The Employment Nexus Between Growth and Poverty

An Asian Perspective

S.R. OSMANI

Economic growth is necessary for sustained reduction of poverty. But how fast poverty will fall in response to growth depends crucially on how far the growth process succeeds in creating productive employment opportunities – wage employment as well as self-employment – for the poor and how equipped the poor are to seize those opportunities. This examination of findings from Armenia, Uzbekistan, Vietnam, Indonesia and Bangladesh testifies to the importance of employment as the critical nexus between growth and poverty. The strategies for poverty reduction must, therefore, be sensitive to the employment-generating potential of the growth process.

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Foreword by Sida

For most poor people, income from employment – including both wage and self-employment – is by far their most important source of income. Yet, of the 3 billion people who constitute the global labour force, the International Labour Organization (ILO) estimates that at least 1 billion are either unemployed or underemployed in the sense that they lack sufficient work or, more commonly, are trapped in employment of such low productivity that – despite long, hard hours – pays too little to enable them to escape poverty. Indeed, employment is the singularly most important, yet often neglected, link between economic development and a reduction in income poverty. Furthermore, lack of employment opportunities that are sufficiently remunerative is a major source of poverty.

The present study draws on the results of collaborative work between the ILO, Sida, and the United Nations Development Programme (UNDP). It is based on a common understanding of the importance of employment and decent work for poverty reduction. This work has progressed along two parallel paths: i) a series of country studies undertaken by UNDP that focuses on economic policies designed to generate employment and reduce poverty in the Asian and the Commonwealth of Independent States (CIS) countries and ii) a sister series of studies undertaken by the ILO and Sida that focuses on the linkages between growth, employment, and poverty.

Based on a coherent methodology developed by the author, the present study explores the strength and nature of the linkages between economic growth, employment, and income poverty in five countries in Asia and the CIS. The text focuses both on the translation of growth into more jobs and higher labour productivity and on the access of the poor to these employment opportunities. The concluding section of the study is a comparative synthesis of the foregoing, distilling conclusions of a more general nature and lessons for policy making.

Stockholm, June 2005

Per Ronnås
Chief Economist

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Executive Summary

Recent empirical studies demonstrate that sustained and rapid economic growth is necessary for sustained reduction of poverty. The evidence also shows, however, that the extent to which poverty responds to growth varies enormously across time and place. Policies for poverty reduction should, therefore, try to promote both faster rate of growth and greater responsiveness of poverty to growth. In the course of the recent explosion of growth literature, much has been written on what can be done to accelerate the rate of growth, but very little work has been done to understand the factors that determine the responsiveness of poverty to growth. The present study aims at advancing such an understanding by examining the experience of a number of Asian countries. It does so by exploring the role of the 'employment nexus' between growth and poverty. "Employment nexus" refers to the idea that economic growth affects poverty mainly through the creation of productive employment for the poor.

The analytical framework of the study is based on the proposition that two distinct sets of factors determine the responsiveness of poverty to growth. First is the 'elasticity factor'. It determines the extent to which the 'employment nexus' between growth and poverty is strengthened by the growth process i.e. the extent to which the scope for improving the quantity and quality of employment is improved. The second is the 'integrability factor'. It determines the extent to which the poor are actually able to seize the employment opportunities opened up by the growth process – for example, by acquiring the skills or assets required to undertake a productive job. For growth to reduce poverty fast, it is important not only that the rate of growth be high but also that the elasticity and integrability factors are favourable. The experience of the selected countries has been examined in the light of these ideas.

The study is based on a synthesis of the findings from two sets of country studies that have recently been concluded – one sponsored by UNDP and the other jointly by ILO and Sida. The synthesis covers five countries, three of which are transition economies, i.e. former socialist countries that are in the process of becoming capitalist market economies (Armenia, Vietnam and Uzbekistan) and two are traditional (i.e., non-transition) developing economies (Bangladesh and Indonesia).

The comparison of growth and poverty across the five countries confirms the emerging consensus that growth is a necessary condition for sustained reduction of poverty. The transition economies of Armenia and

Uzbekistan, which experienced massive poverty at the time of economic collapse in the early 1990s, were able to bring down the level of poverty only when growth revived in the second half of the decade. Vietnam and Indonesia made impressive inroads into poverty by riding on the wave of rapid economic growth. Even the struggling economy of Bangladesh was able to accelerate the rate of poverty reduction, albeit modestly, when the rate of economic growth accelerated somewhat in the 1990s. Robust economic growth is obviously important for the fight against poverty.

The evidence also confirms, however, that there is no one-to-one relationship between the rate of growth and rate of poverty reduction. The responsiveness of poverty to growth varies enormously between countries and within the same country at different periods of time. For instance, poverty was more responsive to growth in Vietnam than Armenia during the recovery phase of their respective transition, and Uzbekistan had an exceptionally high responsiveness than either of them. Over the long haul, not only did Indonesia have a higher growth rate than Bangladesh but its poverty was also more responsive to growth compared to Bangladesh. That explains in a large measure why Indonesia was so much more successful than Bangladesh in reducing poverty over the years. In Bangladesh itself, when growth accelerated in the 1990s, the responsiveness of poverty to growth also improved compared to the 1980s – the two factors together helping to accelerate the rate of poverty reduction in the 1990s.

Analysis of the causes underlying these variations in the responsiveness of poverty to growth demonstrates the importance of the employment nexus. Wherever the growth process was able to offer greater scope for improving the quantity and quality of employment, the responsiveness of poverty to growth also tended to be high. This is hardly surprising when one considers that since labour power is by far the major asset the poor possess, they can hope to escape poverty only through fuller utilisation of this asset and by earning a higher rate of return on its use. The really interesting lesson the present study offers is that there are a variety of ways in which the growth process can enhance the responsiveness of poverty to growth – i.e., the 'employment nexus' can take various forms. Sometimes it can take the form of straightforward expansion of full-time employment leading to reduction in the rate of open unemployment. Sometimes there may be no effect on open unemployment and yet employment may expand in the form of enabling the underemployed workers to work more fully. In yet other cases there may be no effect on the quantity of employment but the quality of employment may improve in the form of either higher wages or higher returns to labour for the self-employed people. Examples of all these cases are found in the case studies analysed in this report.

Indonesia maintained a high rate of poverty reduction for more than two decades since the mid-1970s by adapting its growth strategy to the changing structure of the economy. In the early stage of development the strategy of import-substituting industrialisation was complemented by a major thrust in agriculture and rural development in general, financed to a large extent by the new found oil wealth. The strategy paid rich dividends in terms of both growth and poverty reduction. In particular, it resulted in an all-round increase in the demand for labour leading to a rapid rate of poverty reduction in all sectors of the economy, even though the strategy of industrialisation by itself was not capable of reducing poverty much beyond the urban sector. Poverty came down initially through reduction in unemployment and subsequently though increase in real wages (i.e., money wages adjusted for inflation, reflecting the true purchasing power of wages).

Around the mid-1980s, Indonesia shifted towards the strategy of outward oriented industrialisation. This strategy ushered in the process of rapid labour absorption in the industrial sector, drawing in surplus labour from agriculture in increasing numbers. So long as surplus labour existed, poverty reduction occurred primarily through growing employment in manufacturing where wages were higher than in agriculture. When the surplus labour got exhausted, in the early 1990s, poverty reduction occurred primarily through higher wages.

In Bangladesh, the mechanism through which growth reduced poverty was very different from that in Indonesia. The impetus to growth acceleration in the 1990s came from the non-tradable non-farm sector, which was boosted by enhanced domestic demand – emanating initially from the crop sector and increasingly also from the readymade garments and workers' remittances. Faster growth enabled the non-farm enterprises to increase their scale of operation, thus tilting the structure of the rural non-farm sector more towards the relatively larger enterprises. This structural change in turn brought about a change in the nature of labour absorption in this sector, as salaried wage employment became more plentiful with the emergence of larger enterprises. Whereas in the 1980s most of the surplus labour that got absorbed in the non-farm sector found their way into low-productivity self-employment, in the 1990s the absorption occurred more into salaried employment in the relatively larger and more productive enterprises. Since salaried employment in larger scale enterprises was far more rewarding for the poor than the shift into self-employment that occurred in the 1980s, the structural change engendered by the growth process of the 1990s was especially conducive to poverty reduction.

In Vietnam, by contrast, the employment nexus operated primarily in

the agricultural sector. Vietnam's programme of reforms leading to the transition to a market economy began in the agricultural sector. Collectives were dismantled early in the process and land was distributed amongst farming households. The land distribution pattern that emerged following these reforms was highly egalitarian by international standards. As a result, any benefit that came from improvement of agricultural productivity was shared fairly equally by a huge agricultural population, which was a powerful factor behind rapid poverty reduction in the1990s.

The improvement in productivity itself was ushered in by other components of the reform programme, including price liberalisation, exchange rate reform, export orientation of the economy, and so on. The combination of price liberalisation and export orientation created an enabling environment for the farmers not only to intensify the production of the traditional staple crop rice but also to diversify into higher-valued crops in response to market demand at home and abroad. The reforms opened the economy to the world, raised the relative prices of agricultural products relative to both agricultural inputs and other non-agricultural prices and improved efficiency. Thanks to equitable land distribution, this increase in average income translated into widespread poverty reduction.

