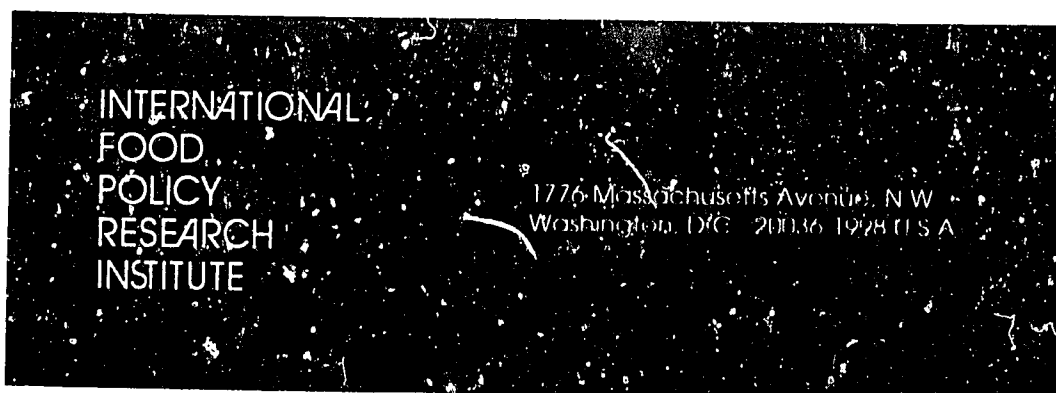


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Dramatic Poverty Reduction in the Third World: Prospects and Needed Action

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John W. Mellor*

Abstract

The national and international requisites for removing hunger in the Third World are discussed. It is virtually impossible for a largely agricultural country to achieve growth of its nonagricultural sector unless the agricultural sector is growing as well. The numbers of people living in absolute poverty in the developing world has increased around 14% in the 70s; however in the rapidly growing middle-income developing countries, the numbers of people in absolute poverty has fallen by one-half in the last two decades. By contrast the low-income countries have shown a 50% increase in the numbers in absolute poverty in this decade. Using examples from India and Bangladesh, a significant factor in improving living standards for rural communities is improved infrastructure including roads, electricity and telephones. It is argued that the agricultural sector is the best starting point for all programs aimed at accelerating national economic growth.

In recent travels through Australia, I have been struck by the sense of recognition here, from all walks of life and many different levels of achievement, that something very exciting and important is happening up there to the north, in Asia. As I travel around the United States and Europe, I just do not find that recognition of the obvious accelerated growth going on in so much of Asia. It is not just in East Asia or in Southeast Asia, but also South Asia, where this accelerated growth is occurring.

There seems also to be a clear recognition that those growth processes in Asia are going to be influenced not only by our policies in the 1990s, but by whether or not we do something extraordinarily foolish now which could prejudice all of those growth-oriented activities. I must say it is a great pleasure, with my concerns and interests, to see that sense of recognition in Australia, and to carry that word back to North America to see if I cannot chide people a little bit on those points.

I have been asked to address the issue of poverty, one which seems to be very much out of fashion these days. Maybe this presentation will help bring it back into fashion. In the 1970s, I was considered as someone not concerned with poverty issues. That was because I was extraordinarily unhappy with the way the issues were being approached. Sometimes, these days I have the feeling that I am the only person concerned with poverty, except, of course, for the poor people in the world.

I would first like to comment on the relationship between poverty reduction, agricultural growth and agricultural exports which is of much relevance and interest for an agricultural exporter such as Australia. If one is trying to see something good for the agricultural exporters of the world in the processes of accelerated growth in developing countries, one must see the importance of breadth of participation in

these growth efforts. It is from the people in the bottom half or perhaps even, as in many countries, the bottom two-thirds of the income distribution where the large incremental effective demand for food is found. When a developing country is able to accelerate the growth rate in its agricultural sector, nonagricultural sectors will thereby be stimulated. Farmers will spend their increased incomes on food or locally produced labour-intensive goods and services, which employ poor labourers who will spend their increased income on food. Given that the propensity to consume food is very high among the poor, not only will the population eat all the food that is produced domestically but the country will also have to import a considerable quantity in addition because domestic production will not be able to keep up with demand. Thus, when we talk about export markets, let us not forget that it is the breadth of participation in the developing countries' growth processes that will determine future commercial needs. It is exceedingly important.

The Poverty Problem

Now I will proceed directly to poverty. I want to present six sets of data that deal with the poverty problem directly or indirectly and highlight the magnitude, distribution, and changes in poverty.

