central Bank and the Women's Bureau.

The scale of the programs varies from country to country. The Indian IRDP covers approximately 3 million beneficiaries per year with the avowed objective of taking

each beneficiary household above the poverty line. Since the total number of households below the poverty line in rural India is estimated at about 55 million, coverage of 3 million beneficiaries per year could make a significant impact over time if the program were as effective as expected. By contrast, the coverage of the Bangladesh and Sri Lanka programs is much more modest compared with the scale of the problem.

The experience with these programs in several countries has been reviewed and the Indian experience has been extensively studied.⁸ There are several issues of concern.

One of the issues is whether these programs, which involve a substantial subsidy element, can be successfully targeted so that only those who are eligible become beneficiaries. The experience in this regard is mixed. The Sri Lankan experience shows that most of the beneficiaries were not from the target group. In Bangladesh, the experience varies, with beneficiaries of the Grameen Bank schemes being mostly from the target group, but other schemes less so. India's experience with the IRDP has been fairly good in this respect, with 70 per cent of the beneficiaries belonging to the target group. Considering that further improvements in implementation are possible, we can confidently conclude that effective targeting is possible.

Another issue relates to the effectiveness of these programs in generating additional income for the beneficiaries. There are bound to be many cases of clear failure reflecting situations where either there has been outright misappropriation of funds or more likely the assets provided for the self-employment venture (milk cattle, goats, bullock carts, pumpsets, sewing machines, etc.) have been sold in a relatively short time and the proceeds consumed. Some of these cases where the asset is lost may reflect poor viability of the project to begin with. Some may arise from the fact that a poor household may be compelled to sell even an asset which is earning a reasonably high rate of return in times of distress because it cannot get access to credit on reasonable terms to tide over temporary difficulties. On balance, the Indian experience shows that the number of such cases of loss of assets is not unduly large. A survey of beneficiaries in 1987 showed that in fully 72 per cent of the cases the assets were found to be intact and operational after two years.

From the fact that assets are retained in operational order, we can conclude that they are found to be productive, but this does not indicate the quantum of additional income generated from the household. Such quantification of the additional income due to these assets is extremely difficult in practice. Base line estimates of income are typically unreliable and it is also difficult to take account of the effects of inflation over time. However, available studies suggest that the IRDP has contributed to raising incomes of beneficiary families subject to two qualifications. One qualification relates to the criticism that in many cases the increase in income is insufficient to achieve the objective of taking the household above the poverty line. This is not however a particularly serious objection since it may only reflect the fact that the investment undertaken was not large enough given the income level of the beneficiary and the gap between this level and the poverty line. A more serious problem noticed in some studies is that the initial increase in income is often not sustained over a longer period. In other words, the self-employment activity often deteriorates over time instead of becoming a self-sustaining viable enterprise. An interesting hypothesis is that this probably happens because the self-employed producers assisted under this program are not assured of continued preferential access to credit. For example, a unit may get its initial credit requirement under the special dispensation of the self-employment scheme, but if no similar provision is made to cater to its subsequent credit needs, it may be difficult for the unit to survive over time.

The key issue in assessing the economic viability of such self-employment programs must relate to the rate of return earned in such investments. Alam reports a very low figure of 4.9 per cent for profits earned as a percentage of total investment in the Grameen Bank

⁸ M. Muqtada, "Special Employment Programmes - Issues and Challenges", in *The Elusive Target: An Evaluation of Target Group Approaches to Employment Creation in Rural Asia*, ed. M. Muqtada (Asian Regional Team for Employment Promotion and World Employment Programme, 1989).

schemes.⁹ However, it is possible that profit in this calculation is understated because much depends on the imputed value of own labour. An alternative approach is to look at the incremental capital output ratio (ICOR), which is perhaps easier to measure than the rate of return and may in any case be more appropriate where there is significant underemployment. On this count, the results for the Indian programs are quite encouraging. A recent longitudinal study of IRDP in one of the Indian States, Uttar Pradesh, shows that the average ICORs obtained were as low as 1.5 if the accounting is over a two-year period and 2.0 over a four-year period for those households which retained their assets. This excludes investments made in the failure cases where the assets were lost. If we include the investments of households which had lost their assets after four years, the ICOR rises to about 3.0. This is higher than is typically thought to be the case for self-employment schemes, but it is certainly significantly lower than the average ICOR of about 4.6 for the economy as a whole.

One dimension in which the IRDP has not performed well thus far is that of repayment of loans. In the study quoted above, whereas 72 per cent of all beneficiaries had the assets intact after two years, only 28 per cent had no credit overdues. In other words, over 60 per cent of the beneficiaries who still retained their assets after two years had not made timely repayments. This is undoubtedly a serious problem since a credit-based scheme can only be viable if credit is repaid. However, it is possible that this percentage can be significantly improved through better monitoring and implementation. One of the problems in implementing these programs is that an impression is often created among beneficiaries that the credit does not need to be repaid, leading to avoidable overdues. Greater involvement and follow up by the banks could lead to much better results. In this respect, the performance of the Grameen Bank in Bangladesh is very much better with much lower overdues.