Uzebekistan's remarkable success in reducing poverty sharply in the short recovery period also owed itself to higher returns to self-employment in the agricultural sector. As in the case of Vietnam, the emergence of a fairly egalitarian household sector in agriculture out of the former collective system played a crucial role in this process. The revival of growth in the Uzbek economy after the mid-1990s was propelled by the agricultural sector, and this revival of agriculture occurred precisely in those products in which the household sector was primarily engaged. As traditionally important crops such as wheat and cotton were kept as the preserve of state and collective farms, households tended to specialise in new areas, especially in the production of high-valued horticultural products, such as fruits and vegetables. After the privatisation of livestock, they also increasingly went into the production of meat and dairy products. These were precisely the products whose output expanded rapidly after 1997 while cotton production declined and the expansion of wheat production slowed down. The revival of agriculture after 1997 was thus primarily based on the increasing ability of the household sector to boost their production.

It is this process that provided the nexus between growth and poverty reduction in the second half of the 1990s. The nexus consisted not so much in increasing the size of employment as in improving the productivity of those who remained engaged in household production. Improved

productivity in agriculture in turn enabled some of the workers to get absorbed in the service sector, which received a stimulus from rising incomes in agriculture and thus helped reduce poverty further.

The Armenian experience was completely different. During the recovery phase, when growth recovered and poverty declined, total employment actually declined in absolute terms. Agriculture had played the role of shock absorber during the contraction phase of the transition process by affording a subsistence opportunity to those losing jobs in urban industry and services. In the recovery phase, however, agriculture could not play the dynamic role in poverty reduction unlike what happened in Uzbekistan. Poverty declined mainly in urban areas as a result of higher wages and paradoxically this happened while employment declined.

This apparent paradox is partly explained by the fact that much of the employment that was lost during the growth phase was not productive employment. In the first half of the 1990s many workers had remained nominally attached to medium and large-scale enterprises in the public sector even when they had little to do and received very little wages. Therefore, the loss of employment as such did not have a significantly negative effect on poverty. Reduced employment did, however, lead to rapidly rising productivity of labour, which in turn was accompanied by significant rise in real wages. Industry, construction and all the branches of the service sector experienced three to four fold increases in real wages between 1995 and 2000. This was an important factor behind the reduction of poverty during the growth phase.

Such a process of poverty reduction – whereby labour productivity and real wages are boosted by shedding redundant labour – is feasible during the phase of economic restructuring. But it can only be a short-term process. Once the restructuring is complete, i.e. output has recovered from the crisis of transition and all the redundant labour has been shed, further reduction in poverty can only come from a growth process that creates new opportunities for productive employment. This is exactly what happened in the other four countries. Growth processes were different in different countries and also at different stages of development in the same country, but the common factor in each case was expansion in the opportunities for productive employment for the poor.

The study also confirms the importance of the 'integrability factor' i.e. the ability of the poor people to seize any opportunities for more productive employment. In each country it was found that when new opportunities for productive employment were created there were always some groups among the poor who were left out. Some impediments or the other prevented them from taking advantage of those opportunities.

Poverty reduction was hampered as a result. A pro-poor growth strategy will have to be sufficiently nuanced to address the specific nature of the integrability problem faced by particular groups of people at particular stages of development.

The rich and varied experience of the countries studied in this report offers important policy lessons regarding different aspects of pro-poor growth policy. Some of these aspects include (a) the role of agriculture in a transition economy, (b) possible complementarity between macroeconomic and structural reforms, (c) how to use a resource bonanza for the benefit of growth and poverty reduction (d) the need to strike the right balance between tradable and non-tradable sectors in the process of pro-poor growth, and (e) the importance of population dynamics for pro-poor growth.

Introduction

CHAPTER 1

Recent empirical studies demonstrate that sustained and rapid economic growth has invariably been accompanied by reduction of poverty and, conversely, persistent growth failures have invariably been accompanied by persistent failure to reduce poverty. Raising the rate of growth is thus being increasingly recognised as necessary for poverty reduction.

The empirical evidence also points, however, to an important feature of the relationship between growth and poverty that is often neglected – namely, that there is no invariant relationship between the rate of growth and the rate of poverty reduction. Faster growth is not always accompanied by faster rate of poverty reduction, just as slower growth does not always entail slower rates of poverty reduction. Therefore, what matters for poverty reduction is not just the rate of growth but also the responsiveness of poverty to growth, as measured by the growth elasticity of poverty, which shows the rate at which poverty declines in response to one per cent growth in per capita income. For any given rate of growth, the rate of poverty reduction will be faster the higher the value of growth elasticity of poverty.

Policies for poverty reduction should therefore try to promote both faster rate of growth and a high growth elasticity of poverty. In the course of the recent explosion of growth literature, much has been written on what can be done to accelerate the rate of growth. But very little work has been done to understand what can be done to promote a high responsiveness of poverty to growth. An important objective of the present study is to advance such an understanding by examining the experience of growth and poverty in a number of Asian countries. It will do so by focusing on the idea that employment plays a crucial mediating role between growth and poverty.

The study is based on a synthesis of the findings from two sets of country studies that have recently been concluded – one by UNDP and

the other jointly by ILO and Sida. UNDP's Asia-Pacific regional programme on the "Macroeconomics of Poverty Reduction" has examined for a number of Asian countries how macroeconomic policies can be rendered more pro-poor. Several of these studies have also examined the role of employment as a crucial mediating factor between growth and poverty. The studies by ILO/Sida have explicitly focused on the role of employment in reducing poverty. The present synthesis will draw on the following studies – the UNDP studies on Armenia (UNDP 2003a), Bangladesh (Osmani *et al.* 2003), Indonesia (McKinley *et al.* 2003), Vietnam (Weeks *et al.* 2003) and Uzbekistan (UNDP 2003b) and the studies by ILO/Sida on Bangladesh (Rahman and Islam 2003) and Vietnam (Islam 2002).

It is worth emphasising at the outset that any systematic analysis of the experience of the countries under review is constrained to some extent by the availability of good quality data. The problem is particularly severe for the transition economies. The redeeming feature, however, is that all the studies cited above, from which the present study has drawn most of the information, made a conscious attempt to check for the quality and consistency of data and not to use data that were suspect in obvious ways. A good deal of confidence can, therefore, be placed in the data base on which the present analysis is based. Nevertheless, readers should be open to the possibility that some of the conclusions drawn here might need to be revised in future as the data on which they are founded turn out to be faulty upon further inspection.

The report is structured as follows. Chapter 2 elaborates the analytical framework underpinning the study. This framework identifies three elements that determine the speed of poverty reduction – viz. the 'growth factor', the 'elasticity factor' and the 'integrability factor'. Chapter 3 deals with the growth factor, demonstrating the importance of growth for poverty reduction. Chapter 4 examines the elasticity factor, which is concerned with the responsiveness of poverty to growth. Chapter 5 looks into the 'integrability factor' i.e., the impediments that prevent the poor from gaining fully from the opportunities opened up by the growth process. A number of important policy considerations are extracted from the country experiences in Chapter 6. Finally, Chapter 7 offers some concluding remarks.

The Analytical Framework

CHAPTER 2

The centrepiece of the analytical framework adopted by this study is the notion of employment nexus between growth and poverty. "Employment nexus" refers to the idea that economic growth affects poverty mainly through the creation of productive employment for the poor.[1] The importance of employment in the context of poverty stems from the fact that poor people rely mainly on the use of their labour power – whether as wage-labour or in self-employment – for earning their livelihood.[2] The quantity of employment – i.e., the number of hours and days a person is able to work – is an important determinant of their income. Also important, however, is the return to labour[3], which depends to a large extent on the portfolio of assets (including physical assets such as land, human capital such as skills and social capital such as community support networks) with which they pursue their livelihood. If either the quantity of employment is low or the rate of return to labour is low, a worker is likely to live in poverty. Accordingly, two broad categories of proximate causes of poverty can be distinguished: *underemployment* (the quantity of employment is inadequate) and *low returns to labour* (earning per unit of employment is inadequate).

Those who suffer from *underemployment* can be of two types:

- The *open underemployed*, i.e., those who work less than full time (i.e. the total number of hours and days a person can physically work in a year after allowing for due rest and

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1 See Osmani (2004) for a fuller discussion of this framework.

2 Employment refers to both wage employment i.e. working as employees in other people's enterprises and self-employment i.e. working in one's own enterprises or in family enterprises – in all sectors of the economy including industry, agriculture and services and in both public and private sectors.

3 Return to labour means the wage rate in the case of wage employment. In the case of self-employment, it means total income earned from one's enterprise minus all costs except cost of own labour.

leisure) and hence cannot earn enough to rise above the poverty line.

- The *disguised underemployed* i.e., the Nurkse-Lewis type surplus labour – those who apparently work full time but at low intensity, within an institutional framework that permits both work-sharing and income-sharing (e.g., in family farm enterprises in backward agrarian economies in which there is very little scope for wage labour outside the family farm).

Those who suffer from *low returns to labour* despite working full-time and at high intensity can be classified into three categories depending on the causes of low returns:

- Those who work for very low wages because they have to compete with potential entrants (comprising the unemployed and the underemployed, and constituting a pool of surplus labour) who have very low reservation wages (i.e., the minimum wage level below which a person would not accept employment) – this may be called the *surplus labour* syndrome.

- Those who work with poor skill, or poor technology, or inadequate complementary factors – this may be called the *low productivity* syndrome.

- Those who suffer from adverse terms of trade, either because of low product prices, or high input cost (including high cost of credit), or both – this may be called the *adverse terms of trade* syndrome.