Agricultural and Nonagricultural Growth Relationship

The first set of data has to do with the relationship between agricultural and nonagricultural growth in low-income developing countries. It is virtually impossible to have a high rate of growth in the nonagricultural sectors of the economy without a high rate of growth in the agricultural sector. This has been found to be true in almost all low-income developing countries. Of course, this is not the

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in the major city states of Hong Kong and Singapore which by definition do not have significant agricultural sectors and who are already solidly in the upper middle-income range now. The point is powerfully made if we said it is almost impossible to have a high rate of growth in overall GNP without the agricultural sector moving, given the large size of the agricultural sector in most developing countries.

Let me illustrate my point by dividing the developing countries of the world into four sets with respect to the rates of growth in the agricultural and nonagricultural sectors. These four sets are: (1) the high-highs which includes those countries that have high growth rates in both agriculture and nonagriculture; (2) the high-lows which includes those countries with high agricultural growth rates and low nonagricultural growth rates; (3) the low-highs which includes those countries with low agricultural growth rates and high nonagricultural growth rates; and (4) the low-lows which includes those countries with low growth rates in the agricultural and nonagricultural sectors.

Practically all countries in the developing world are either in the high-high category or the low-low category. There are very few countries that have high agricultural growth and low nonagricultural growth, or conversely very few experience low agricultural growth and high nonagricultural growth.

There are only two countries in Asia that do not fall in either the high-high or the low-low quadrants. The first country is Myanmar (previously Burma) which is high on agriculture and low on nonagriculture. This is not surprising. Myanmar is a country with extraordinarily good agricultural resources and it should be one of those few net cereals exporters from developing countries, along with Thailand and Argentina, so that even with very bad agricultural policies, it still sputters along reasonably well. Myanmar has had very discouraging policies for the nonagricultural sector, thus demonstrating that if you have sufficiently bad policies in the nonagricultural sector, you can kill off the multipliers that link agriculture and nonagriculture.

The other country, the Philippines, has also done very well in agriculture, thanks to its own agricultural research system and particularly to the efforts of the International Rice Research Institute (IRRI). The very rapid rate of technological change in its agriculture has shown up in high overall rates of growth of its agricultural sector. However, it has had remarkably bad policies for its nonagricultural sector, so that once again we see that it is possible to destroy that link between high growth in agriculture and high growth in nonagriculture.

By making the point that the two sectors are linked, I hope to drive home the following points: (i) that virtually all substantially agricultural developing countries fall in the high-high or the low-low quadrants, and (ii) that it does not make sense to think that economic development can be pushed rapidly in countries that are heavily rural without emphasising the agricultural sector in the growth process.

Growth and Reduction of Poverty

The second data set has to do with the tremendous reduction of poverty that has occurred in the past few decades in the world. A very powerful philosophical case can be made that what one should be concerned with in poor countries which have large numbers of very poor people, is not the Gini coefficient which is the percentage distribution of income across various strata, but the *numbers* of poor people. Perhaps a little more abstractly, one should concentrate on the proportion of people that falls below an abysmally low absolute poverty line. Amartya Sen has made such a clear philosophical case neatly.

What has happened to the number of people, or the proportion of people, in developing countries that falls below an absolute poverty line, which is defined so low that it is barely adequate in terms of caloric intake for a reasonably active life? Such an absolute poverty line is an ethically unacceptably low standard to have in mind as a minimum, but it is one that includes somewhere between 0.75 and 1 billion people in the world at the present time.

The bad news is that the number of people in absolute poverty in the developing world as a whole increased by about 14% during the 1970s. The good news is that in the middle-income developing countries, which are essentially the ones which have had fairly rapid growth rates at least for a significant portion of the period from the mid 1960s to the mid 1980s, the numbers of people in absolute poverty has dropped by one-half. In other words, those countries that have been able to get their incomes up to a level at which it becomes possible to have savings levels that allow them to grow fairly rapidly, have reduced the numbers of poor people by one-half. Now, of course, one questions how, in spite of so much success with poverty reduction, have the overall numbers of poor people increased? Well, the numbers of people in absolute poverty in the low-income countries, which are the IDA countries or those slightly above that, increased by 50% in this decade. Given the heavier weight of the low-income countries compared to the middle-income countries, it is not surprising the overall numbers have increased.