To summarize, the experience gained with self-employment schemes suggests that there are many problems which need to be resolved if these schemes are to become a truly effective instrument for poverty alleviation. It is certainly not easy to set up poor households as independent producers. Simply providing them with cheap credit or cheap credit plus a capital subsidy will not ensure the establishment of a viable source of additional income. At the same time, it cannot be denied that there is a substantial scope for promoting household-based production activities catering to the local market and requiring only a minimum of skills. Well-designed systems for providing credit, not just initially on a one-shot basis but also on a continuing basis to meet the economically justifiable needs of the enterprise, could enable large numbers of poor households to expand their income-earning capability. If this is combined with an element of training and marketing advice, and also supported by possible cooperative marketing arrangements, where appropriate, it could provide the basis for self-sustaining viable production which could help in poverty alleviation.

Conclusion

The conclusion which emerges from this discussion is eclectic. As Bhagwati points out, the optimal strategy for poverty alleviation is bound to be a mixed strategy involving some combination of the direct and indirect approach. The indirect approach has the advantage that since it focuses on the operation of the whole economy, successful indirect strategies are likely quantitatively to make a much larger impact than any possible direct intervention programs, which are bound to be severely constrained by budgetary considerations. On the other hand, since the approach depends on the overall pace and pattern of growth, it may not be able to provide adequate income support to all groups. In the longer run, the impact of a labour absorbing, skill-based growth process is bound to be the decisive factor in removing poverty, but in the short run it may not provide a solution for particular groups bypassed or marginalized by development.

The direct approach has the advantage of responding immediately and visibly in support of identified target groups. Its main disadvantage is that it necessarily involves a heavy draft on budgetary resources which most low-income countries can ill afford. The resource requirement of the direct approach brings in the possibility of a trade-off between the two

⁹ Mustafa Alam, "Special Employment Programmes in Bangladesh - An Evaluation of Major Schemes", in *The Elusive Target: An Evaluation of Target Group Approaches to Employment Creation in Rural Asia*, ed. M. Muqtada (Asian Regional Team for Employment Promotion and World Employment Programme, 1989).

approaches since resources used for directly targeted interventions can also be used to support particular aspects of the overall growth strategy, especially those which are most likely to have the maximum indirect effect on poverty. Needless to say such trade-offs can be quantified only through the use of general equilibrium models. All such quantifications are subject to numerous well known limitations, but where they are feasible they can throw useful light on the cost effectiveness of direct targeted programs.

An interesting example of explicit quantification of trade-offs is a recent study which examines the cost effectiveness of large-scale rural works programs in India as instruments for raising incomes of the rural poor.¹⁰ The study finds that even if the program is financed by a reduction in the general level of investment in the economy, the cost in terms of reduction in GDP growth over a 20-year horizon is quite modest, while the benefit in terms of income levels of the poorest classes is very substantial. For example, they estimate that a rural works program requiring investment of 6 per cent of GDP to begin with and a declining percentage over time would, on certain favourable but not impossible assumptions about the effectiveness of targeting and productivity of investment, involve a slowdown in growth of only 0.25 per cent per year over the 20-year horizon. Terminal year GDP per capita would be lower by only 4.6 per cent but the income of the two poorest classes in the rural areas in the terminal year would be 40 per cent higher than in the base run. The volume of resources envisaged in these simulations is of course massive and feasible levels of investment in such employment programs are likely to be much lower in practice. The benefits would also be correspondingly smaller, but the simulations indicate that the cost of these benefits, in terms of growth foregone, may not be very large. What the simulations establish is that if a rapid increase in the incomes of the poor to some minimum level is a matter of priority, targeted programs on some suitable scale may well be an essential requirement.

It is important to recognize that while some elements of a direct approach are unavoidable as long as significant poverty persists, it is perhaps best to view this as a necessary safety net while relying on broader based growth processes to provide sustained growth in income levels for the bulk of the population. This underscores the importance of ensuring that the total policy framework is such as to ensure that growth is as broad based as possible. Failure to ensure this will lead to an inherently unstable situation in which development strategy choices are made which fail to make full use of the potential for reducing poverty through growth, and this in turn generates pressures to expand schemes for direct intervention. A successful strategy is surely one in which the need for the direct approach diminishes gradually.

¹⁰ Mustafa Alam, "Special Employment Programmes in Bangladesh – An Evaluation of Major Schemes", in *The Elusive Target : An Evaluation of Target Group Approaches to Employment Creation in Rural Asia*, ed. M. Muqtada (Asian Regional Team for Employment Promotion and World Employment Programme, 1989).