For growth to be able to reduce poverty fast, the nature of the growth process must be such that the forces creating underemployment and low returns to labour are weakened. Whether this will happen or not depends on three sets of underlying factors: namely, the growth factor, the elasticity factor and the integrability factor:

The growth factor: The rate at which the production potential of the economy expands, as represented by an upward shift of the production possibility frontier.[4]

[4] The production possibility frontier refers to the maximum amount of goods and services an economy can produce with the given technology and the given amounts of factors of production (land, labour, capital and entrepreneurial capacity) available at any moment in time.

The elasticity factor: The extent to which an upward shift of the production possibility frontier enhances the employment potential – the latter being defined as the scope for improving the quality[5] and quantity of employment. What we are concerned with here is the elasticity of employment potential with respect to growth in production potential.

The integrability factor: The extent to which the poor are able to integrate into economic processes so that, when growth occurs and the employment potential expands, they can take advantage of the greater scope for improving the quality and quantity of employment.

The 'growth factor' i.e. expansion of an economy's production potential, as determined by the growth of its labour force, accumulation of human and physical capital, and technological progress, must be an essential component of any programme of sustained poverty reduction. It is obvious that without the growth of production possibilities there can be no sustained expansion in employment potential. The only way employment can be expanded in a stagnant economy is either by depressing the returns to labour or by increasing the rate of underemployment. Neither route is good for the poor. Only a growth-induced shift in the employment potential will enable the poor to enjoy rising income either through reduced unemployment/underemployment or through higher returns to labour.

Given any shift in the production potential, the next parameter that has a bearing on the poor people's income is the 'elasticity factor' i.e. the extent to which growth in output expands the scope for improving the quantity and quality of employment – in short, the employment potential. The expansion of employment potential will manifest itself as an upward shift of the marginal value product curve of labour. For the wage labour sector, this is nothing but the standard demand curve for labour. For the self-employed sector, however, the term demand curve does not strictly apply. Even so, the common feature of both cases is that an upward shift of the curve allows the workers to improve the quality and quantity of their employment. For any given expansion of the growth potential, the shift of the labour demand curve would depend on three factors: sectoral composition of output, choice of technique, and the terms of trade (the relative price between output and input). If the composition of output

[5] Quality of employment includes both return to labour (e.g., wage rate in the case of wage employment) and other conditions of work such as health and safety conditions, job security, opportunities of leave and pensions, the right to form trade unions and to engage in collective bargaining, and so on. The present analysis focuses mainly on the return to labour.

and the choice of technique favour the use of labour relative to other factors of production and if the terms of trade are high, then the demand for labour would rise more strongly, leading to a high elasticity of employment potential.

The elasticity factor refers to the ability of any given growth of production to stimulate the growth of employment potential, as represented by upward shift of the marginal value product of labour curve. The idea behind this concept is that any given growth rate can be associated with different degrees of shift in employment potential depending on the nature of the growth process. And the growth process that is associated with a bigger shift – that is, the one that is more employment-elastic – would be more helpful for the poor, other things remaining the same. The degree of elasticity would depend on three features of the growth process:

- *Sectoral composition of output*: The extent to which the growth of output is concentrated in the more labour-intensive sectors.

- *Choice of technique*: The extent to which more labour-intensive techniques are used, especially in the growing sectors.

- *Terms of trade*: The extent to which the internal and external terms of trade improve for the labour-intensive sectors.

It should be noted that the three factors are not completely independent of each other. For instance, changes in terms of trade will affect the composition of output. In particular, if the terms of trade improve for the labour-intensive sectors, the composition of output will change in such a way as to expand the production of labour-intensive goods at the expense of other products. Changes in the composition of output will in turn affect the relative prices of factors of production – e.g. if production is concentrated more in labour-intensive products then the resulting increase in the demand for labour will raise the wage rate relative to the prices of other factors of production. This change in relative factor prices will turn affect the choice of technique. These interactions among the three factors will together determine the elasticity effect of the growth process i.e., the extent to which employment potential will increase as a result of economic growth.

The greater the expansion of employment potential, the greater the opportunity for reducing underemployment and raising the returns to labour – the two proximate causes of poverty mentioned earlier. The growth elasticity of employment potential is therefore an important intermediate variable that shapes the extent to which the growth of the overall economy translates into higher incomes of the poor.

Of course, a high elasticity of employment does not necessarily entail higher incomes of the poor. All it does is to allow the working population as a whole to reduce their unemployment and underemployment and raise their returns to labour. In short, it expands the opportunities, generally. There remains the question, however, whether the poor are able to take this opportunity or whether it is captured mainly by non-poor workers, or even whether the opportunities are seized at all. Much depends on whether the poor possess the necessary attributes that will enable them to integrate fully into the workings of an expanding economy. This is what we have termed the 'integrability' factor.

Rapid growth and high elasticity of the employment potential can together ensure that economic activities create greater opportunities for workers to increase their income through a combination of greater employment and higher returns to labour. However, workers do not necessarily mean 'poor workers', and opportunities are not necessarily seized. So, even a combination of rapid growth and high elasticity does not guarantee a rapid rate of poverty reduction. If the new opportunities are such that the capabilities they demand do not match the capabilities of the poor, then either non-poor workers will seize the opportunities or perhaps the opportunities will not be seized at all. Much, therefore, depends on the correspondence between the structure of opportunities that are opened up and the structure of capabilities possessed by the poor. The 'integrability factor' refers to the degree of this correspondence. The greater the degree of correspondence, the more extensively will the poor be able to integrate into the processes of economic expansion and the faster will be the rate of poverty reduction for any given rate of growth.

There are a variety of reasons, however, why the poor may not be able to integrate fully into economic processes so as to take advantage of any expansion in employment potential created by economic growth. Some have to do with the distribution of assets, with market failures of various kinds, and some with social norms. The extent to which policies are able to mitigate these problems will determine to a large extent how fast poverty will decline for any given rate of growth.

The preceding analysis shows that while economic growth is indeed essential for sustained poverty reduction, the rate of poverty reduction also depends crucially on two other parameters – the elasticity factor and the integrability factor. These two factors constitute the core of the employment nexus between growth and poverty reduction. The experience of the selected countries will, therefore, be examined not just in terms of how fast they have grown but also in terms of their success in strengthening the employment nexus.

Growth and Poverty: The Recent Experience

CHAPTER 3

This section first reviews the growth experience of the selected countries, then looks at the evolution of poverty in these countries in the recent past, and finally seeks to identify relationships between growth and poverty, if any.

3.1 Recent Growth Experience

3.1.1 Armenia

Among the post-communist economies that emerged after the disintegration of the Soviet Union, Armenia has had one of the most difficult periods of transition. Before independence in 1991, Armenia was a heavily industrialized country, with 45 per cent of GDP originating in the industrial sector. Output consisted of capital and intermediate goods; the raw materials were imported and mostly semi-finished products were exported to other parts of the USSR. The dissolution of the Council for Mutual Economic Assistance (CMEA) destroyed this pattern of trade and, with it, the viability of a large part of Armenia's industrial sector. Sudden disappearance of a captive export market as well as a sharp deterioration in Armenia's terms of trade (due largely to having to pay the world price for imported oil) decimated the industrial sector even before the transition to a market-based economic system began.

Armenia's woes were further compounded by the war with the neighbouring country of Azerbaijan over the enclave of Nagorno-Karabakh, which erupted shortly after independence and ended in 1994. The major economic consequence of the war was the closing of the borders with Azerbaijan and Turkey, which left Armenia virtually isolated. Thus Armenia began its transition as a semi-closed economy with high transaction costs.

The final nail in the coffin came from the "shock therapy" approach to transition. Like most other post-Soviet economies, Armenia tried to

Table 3.1 Comparative Growth Performance

Country	Period	Annual average GDP growth rate	Population growth rate	Per capita GDP growth rate
Armenia	1991–2001	-2.2	-1.0	-1.1
	1991–1993	-17.4	-0.8	-16.8
	1994–2001	5.4	-1.4	6.8
Uzbekistan	1991–2001	0.4	1.9	-1.5
	1991–1996	-2.4	2.1	-4.5
	1997–2001	4.4	1.5	2.9
Vietnam	1985–2001	6.5	1.9	4.6
	1985–1991	4.8	2.3	2.5
	1992–1997	8.7	1.8	6.9
	1998–2001	6.1	1.3	4.8
Indonesia	1970–2000	6.3	1.9	4.4
	1970–1979	7.8	2.4	5.4
	1980–1989	6.4	1.9	4.5
	1990–1996	8.0	1.6	6.4
	1997–2000	-0.7	1.4	-2.1
Bangladesh	1980/81–1999/00	4.3	2.0	2.3
	1980/81–1989/90	3.7	2.1	1.6
	1990/91–1999/00	4.8	1.8	3.0

Sources: Compiled from UNDP (2003a) for Armenia, UNDP (2003b) for Uzbekistan, Weeks et al. (2003) for Vietnam, Mckinley et al. (2003) for Indonesia and Osmani et al. (2003) for Bangladesh.

introduce a series of major economic reforms as rapidly as possible. These reforms included comprehensive price liberalization; the transfer to the private sector of state owned land, housing and productive enterprises; a reduction in public expenditures, the introduction of some tax reforms and a general shrinkage (and weakening) of the state; the introduction of tight monetary policies to control inflation; and the adoption of free trade policies, including very low tariffs, abolition of non-tariff barriers to trade, removal of controls over capital movements, currency convertibility and a floating exchange rate. The disruptions caused by the combination of the policy 'shocks' led inevitably to a collapse of output.[6]

As a consequence of these series of shocks, GDP declined at an annual rate of over 17 per cent between 1990 and 1993. Recovery began from 1994 and for the rest of the decade GDP grew at the rate of 5.4 per cent per annum (Table 3.1). But the initial shock was so severe that even after sustained recovery for more than seven years, output in 2000 remained about two-thirds of what it was at the beginning of the decade.