Brazil and Thailand

It is very important to focus on the point that rapid growth in developing countries causes a very sharp reduction in the numbers of people in absolute poverty. To emphasise this, I want to refer to the third set of data which specifically deals with two middle-income rapidly growing countries, Brazil and Thailand. I focus on Brazil and Thailand because, when I came across these poverty reduction numbers from a World Bank study titled 'Poverty and Hunger,' I felt the change in the middle income countries just could not be true, because Brazil, which is a very large element in the middle-income group, is said to have a poor record on equity. As well, the numbers of people in Brazil in absolute poverty over the last several years have been increasing given the negative growth or very little growth that has been taking

place. How could this be explained? When you focus on Brazil during its 15 years of rather rapid growth from the mid 1960s to the end of the 1970s, while there is great controversy with respect to what was happening to the Gini coefficient, it is quite clear that the number of people in absolute poverty dropped by one-half.

Sifting through the controversy over the Gini coefficient, the weight is probably mildly on the side that the Gini coefficient rose during this period of rapid growth, that is, the distribution of income in Brazil became somewhat less equal. One might then ask: How can the income distribution get more unequal at the same time that the numbers of people in absolute poverty are reduced substantially? The answer is that, and one has to focus on the low level of absolute poverty here, the proportion of the national income in the hands of these people with the abysmally low income is very small and they can be raised above that poverty line without changing the Gini coefficient in a favourable direction. Thus, you can have as Brazil probably did, a rising Gini coefficient, accompanied by rising real incomes via growth which may raise the proportion of the income in the highest income class at the same time that there is a substantial percentage increase in the incomes of the lowest-income people.

It comes as no surprise that in Thailand, during its period of rapid growth which extended for a slightly longer period of time, there was a radical reduction in the numbers of people in absolute poverty, also of the order of 50%. The Thai record is slightly more impressive than Brazil's, given that it occurred in a country with a lower average level of income both at the beginning and at the end of its rapid growth period. Also, within an agricultural growth context, Thailand did relatively better in agriculture than Brazil. I might say, however, both Brazil and Thailand had outstanding records in their agricultural sectors during their periods of rapid economic growth.

One further point about Brazil and Thailand is that most of the remaining poor in both countries are located in areas of relatively low agricultural potential. In each country, this concentration happens to be in the Northeast. Stimulating growth in these areas, which do not respond well to the kinds of technological improvements we are able to provide elsewhere, will require ingenious policy ideas. We will also have to see rapid migration continue from those areas.

India

The fourth set of numbers is for parts of a very poor country — India. We have, as is always the case, very good data for India and I can make my comments with a high degree of assurance. I particularly want to discuss the proportion of the rural population in absolute poverty in India in the period from 1963 to 1983. The year 1963 was probably a somewhat better one for weather than 1983, so that by choosing these periods, there is a natural small bias to show an increase in the

population in poverty because the poverty numbers decline rapidly during good agricultural years. In India, over the past several decades, the proportion of the rural population in absolute poverty has fluctuated between 40 and 60%, according to whether it was a good or poor weather year. This incidentally means that you can show anything you like on poverty trends. This is because of the dominating influence of weather and size of the food crop in determining poverty. I am here choosing figures that would tend to give you a small decrease in the numbers of people in poverty because of the way the weather was operating.

During the whole period for all of India, there was a small but nevertheless real increase in the numbers of rural people in absolute poverty. There were five states (Andhra Pradesh, Gujarat, Haryana, Kerala, and Punjab), however, in which the proportion of the rural population in absolute poverty dropped by one-half. Some of these states had incidences of poverty in the 40–50% range at the beginning of the period and reduced them to the 20–25% range over 20 years. In other words, in a country with incredibly low incomes and, therefore, incredibly difficult situations for accumulating capital for economic growth, there were five states that reduced the proportion of the rural population in absolute poverty to one-half in a 20-year period. This is a very encouraging sign.

Four of those five states had the highest growth rates in agricultural production during that period. There is a neat link between an excellent record in agriculture and very radical reduction in the proportions of the rural population in poverty.

The state which has done quite badly in agriculture is Kerala, the fifth data set. This state is the darling of people who like to point out the reduction of poverty, and the very good quality of life indices in terms of low infant mortality, long life expectancy, high literacy rates and so on. However, Kerala has not done very well in agriculture, probably because of poor state policies towards the agricultural sector. How, then, were they able to join the states that did very well in agricultural growth in this period in reducing absolute poverty? Because they have done very well in the education sphere and have prepared their people well for emigrating. There is a long history in Kerala of people leaving for other parts of India into all levels of the civil service, including the lowest levels. That migration to other parts of India, and the resultant increment in income that people could get compared to Kerala, was not enough, however, to cause a sharp reduction in poverty. Therefore, in 1963 Kerala had about 50–60% of its rural population in absolute poverty. But, when the Middle East opened up in the mid 1970s the out-migration rate greatly increased over what it had been before. The out-migrants moved into relatively high-income jobs compared to elsewhere in India. A tremendous amount of remittances sent back which resulted in a radical reduction in poverty. You can do what Kerala did: teach your people how to leave. The Irish did very well at that at one time, so this is

not an isolated example. However, it is probably not an example which is readily replicable, whereas the agriculture one is.