3.1.2 Uzbekistan

In sharp contrast to Armenia's experience, Uzbekistan's growth performance during the 1990s has been one of the best among all the former Soviet republics. The recovery was completed by 2000, and by 2001 Uzbekistan's GDP was 3 per cent above the 1989 level, making it the first former Soviet Republic to surpass the 1989 GDP level. By contrast, in 2001 the fourteen other former republics had GDPs ranging from 35 per cent (Moldova) to 88 per cent (Belarus) of their respective 1989 levels.

Like other former Soviet republics, Uzbekistan too suffered severely from the break-up of the Soviet Union. Subsidy from the Soviet Union amounted to 21 per cent of GDP in 1991; this suddenly disappeared in 1992. Since its industrial sector was part of the overall industrial complex of the Soviet Union, the break up of CMEA severed its traditional supplier and customer linkages. Its economy depended on cheap Soviet oil; that advantage also vanished, as did cheap food imports from the Soviet Union.

These legacies of the collapse of the Soviet Union inevitably rendered a severe blow to the economy. In addition, by not following the shock therapy approach as rigorously as other former republics, Uzbekistan raised the fear in many quarters – especially among the Bretton Woods institu-

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[6] This series of reforms was essential for Armenia to make the transition to a market economy. There is a debate, however, on whether a more gradualist approach (i.e., adopting reforms sequentially depending on priority instead of implementing them all at the same time) in implementing these reforms would have reduced the initial collapse of output by reducing the degree of disruption caused by policy shocks. This debate remains unresolved because of the difficulty of constructing a credible counterfactual of what would have happened with a gradualist approach.

tions – that it would fare badly during transition. Instead, it turned out to be the best performer in terms of emerging from the crisis fast. This has been described as the 'Uzbek Growth Puzzle'.

What really lies behind this puzzle, however, is not so much any extraordinary achievement during the recovery phase as an especially light contraction in the early years of transition. The economy contracted up to 1995, emerged with a small positive growth in 1996 and began a sustained recovery from 1997. During 1997–2001, growth rate averaged 4.4 per cent (Table 3.1), which was healthy but nothing special. In fact, its neighbouring countries in Central Asia all had much higher growth rates during this period – ranging from 5 (Kazakhstan) to 8 per cent (Turkmenistan).[7]

If Uzbekistan stands out, it's not for the pace at which the economy grew in the later years, but for the way contraction was kept within limit in the early years. During 1992–1995, the Uzbek economy contracted at an annual rate of 4.6 per cent, as against a massive 10.5 per cent for the CIS countries as a whole, and a range of 8 to 15 per cent among the Central Asian republics.

So, if the Uzbek growth puzzle is to be explained, the answer must be sought not in the growth phase but in the contraction phase. The question one must ask is why there was so little contraction?

There were three main factors in containing the severity of contraction:

- A large agricultural sector, which accounted for 37 per cent of GDP in 1991. A major crop was cotton, providing a readily exportable commodity, which could be exported to any part of the world. The break up of CMEA was not therefore such a big shock, as it was e.g. in Armenia.

- A large reserve of minerals, especially oil. In the Soviet period Uzbekistan imported 60 per cent of petroleum. Upon gaining independence, a deliberate policy of import substitution was started. By 1995, oil self-sufficiency was achieved.

- Oil and cotton provided a substantial amount of government revenue, which enabled Uzbekistan to maintain high level of public sector spending in contrast to most other CIS countries. This helped reduce recessionary pressures from the demand side that was created as a result of collapse of purchasing power among the households whose members had either lost jobs or seen their wages decline.

[7] Source: Table 1.4 of the UNDP report on Armenia.

3.1.3 Vietnam

Vietnam has been a star performer among the transition economies. Following China's lead in economic liberalisation in the late 1970s, Vietnam launched its own programme of liberalisation, known as *doi moi*, in the mid-1980s, letting in market forces first gradually but with increasing vigour since the early 1990s.

In the decade and a half since 1985, GDP has grown at an average rate of 6.5 per cent per annum. In the first phase of liberalisation (1985–1991), which was essentially a phase of macroeconomic stabilisation, GDP grew at the rate of 4.8 per cent (Table3.1). Given the inherent difficulties of stabilisation, which often entails sluggish and even negative growth of GDP, this was a remarkable example of stabilisation with respectable growth.

The next phase, comprising the middle of the 1990s, was even more remarkable. During 1992–1997, GDP grew at the rate of 8.7 per cent, entailing a per capita GDP growth of 6.9 per cent, which was among the fastest episodes of growth in the world in the 1990s, rivalled only by China and to a lesser extent Indonesia.

Growth slowed down slightly after 1997, partly as a consequence of the after-effects of the Asian financial crisis, but still remained healthy at 6.1 per cent per annum during 1997–2001. Rapidly falling population growth ensured that per capita GDP would still grow at a highly satisfactory rate of 4.8 per cent even during this phase of slower growth.

3.1.4 Indonesia

Indonesia entered the rapid growth phase in early 1970s. In the following three decades, GDP grew at the rate of 6.3 per cent, entailing a per capita GDP growth of 4.4 per cent (Table 3.1). This performance has of course been marred by the sharp economic decline that occurred after 1997 when Indonesia was hit by the Asian financial crisis. Considering only the pre-crisis period, the economy grew at the average rate of over 7 per cent during 1970–1997, with per capita growth rate of nearly 5 per cent per annum. Such a sustained expansion of the economy over a period of nearly three decades has helped transform Indonesia from a poor economy to a relatively prosperous middle-income country.

In terms of economic policies, the period of growth can be split up into two parts – before and after 1985. Up to the mid-1980s, the driving force behind overall economic growth was rapid expansion of the agricultural sector, followed by a construction boom and import-substituting industrialisation. In the mid-1970s, the government of Indonesia embarked upon a massive programme of intensification of rice cultiva-

tion. The programme was based on four pillars: introduction and dissemination of the Green Revolution technology, public distribution of subsidized inputs (mainly, fertilizer), a massive programme of infrastructural development (mainly, irrigation and roads), and a price support scheme funded by the new-found oil wealth. The result was a sharp acceleration in rice production – from annual average growth of 3.7 per cent during 1972–1977 to 7.2 per cent in during 1977–1982. The rate of agricultural growth achieved by Indonesia in this period exceeded not only that of other developing countries in the region, but also of other developing countries that had also benefited from the oil bonanza, such as Nigeria, Algeria, Ecuador and Venezuela. During this period Indonesia conspicuously avoided the 'Dutch disease'[8] that afflicted other oil-rich economies, where the oil wealth actually led to stagnation in the production of other tradable goods by causing appreciation of the real exchange rate. The reason why Indonesia was able to avoid the 'Dutch disease' lay precisely in the conscious effort made by the Indonesian government to utilize the oil wealth for increased rice production and subsequently for construction and import-substituting industrialisation.

By the mid-1980s, however, the Green Revolution technology had begun to run out of steam, as had the strategy of import substitution in manufacturing industries, and in consequence growth began to slow down. The average growth rate during 1982–1985 was only 5 per cent, compared to over 7 per cent in the preceding decade. At that stage, the government of Indonesia changed track and began to adopt the strategy of economic liberalisation and outward oriented industrialiation. Economic growth revived as a consequence, albeit gradually. In the second half of the 1980s, growth picked up to 6.7 per cent per annum, rising to an average of 8 per cent in the 1990s until the crisis of 1997.

In the second half of the growth phase (1985–1996) the economy grew at the rate 7.5 per cent per annum, as compared with 7.1 per cent in the first phase (1970–85). An already high growth rate was thus accelerating even more. The days of heady growth came to a rude halt, however, with the financial crisis of 1997–98. Over the 4-year period from 1997 to 2000, the economy actually experienced negative growth of –0.7 per cent per annum, although by the end of the period recovery had already begun.

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[8] The term 'Dutch disease' was coined to describe the difficulties the Dutch economy faced after the discovery of North Sea oil in the 1960s. The term is now used more generally to describe the paradox that the discovery of an exportable natural resource or the sudden increase in the price of an export commodity can cause problem for the overall economy in terms of lost production and employment even as export earnings go up.

3.1.5 Bangladesh

Bangladesh emerged as an independent nation in 1971 after a highly destructive war of liberation, which came on top of a series of natural disasters that had already played havoc with the economy. The subsequent growth experience of Bangladesh economy can be divided into three phases – recovery and reconstruction in the 1970s, slow growth in the 1980s, and a modest acceleration of growth in the 1990s.

In the 1980s, per capita GDP had grown slowly at the rate of about 1.6 per cent per annum. In the first half of the 1990s, growth rate accelerated to 2.4 per cent and further to 3.6 per cent in the second half of the decade (Table 3.1). This was not an insignificant acceleration, even though by no means spectacular by the standards of the rapidly growing countries of Asia.

The acceleration in the growth of per capita income owed itself both to a slowdown in population growth and a sustained jump in the rate of GDP growth. Population growth had remained more or less stable in the 1980s – at about 2.2 per cent per annum. But the onset of the 1990s ushered in a period of sustained slowdown. Fertility had begun to decline somewhat earlier, but sluggish improvement in mortality had kept population growth high. But in the first of the 1990s the rate of population growth dropped to 2 per cent and further to 1.6 per cent in the second half – indicating a remarkably early demographic transition for a country at as low a level of development as Bangladesh. At the same time, GDP growth also accelerated in tandem. From an average of around 3.7 per cent, which had prevailed in both halves of the 1980s, it rose to 4.4 per cent in the first half of the 1990s and accelerated further to 5.2 per cent in the second half of the decade.

Thus both productive and reproductive performance of the economy improved in the 1990s to generate a moderate acceleration in the growth of per capita income. In purely accounting terms, productive performance played the more dominant role, however, contributing about three-fourths of the observed acceleration. Thus, out of the 2 percentage points acceleration in per capita income growth that was experienced from the first half of the 80s to the second half of the 90s, as much as 1.5 percentage points came from GDP growth.

3.2 Poverty Trends

During the Soviet era the republics such as Armenia and Uzbekistan did not officially recognise the existence of poverty, although it is now widely accepted with the benefit of hindsight that there was a good deal of hid-

Table 3.2 Comparative Poverty Trends

Country	Year	Poverty ratio
Armenia	1996	54.7
	1998	49.1
Uzbekistan	1997	23.3
	2001	16.0
Vietnam	1993	58.0
	1998	37.0
Indonesia	1976	68.9
	1981	60.8
	1984	51.1
	1987	46.1
	1990	42.8
	1993	34.0
	1996	32.5
Bangladesh	1983/84	52.3
	1991/92	49.7
	1999/00	39.8

Sources:
Armenia: World Bank (2002) "Armenia Poverty Update", cited in UNDP(2003a), Ch 6, p. 104.

Uzbekistan: UNDP(2003b) Ch. 3, Fig. 3.1.

Vietnam: Huong, Tuan and Minh (2003), Fig 2; cited from Poverty Working Group (1999).

Indonesia: Islam (2002), Fig 2.1.

Bangladesh: Osmani *et al.* (2003).

den poverty in most republics. The crisis that followed the break up of the Soviet Union and the disruptions that occurred with the initiation of market reforms at the same time intensified poverty and brought it out into the open. No systematic assessment of poverty could, however, be made in the initial years of transition, when poverty was at its peak, although there were some estimates based on guesswork and incomplete information. To-

wards the middle of the 1990s, systematic household surveys of nationally representative character began to be carried out, which form the basis of whatever little is known of the trends in poverty in the transition period.

Armenia carried out nationally representative household income and expenditure surveys in 1996, 1998/99 and 2001. However, only preliminary and incomplete results from the 2001 survey were available. What is worse, a number of methodological differences between the first two surveys limits the extent to which meaningful comparison based on these data can be made. A very limited attempt has been made to reconcile some of these differences. While the results of this reconciliation should be treated with caution, they provide the only available basis of making any kind of direct assessment of how poverty has been changing over time. According to the evidence, nearly 55 per cent of the population were below the poverty line in 1996; by 1998, the proportion came down to 49 per cent (Table 3.2). This was not a big reduction, but then one is considering here only a two-year interval.

The incidence of poverty was lower and the reduction was also sharper in rural areas compared to the urban. Rural poverty came down from 48 to 41 per cent in the two-year period, while urban poverty declined from 59 to 55 per cent. The evidence also suggests that extreme poverty declined considerably faster than overall poverty. At the national level, extreme poverty came down from 28 per cent to 15 per cent; in urban areas it declined from 30 per cent to 18 per cent, and in rural areas from 24 per cent to 12 per cent (UNDP 2003a, Table 6.7). If these figures are anywhere near the truth, they reveal quite a spectacular reduction of extreme poverty in a very short period of time.

In Uzbekistan, a full-fledged household income and expenditure survey was carried out for the first time only in 2000–01. While this survey provides very useful information on the structure of poverty, for the purpose of assessing trends in poverty recourse must be taken to alternative sources. The most useful of such sources is a large-scale income survey of twenty thousand randomly selected households, first carried out by the government in 1994 and then turned into an annual feature. Initially, the extent of poverty was estimated not on the basis of a well-defined poverty line but with reference to the official minimum wage level. On that basis, some 45 per cent of the population were found to be poor in 1994–95 i.e. with income below the minimum wage level.

Poverty estimates based on a consistently applied poverty line are available only from 1997. These estimates show that poverty declined from 23 per cent in 1997 to 16 per cent in 2001 (Table 3.2). While annual figures do show some year-to-year fluctuation, the trend is clearly downwards.

Using a different and perhaps more realistic poverty line, the World Bank has recently estimated on the basis of the Household Budget Survey of 2000–01 that poverty in that year was around 28 per cent, which is considerably higher than the 16 per cent figure quoted above (UNDP 2003b, Chapter 3). But since estimates for other years based on the same poverty line are not available, nothing can be said about poverty trends on this basis. However, these estimates can still be used for other purposes, especially for spatial comparison of poverty and for comparison across population groups. For example, they show that, unlike in Armenia, rural poverty was much deeper in rural areas compared to urban areas. In 2000–01, rural poverty was in the region of 31 per cent while urban poverty was 23 per cent.

For Vietnam, consistent poverty estimates are available from the nationally representative Vietnam Living Standards Surveys, the first of which was carried out in 1992–93. Using a poverty line that is fixed in real terms over the years, poverty is found to have declined from 58 per cent in 1993 to 37 per cent in 1998 (Table 3.2). This represents an exceptionally large decline within just a five-year interval – one that has led Vietnam to be viewed as perhaps the most successful of the transition economies after China.[9]

As in most other Asian countries, rural poverty is found to be much higher than urban poverty in Vietnam, and declining more slowly. Thus, while rural poverty declined by about one-third from 66 per cent in 1993 to 45 per cent in 1998, urban poverty was more than halved – from 25 per cent to just 9 per cent – during the same period.

For both Indonesia and Bangladesh, consistent poverty estimates are available for a much longer time period than for any of the three transition economies discussed above. In Indonesia, the Central Bureau of Statistics provides a series of poverty estimates dating back from 1976 using information collected from nationally representative household income and expenditure surveys. These so-called official estimates of poverty have been the basis of most discussion of poverty in Indonesia so far. One problem with these estimates, however, lies in the fact that the poverty lines used by the Central Bureau of Statistics do not represent constant purchasing power over time. Using an alternative methodology, which uses the same poverty line in real terms, Dhanani and Islam (2000) have recently re-estimated poverty in Indonesia from 1976 onwards; these figures are used in the present study.

These figures reveal that poverty has declined consistently in Indone-

[9] A preliminary estimate for 2001-02 shows that poverty declined further to 32.5 per cent by that year. However, because of their preliminary nature the estimates for 2001-02 are not analysed further in this report.

sia during its two decades of rapid growth until the financial crisis. From 70 per cent in the mid-70s, the incidence of poverty came down to 51 per cent by the mid-1980s and further to 33 per cent by the mid-1990s (Table 3.2). There was a sharp rise in poverty during the crisis period of 1997–98, but by the end of 1999 the incidence of poverty had almost gone back to its pre-crisis level. Thus the crisis did not cause any permanent or long-term reversal of the gains that had been made on the poverty front, contrary to the apprehensions expressed in some quarters during the crisis, but it did halt the progress and reduced Indonesia's ability to reduce poverty with the same vigour as in the past.

During the growth phase, poverty declined remarkably in both rural and urban areas. Rural poverty declined from 74 per cent in 1976 to 42 per cent in 1996, while urban poverty declined from 54 per cent to just 18 per cent during the same period. Thus, as in Vietnam, rural poverty was higher than urban poverty to begin with and continued to be higher, having experienced a slightly slower rate of reduction over time.

For Bangladesh long-term trends in poverty are available at least since 1973/74, based on nationally representative household surveys. However, the surveys carried out by the Bangladesh Bureau of Statistics before 1983/84 differ significantly in methodology from those carried out since. It is, therefore, advisable to focus on the trends only since the early 1980s. Estimates based on consistent poverty lines show that there has been faster progress in poverty reduction during the nineties compared with the eighties. Thus, the national poverty ratio dropped only marginally from 52 per cent in 1983/84 to about 50 per cent in 1991/92, but then fell relatively sharply to about 40 per cent by the year 2000 (Table 3.2). The reduction of poverty that took place in the 1990s – at the rate of about one percentage point per year – was certainly modest by the standards of East and South-east Asia in the last few decades. But at least it marked a welcome acceleration in the pace of poverty reduction compared to the near stagnation of the preceding decade.

As in most other Asian countries, rural poverty is higher than urban poverty in Bangladesh, and during the period between 1983/84 and 2000 the pace of poverty reduction was faster in urban areas (2.2 per cent per year) compared with rural areas (1.2 per cent per year). But it is significant to note that there has been considerable acceleration in the reduction of rural poverty in the nineties. Thus while rural poverty hardly declined in the 1980s, it fell relatively sharply from 53 per cent to 42 per cent in the 1990s. By contrast, the decline of urban poverty maintained a steady trend – falling from 41 per cent in 1983–84 to 34 per cent in

1991/92 and further to 26 per cent by 2000.[10] These figures suggest that the overall acceleration that occurred in the rate of poverty reduction in the 1990s was accounted for almost wholly by accelerated poverty reduction in rural areas.

Taken on their face value, the figures in Table 3.2 reveal that all three transition economies have reduced their poverty much faster than the two traditional developing economies – Bangladesh and Indonesia. But such comparisons need to be made with care. In the first place, the periods under consideration are much shorter for the transition economies – ranging from two to five years in contrast with periods spanning two decades for Bangladesh and Indonesia. The two sets of figures are non-comparable because what can be achieved in a short period may not be sustainable over a longer period.