Bangladesh

One other small data set with respect to the poverty issue that I want to present is from Bangladesh. IFPRI has been able to run a rather large sample survey somewhat randomly across the length and breadth of the country. Thanks to support from the World Food Program for looking at food aid in Bangladesh, samples of villages similar with respect to rural population density and agroecological potentials, but which differed in their rural infrastructure, were obtained. A complex infrastructure index allowed us to divide these villages into those with good and poor infrastructure. It turns out that those villages with a good infrastructure have a bus station and those with poor infrastructure do not, among other things.

Villages with good infrastructure use twice as much fertiliser as villages with poor infrastructure.

Furthermore, villages with good infrastructure use 12% more labour per hectare of land, have a wage rate 4% higher, have 30% more employment in nonagricultural sectors, and so on. In terms of poverty, the proportion of the rural population in absolute poverty is 40% lower in villages that have good rural infrastructure.

Good infrastructure in the Bangladesh case provides access to available improved technology, which often doesn't spread because infrastructure is not there and it does not pay under those circumstances to spread it. Good infrastructure also enables trained people to operate institutions crucial to development. I do not want to imply that infrastructure alone brings down poverty ratios by 40% but I do want to imply that it is a very important and necessary condition.

Summary

The first lesson is recognition that it is growth which is bringing down poverty levels radically in developing countries. The argument that growth is not likely to bring poverty levels down is specious. The second lesson is that it is rural growth that is critical in this poverty-reduction process. It is difficult to see how large numbers of rural people in absolute poverty in South Asia are going to lift themselves out of poverty by growth in the major metropolitan centres. In the case of Bangladesh, moving more than 40 million people from absolute poverty conditions in rural areas into Dhaka in order to deal with their poverty problems just does not seem a very sensible idea. You have to go where the poor people are if you are going to have some impact. I emphasise the role of infrastructure in getting to where the people are. Infrastructure is, of course, not just good roads, though they are vital to the development process. I remember an official in a country I was visiting commenting that he thought the infrastructure was fine and that everywhere he went there was a good road. That tells you a lot. Everywhere most of us go there is a good road also. Few people, including development agents, have time to go to where good

roads do not exist. Two-thirds of Bangladesh is without good infrastructure. In Nigeria, 90% of the country is left out.

Earlier, I indicated that if we use this abysmally low and ethically unacceptable level of absolute poverty as the criterion, there are at least 700 million poor people in the developing world. This is a massive problem and, I would argue, is not likely to be dealt with by redistribution. Fifty percent of poor people are in South Asia, which is something we forget frequently; 20% are in subSaharan Africa, which is a surprising number but also probably a fair one; about 10% are to be found in the People's Republic of China; and the rest are scattered around Southeast Asia, the Middle East, and Latin America. Most of the poor people are to be found in rural areas: up to 90% in subSaharan Africa, probably 80% in South Asia, and even in Latin America about 60%. Poverty is a substantially rural problem. Looking at these numbers, one asks: Are we concentrating foreign assistance where it is most effective in reducing absolute poverty? Every Australian will obviously say no since they are looking at a lot of the absolute poverty not all that far away from them.

In the poor countries, well over one-half of the people in absolute poverty are living in areas of high rural population density and high-potential agricultural resources which are responsive to modern technology. It is in those high population density and high potential areas where infrastructure costs per family are the lowest. High population growth rates are not. There is a little conundrum there, but if the concern is to quickly reduce the numbers of people in absolute poverty with cost-effective use of resources currently available in the short run, much more should be done in those areas in the poor countries where the poor are now heavily concentrated. This is not the case in the middle-income countries where the numbers of poor people have already been brought down cheaply and quickly in areas of high responsiveness to technology; there is, however, still a major problem for the longer run in those areas that are not very responsive as yet to the kinds of technology we are offering. The CGIAR system should put substantial resources into looking at how we are going to reduce those poverty numbers in the more difficult situations in the future, but not at the expense of doing it in the short run in the easier areas.

Conclusion

I want to underline two points on poverty reduction:

1. **The role of technological change in agriculture.** Everything I have talked about here has had technological change of one type or another involved in it.
2. **The need for broad participation in the development process.** To bring down poverty numbers rapidly means that most rural people have to have access to the development processes. This cannot occur without giving them access to the integrating effects of infrastructure, and particularly roads.