Secondly, and more importantly, there is a significant difference in the nature of poverty in the two sets of countries, which may have important implications for the ease with which it can be reduced. Much of the poverty found in transition economies is in the nature of what has in other contexts been called 'conjunctural' poverty i.e., temporary poverty caused by sudden disruption of the economic system. By contrast, much of the poverty found in traditional developing economies is 'structural' in nature, whose roots lie very deep in the existing economic system. By its very nature 'conjunctural' poverty is likely to be easier to tackle than 'structural' poverty – as the economy recovers from temporary dislocations much of 'conjunctural' poverty is likely to disappear. The evidence suggests that this is precisely what has happened, giving rise to a very high rate of poverty reduction. These rates cannot be compared with the rates of reduction of structural poverty, which by its very nature is likely to fall relatively slowly, other things remaining the same[11]. A possible exception is the experience of Vietnam. In this case, it is arguable that much of the conjunctural poverty created by the transition process initiated in the mid-1980s may already have disappeared in the early 1990s when economic reconstruction was well under way. The further reduction of poverty that was achieved since 1993 may, therefore,

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10 Poverty estimates available for 1995/96 show that the decline in urban poverty was confined wholly to the first half of the 1990s; in the second half of the decade urban poverty seems to have actually increased. But questions have been raised about the reliability of the 1995/96 figures. It has been noted, for example, that the estimate of per capita income obtained from this year's survey is exceptionally high in the light of all other evidence, and it is this artificially high estimate of income for the mid-90s that leads to an apparently very sharp decline in poverty in the first half of the decade and an apparent increase in poverty in the second half. For this reason, the present report ignores the 1995/96 estimates and focuses only on the estimates for the two ends of the decade.

11 Rapid reduction of conjunctural poverty in he transition economies is much more comparable with the experience of Indonesia during and in the aftermath of the financial crisis of the late 1990s. While poverty increased sharply in Indonesia during the crisis, it fell equally sharply in the immediate post-crisis period. From its peak of 46 per cent in February 1999 poverty declined to 36 per cent in August of the same year (Dhanani and Islam 2000, Table A.4). It is inconceivable for structural poverty to decline at such a rapid pace during so short a period.

relate primarily to structural poverty. That makes Vietnam's experience of poverty reduction in the 1990s truly unique.

3.3 Relationship between Growth and Poverty

In order to investigate the relationship between growth and poverty, Table 3.3 reports side by side the rates of poverty reduction between various data points and the rates of growth of per capita income during the same data points. For Armenia, Uzbekistan and Vietnam, only two data points are used, which of course vary from country to country depending on the availability of survey data. No inter-temporal comparisons are possible for these countries. For both Indonesia and Bangladesh, however, more than two data points are available, which allows comparison of poverty reduction over time. For Indonesia, we compare the period 1976–84 with 1984–96 corresponding to two different policy regimes as discussed above. For Bangladesh, the period 1983/84–1991/92 is compared with 1991/92–1999/00, as these two periods correspond to two very different regimes of poverty reduction – the latter period marking a significant acceleration of poverty reduction over the preceding one.

Table 3.3 Relationship between Growth and Poverty

Country	Period	Annual rate of decline of poverty	Per capita GDP growth rate	Growth elasticity of poverty
(1)	(2)	(3)	(4)	(5) = (3)/(4)
Armenia	1996–1998	5.3	7.9	0.67
Uzbekistan	1997–2001	9.0	2.7	3.33
Vietnam	1993–1998	8.6	6.7	1.28
Indonesia	1976–1984	3.7	5.2	0.71
	1984–1996	3.7	5.5	0.67
Bangladesh	1983/84–1991/92	0.6	1.6	0.38
	1991/92–1999/00	2.4	3.2	0.80

Notes and sources: Column (3) is from constructed from Table 3.2, and column 4 is constructed from information provided in the documents cited under Table 3.1.

The first point to note from Table 3.3 is that each episode of poverty reduction is associated with positive growth in per capita income. This reinforces the emerging consensus that economic growth is necessary for sustained reduction of poverty. More significantly, Table 3.3 also reveals that there is a strong positive association between the rate of growth of per capita income and rate of poverty reduction. On the whole, more rapid growth of per capita income is associated with faster rate of poverty reduction. For instance, the observed growth rates are much higher for the transition economies of Armenia and Vietnam as compared with the traditional developing economies of Indonesia and Bangladesh and their corresponding rates of poverty reduction are also much higher. The conspicuous exception is Uzbekistan, where a modest rate of growth has been associated with a very high rate of poverty reduction. Between the two traditional developing economies, Indonesia has had a much higher rate of growth than Bangladesh and also a faster rate of poverty reduction.

Inter-temporal comparisons reveal a similar relationship between growth and poverty. Indonesia experienced an identical growth rate between the two phases of its growth, and also experienced a remarkably similar rate of poverty reduction. Bangladesh experienced a significantly higher rate of growth in the 1990s as compared with the 1980s; correspondingly poverty reduction was also much faster in the 1990s.

These figures reveal the significant effect that growth has on poverty reduction and thereby corroborates the importance of the 'growth factor' discussed in Chapter 2. However, the same table also shows that there is no one-to-one relationship between the rate of growth and the rate of poverty reduction. It is not only the exceptional experience of Uzbekistan, where relatively slow growth was associated with a very rapid rate of poverty reduction, that destroys such a relationship. Even in the cases where faster growth was associated with faster poverty reduction, the impact of growth on poverty was by no means uniform. This is revealed by the estimates of growth elasticity of poverty, which shows the extent to which poverty declined in response to one per cent growth in per capita income.

There is wide variation in the estimated growth elasticities of poverty, even leaving aside the exceptional case of Uzbekistan. Thus, compared to Armenia, Vietnam not only had a higher rate of growth but also considerably higher responsiveness of poverty to growth – the respective elasticities were 0.67 for Armenia and 1.28 for Vietnam. And Uzbekistan had an even higher elasticity (3.33), which enabled it to reduce poverty at about the same rate as Vietnam despite a much slower rate of growth.

Between the two traditional developing economies, Indonesia not only

had a faster rate of growth than Bangladesh but also higher elasticity during the overall periods under consideration. This shows that the better record of poverty reduction in Indonesia owes itself not just to faster growth but also to higher responsiveness of poverty to growth. Looking at Bangladesh's own experience over time, it may be noted that the decade of the 1990s saw not only faster growth but also a much higher elasticity compared with the 1980s (0.80 in the 1990s as against 0.38 in the 1980s). Thus the observed acceleration in poverty reduction in the 1990s owed itself not just to faster growth but also to increased responsiveness of poverty to growth.

These observations suggest that while it is important to understand, for the sake of poverty reduction, what factors cause rapid growth of per capita income, it is equally important to understand what factors cause poverty to respond differently to growth under different circumstances.[12] The following chapter is concerned with these issues.

[12] One possible explanation of variable elasticity lies in the statistical properties of the initial distribution of income. It is well known that the rate of poverty reduction, as it is usually measured by the observed change in the head-count ratio, can be very sensitive to the nature of income distribution around the poverty line. If density is very high just below the poverty line i.e. if a disproportionately large number of poor people are concentrated just below the poverty line, then even a small growth in the per capita income of the poor may lead to a very large reduction in poverty, i.e. elasticity will be high. It is, therefore, important to use these elasticity measures with caution while trying to understand why growth affects poverty differently under different circumstances.

The Employment Nexus between Growth and Poverty

CHAPTER 4

The impact of growth on poverty depends to a large extent on the kind of structural changes that growth entails and the impact such structural changes have on employment and wages. This chapter, therefore, explores the linkages between growth, structural change, employment and wages and the impact of all these on poverty.

4.1 Armenia

In spite of an economic recovery that started in the mid-1990s, the salient experience of Armenia over the decade as a whole is an overall contraction of the economy. A breakdown of sectoral composition of output shows that the decline in output occurred primarily in the industrial sector. At the end of the decade, agricultural output was actually about a quarter higher than at the beginning, output of the services sector had almost completely recovered, and construction output was nearly 25 per cent below but fast recovering. The most precipitous decline took place in the industrial sector where output had come down to just one-third of its 1990 level (Table 4.1). Since industry was by far the most important sector of the economy before transition, accounting for 45 per cent of GDP, the collapse of industry was primarily responsible for the overall contraction of the economy.

Table 4.1 Value-added Index by Sector: Armenia

Year	Total	Agriculture	Industry	Construction	Services
1990	100.0	100.0	100.0	100.0	100.0
1993	46.9	172.3	32.4	10.7	35.4
1998	61.2	149.6	27.4	59.5	78.2
2000	67.8	124.3	33.7	73.8	95.8

Source: Compiled from the information provided in UNDP (2003a).

Further insight can be gained by looking separately at the contraction phase and the recovery phase of the economy. In the contraction phase (1990–93), output declined precipitously in industry, construction, and services, but rose sharply in agriculture. As workers were laid off in the declining non-agricultural sectors, they flocked to agriculture in order to make out a living. This process was aided by the policy of privatising land and distributing it in a more or less equitable manner. The share of agriculture in total employment doubled as a result – from 17 per cent in 1990 to 34 per cent in 1993. In absolute terms, agricultural labour force increased by a massive 83 per cent. Agricultural output increased as a result, by as much as 72 per cent, but because of its small weight in the economy (accounting for only 12 per cent of GDP in 1990), agriculture could not compensate for the sharp fall elsewhere in the economy. As a result, total GDP declined by more than half during this period.

In the rest of the economy, as output declined so did employment. To some extent labour shedding was inevitable, as during the Soviet era public enterprises had come to acquire an artificially bloated labour force. However, the inertia of labour hoarding in public enterprises meant that the pace of employment contraction lagged behind the pace of output decline (Table 4.2).

Table 4.2 Employment Index by Sector: Armenia

Year	Total	Agriculture	Industry	Construction	Services
1990	100.0	100.0	100.0	100.0	100.0
1993	94.7	183.1	73.3	63.3	81.8
1998	82.0	200.1	42.3	29.9	76.0
2000	78.4	199.7	36.3	24.5	73.2

Source: Compiled from the information provided in UNDP (2003a).

While this helped keep down the rate of overt unemployment, it did lead to a precipitous decline in labour productivity. By 1993, labour productivity in industry and services had come down to just 44 per cent of the 1990 level and in construction as low as 17 per cent of its 1990 level (Table 4.3). Real wages also declined in line with productivity, and this is what caused the accentuation of poverty in the contraction period.

Table 4.3 Labour Productivity Index by Sector: Armenia

Year	Total	Agriculture	Industry	Construction	Services
1990	100.0	100.0	100.0	100.0	100.0
1993	49.5	94.1	44.2	16.9	43.3
1998	74.6	74.8	64.7	198.9	102.8
2000	86.5	62.2	92.8	300.8	130.8

Source: Compiled from the information provided in UNDP (2003a).

During the recovery phase (1993–2000), total output increased by 45 per cent (but at the end of the period still remained one-third below the 1990 level). This partial recovery was led by construction and services. Construction output increased over six-fold, and services nearly three-fold. Agricultural output declined from its peak of 1993, after having played the role of shock absorber during the contraction period. Industrial output essentially stagnated, with minor annual fluctuations (Table 4.1).

Thus, the growth phase was characterised by rapid recovery of construction and services, with decline in agriculture and stagnation in industry. It is in the context of this structural change that the relationship between growth and poverty has to be understood. In order to explore this relationship further, the information on structural change in output needs to be supplemented by information on the structure of employment and wages.

As the recovery started, employment continued to fall in non-agricultural sectors and rise in agriculture, as in the contraction period. However, there was a significant shift in the pace at which employment changed. In industry and construction, employment declined faster than during the contraction period, perhaps because the inertia of the culture of labour hoarding had finally lost its force. On the other hand, the pace of employment expansion in agriculture slowed down considerably, perhaps because the absorptive capacity of agriculture was rapidly being reached. Total employment declined sharply as a result. While during the contraction phase employment had fallen by just 5 per cent, it fell by a further 17 per cent in the recovery phase (Table 4.2).

Significantly, however, this fall in employment was accompanied by a reduction rather than an increase in poverty, and a very sharp reduction in extreme poverty, as noted in Chapter 3. Part of the explanation of this apparent paradox lies in the fact that much of the employment that was lost during the growth phase was not productive employment. In the first half of the 1990s many workers had remained nominally attached to medium and large-scale enterprises in the public sector even when they had little to do. The 1996

Labour Force Survey revealed, for instance, that almost one-third of the employees still registered as employed in industry were not working or were on extended leave. When these workers were finally laid off, it entailed neither a loss of output for the economy as a whole nor a significant loss of income for themselves. Before being laid off, they were eking out a living in the informal sector; afterwards, they continued to do so. Therefore, the loss of employment as such did not have a significantly negative effect on poverty.

Reduced employment did, however, lead to rapidly rising productivity of labour – not only in construction and services, where output was recovering fast, but also in industry, where output stagnated. By the end of the decade, productivity in construction and services in fact exceeded the level of 1990. The rebound of the service sector was especially important as this sector was the single largest employer of labour in the mid-1990s. Productivity in industry also recovered and came within 90 per cent of the 1990 level. Rising productivity of labour in the growth phase was accompanied by significant rise in real wages. Industry, construction and all the branches of the service sector experienced three to four fold increases in real wages between 1995 and 2000. This was an important factor behind the reduction of poverty during the growth phase.

Between 1993 and 2000, the non-agricultural sector as a whole lost about 30 per cent of its labour force. The poor among the remaining 70 per cent clearly benefitted from rising wages. The distribution of wage income became slightly unequal during the growth phase, with Gini coefficient of wage income rising from 0.38 to 0.41. But given the fact that average wages increased three to four-fold during the same period, the rise in inequality was clearly not large enough to prevent a reduction in poverty among those who managed to retain their jobs.[13]

As for those who were lost from the non-agricultural sector, many did not actually suffer commensurate losses of real income because of the reason explained above, namely that they continued to find a living in the informal sector, as before. Of course, the informal sector kept on getting overcrowded, which may have put a downward pressure on income. This is clearly evident in agriculture, in particular.

During the growth phase, agriculture continued to gain labour in absolute terms, but at a much slower pace than during the contraction phase. While agricultural labour force nearly doubled between 1990 and

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[13] Taking the decade of the 1990s as a whole, wage inequality increased much more steeply, as Gini coefficient went up from 0.20 in 1989 to 0.41 in 2000. However, by far the major part of this increase occurred during the contraction phase. The Gini coefficient had already risen to 0.38 by 1995, the subsequent increase during the growth phase was only marginal. Thus the experience of Armenia can be characterised more as a case of 'disequalising contraction' than of 'disequalising growth'. Rising inequality cannot, therefore, be seen as a major factor behind keeping down the rate of poverty reduction during the growth phase.

1993, it grew by only 10 per cent between 1993 and 2000 (Table 4.2). But even this slow increment in labour force was too much for the already overcrowded agriculture to bear. In the absence of any addition of capital input or technological progress, overcrowding led to sharply diminishing returns to labour, which became especially severe in the growth phase. During the contraction phase, labour productivity had fallen by only 6 per cent despite a near doubling of labour force. But during the growth phase, a mere 10 per cent increase in labour force was accompanied by one-third reduction in productivity (Table 4.3). The absorptive capacity of agriculture had clearly reached its limits. This sector may have continued to play the role of the shock absorber and to provide a means of survival but it hardly provided a route out of poverty.

The only escape route out of poverty for those who lost employment in non-agriculture was emigration to other former Soviet republics, mainly Russia. Over the decade of the 1990s as a whole, Armenia lost nearly 12 per cent of its population, mostly due to emigration. This phenomenon helped reduce poverty in two ways. First, it reduced the pressure of excess supply of labour in the domestic economy and thereby allowed the workers who remained at home to earn higher wages compared to what they would have otherwise done. Secondly, the migrant workers sent remittances back home, which gave a significant boost to the income of the local population, especially the poor. Survey data show, for example, that for the poorest 40 per cent of urban households remittances from abroad accounted for 25 to 30 per cent of household income.

In summary, while poverty declined during the growth phase the way growth contributed to poverty reduction was not by providing new productive jobs for the poor but by improving the productivity of a much reduced labour force in non-agricultural sectors, aided by the process of emigration. In construction and services, productivity improved due to both growth of output and shedding of redundant labour, but in industry productivity gains came solely from shedding of labour. This process of poverty reduction – whereby labour productivity and real wages are improved by shedding redundant labour – is feasible during the phase of economic restructuring. But it can only be a short-term process. Once the restructuring is complete – i.e., output has recovered from the crisis of transition and all the redundant labour has been shed – further reduction in poverty can only come from a growth process that creates new opportunities for productive employment. In Armenia, these opportunities will have to come from newly emerging small and medium scale private enterprises, but this process has barely begun. There are in fact many impediments to this process, which will be discussed in Chapter 5.

4.2 Uzbekistan

During its recovery phase (1997–2001), Uzbekistan reduced poverty at a much faster rate than Armenia did in its growth phase – 9 per cent per annum as against 5.3 per cent per annum. And it did so despite having a much slower growth rate (2.7 per cent) than Armenia (7.9 per cent), with the result that the growth elasticity of poverty turned out to be as high as 3.33 in Uzbekistan as compared with only 0.67 for Armenia (Table 3.3). While there may exist reasonable doubts regarding the precision of poverty estimates for both countries, the orders of magnitude are simply too large to dismiss the implication that poverty was much more responsive to growth in Uzbekistan. Why was it so?

The answer may be found in the relationship of growth with employment and productivity of labour, which in turn is related closely to the pattern of structural changes underlying the growth process. The first point to note is that at the time the transition began Uzbekistan had a very different economic structure compared to Armenia. The most crucial difference lay in the relative importance of agriculture and industry. In 1990, industry accounted for 44 per cent of GDP and agriculture just 13 per cent in Armenia. By contrast, in Uzbekistan industry accounted for just 22 per cent of GDP and agriculture as much as 33 per cent (Table 4.4). Together with services, agriculture accounted for 67 per cent of GDP and 76 per cent of employment in Uzbekistan. What happened in these sectors, and especially in agriculture, had therefore a much greater impact on employment and productivity, and hence on poverty, in Uzbekistan than in Armenia. The collapse of industry was the driving phenomena in Armenia. By contrast, while industry suffered in Uzbekistan too, its relatively low share of output (22 per cent) and employment (15 per cent) ensured that the impact of its collapse was overshadowed by what happened in agriculture and services.

Table 4.4 Value-added Index by Sector: Uzbekistan

Year	Total	Agriculture	Industry	Construction	Services
1990	100.0	100.0	100.0	100.0	100.0
1995	81.1	79.1	71.3	63.3	94.9
1997	86.8	84.7	69.0	68.6	106.2
2001	102.1	106.4	73.8	65.1	127.9

Source: Compiled from the information provided in UNDP (2003b).

Table 4.5 Employment Index by Sector: Uzbekistan

Year	Total	Agriculture	Industry	Construction	Services
1990	100.0	100.0	100.0	100.0	100.0
1995	106.4	111.5	90.9	75.7	114.8
1997	109.4	113.2	92.7	76.5	120.1
2001	115.0	98.1	96.8	95.9	145.5

Source: Compiled from the information provided in UNDP (2003b).

Agriculture, the mainstay of Uzbek economy, had lost some 20 per cent of its output by the mid-1990s compared to its 1990 level, and service sector, the other important sector, had lost just 5 per cent (Table 4.5). This was a significantly milder contraction than, for example, what happened in Armenia where its own mainstay, industry, had lost two-thirds of its output by the mid-1990s. The main reason for this milder contraction was that agriculture was not as dependent on intra-Soviet transactions as industry was, so that the break-up of the Soviet Union did not have as disruptive an effect on a mainly agricultural economy like Uzbekistan as it had on a mainly industrial economy like Armenia. The Uzbek economy had the added advantage of having developed in the Soviet era a very large capacity for producing cotton, which could be readily exported to anywhere in the world. In addition, the Uzbek government had embarked upon a policy of complete import substitution in wheat with the aim of achieving self-sufficiency in wheat production as soon as possible. All this resulted in a relatively mild contraction in agriculture up to the mid-1990s, and as a spillover effect, a relatively mild contraction in services, and given the overwhelming importance of these two sectors in the economy, a relatively mild contraction of national output as a whole.[14]

In the growth phase, agriculture fully recovered and by the year 2001 the GDP of its sector was 6 per cent above the 1990 level. Services, the other major sector, had 27 per cent higher GDP in 2001 than in 1990. Even though industrial GDP was still 25 per cent below its 1990 level, and construction GDP was 35 per cent below, their relatively low weight in the economy meant that the poor performance of these sectors could not outweigh the progress in agriculture and services (Table 4.4). The two progressive sectors employed the vast majority of workers by the mid-1990 (some 81 per cent, divided almost equally between agriculture and services). This had a lot to do with the high responsiveness of poverty to growth, and hence quite rapid rate of poverty reduction, during the growth phase of Uzbekistan.

[14] This is what mainly accounts for the so-called 'Uzbek puzzle', referred to earlier.

Between 1997 and 2001, agricultural GDP grew by 25 per cent, and the productivity of labour grew even more as agricultural labour force declined in absolute terms. This created the conditions for the agricultural population, including the poor, to raise their income. The labour that agriculture lost went primarily to the service sector, where the level of productivity prevailing in the mid-1990s was higher than in agriculture (Table 4.6). That too must have helped to reduce poverty.

Table 4.6 Labour Productivity Index by Sector: Uzbekistan

Year	Total	Agriculture	Industry	Construction	Services
1990	100.0	100.0	100.0	100.0	100.0
1995	76.2	70.9	78.4	83.7	82.6
1997	79.3	74.8	74.5	89.7	88.5
2001	88.8	108.5	76.3	67.9	87.9

Source: Compiled from the information provided in UNDP (2003b).

Of course the growth of agriculture, and even the rise of agricultural productivity, does not necessarily mean that the poor farmers and farm workers would benefit from it. It is, therefore, important to look more closely at what was happening in agriculture, both before and after the recovery began, to understand how poverty came to be so responsive to growth.

Uzbek agricultural policy in the 1990s is characterised by three major elements. First, as in many developing countries in their early stages of development, agriculture was used as a source of surplus extraction for use in non-agricultural sector. This policy was implemented through administrative institutional arrangements of land-use and state procurement of the strategic crops of cotton and wheat at low official prices.

Second, the government took an early decision to move towards self-sufficiency in wheat production, as part of a strategy of 'economic independence'. In the Soviet era, Uzbekistan used to import wheat principally from Kazakhstan. But in the changed economic and political circumstances of the post-communist era, the country did not want to continue its dependence on the import of a basic food commodity, especially in a situation where external market ties were still weakly developed. At the same time that import substitution of wheat was forced on Uzbek agriculture and the farms were forced to sell wheat to the government at artificially low prices, the procured wheat was used to sell bread and flour to the population at heavily subsidized prices.

Third, some gradual and halting steps were taken to reform the institutional structure of Uzbek agriculture. The old-style state and collective farms were transformed into co-operatives, and sometimes into joint stock companies, but this change was largely cosmetic as the control of these farms remained almost entirely in the hands of the government. Towards the middle of the decade, some of the insolvent large-scale state and collective farms began to be broken up into medium and smallscale private farms, but this process was slow. The really important change was the emerging importance of very small-scale household plots. In response to popular demand, the government expanded access to household plots by redistributing some of the land under state and collective farms to the farm workers. By 1993 more than half a million new households had received plots and 1.6 million households had been able to augment the size of their plots. Not only did the number of households with usufructuary (and often heritable) rights to plots of land significantly expand, the average size of these plots also increased by over 50 per cent from 0.12 ha to 0.19 ha per family.

In order to see exactly how agricultural growth helped reduce poverty in the second half of the 1990s, the impact of each of these policies needs to be analysed – both in isolation and in terms of their independence with each other. The policy of surplus extraction helped to bolster public finances, which no doubt was a great help to the government in the aftermath of the loss of Soviet subsidy. But its impact on agricultural production was a different story altogether. The production of cotton drastically declined from 4.6 mil tons in 1991 to 3.3 ml tons by 2001. This happened because to the extent that the co-operatives could exercise some choice in the selection of crops they shifted acreage away from cotton, whose real prices had fallen by more than half by the middle of the decade. To the extent that they could not avoid planting the crop, low prices made them financially insolvent, and this happened despite the fact they received subsidised inputs because the fall in output prices far outweighed the gain from input subsidy. All this reduced the ability of large farms to invest, and as a result yield declined – from 2.7 ton per hectare in 1991 to 2.2 tons per hectare in 1996. The insolvency of large-scale farms caused by the compulsion to sell their crops at artificially low prices resulted in widespread laying off of farm workers and greatly reduced wages of the worker that remained. The immediate impact on poverty could only have been deleterious.

The production of the other strategic crop, wheat, of course increased sharply as the government forced the large-scale farms to allocate an increasing share of their land to its production. Several features of wheat

production are important in this context. First, the major thrust in production came in the contraction phase of the decade, as production increased from 0.6 ml tons in 1991 to 3.1 ml tons by 1997. During the latter phase, when poverty declined, the production of wheat increased only marginally – to 3.7 ml tons by 2001. Second, the acreage of wheat production increased mostly at the expense of fodder, to a lesser extent at the expense of cotton, and only to a small extent by reclaiming new land. Because of this substitution effect, the impact of wheat on overall agricultural production may have been rather limited. Third, small farms, including household plots, have only a small share (17%) of total wheat production. All this suggests that the direct contribution of wheat production to the reduction of poverty after 1997 is likely to have been minimal.

This leaves us with the third element of the three-pronged strategy mentioned above, namely, the expansion of land under household cultivation. During the contraction phase, the household plots provided a safety valve for the poor, as they found themselves laid off by the state farms and saw their wages plummet. During the expansion phase, the same household plots provided a means for some of them to escape from poverty.

The other two prongs of the agricultural strategy helped in this process in an indirect albeit unintended manner. First, some of the subsidised inputs provided by the government to the large farms for the production of cotton and wheat were used by farm workers in their household production. This helped them raise their productivity and profitability. Second, as wheat acreage expanded at the expense of fodder livestock farming collapsed, and as the large-scale specialised livestock farms became bankrupt the government decided to redistribute much of the livestock to the households. This enabled the households to engage in the production of meat and dairy products.[15]

The statistics on agricultural production show that the revival of agriculture after 1997 occurred precisely in those products in which the household sector was primarily engaged. As wheat and cotton were kept as the preserve of state and collective farms, households traditionally specialised in the production of high-valued horticultural products, such as fruits and vegetables. After the privatisation of livestock, they also increasingly went into the production of meat and dairy products. These were precisely the products whose output expanded rapidly after 1997 while cotton production declined and the expansion of wheat production slowed down. For instance, between 1997 and 2001 production of vegetables increased by

[15] There is some evidence that the privatisation and redistribution of livestock had some negative consequences, as data reveal that livestock farming under household plots is less efficient and more environmentally degrading than under specialised large-scale farmers. However, it did have the positive effect of helping poor households to boost their private incomes.

16 per cent, fruits by 45 per cent, meat by 6 per cent and milk by 8 per cent. The revival of agriculture after 1997 was thus primarily based on the increasing ability of the household sector to boost their production.

This is what provided the nexus between growth and poverty reduction in the second half of the 1990s. The nexus consisted not so much in increasing the size of employment as in improving the productivity of those who remained engaged in household production. Improved productivity in agriculture in turn enabled some of the workers to get absorbed in the service sector, which received a stimulus from rising incomes in agriculture and thus helped reduce poverty further. Industry, meanwhile, played very little role in poverty reduction firstly because of its relatively small size, which had become even smaller as a result of economic contraction, but primarily because of its increasing orientation towards import substitution in capital-intensive activities.[16]

4.3 Vietnam

The Vietnam economy has undergone significant structural changes since it began its transition in the mid-1980s. In the first phase of transition – namely, the phase of structural adjustment and stabilisation – the structural change consisted mainly of changes in the relative importance of agriculture and services, with the place of industry remaining virtually unchanged. The share of agriculture in GDP came down from 35 per cent in 1986 to 29 per cent in 1993, and the share of services increased from 38 per cent to 43 per cent, while the share of industry remained stable at around 27–28 per cent. In this period, both agriculture and industry saw their share of employment reduced, as services acted as the soaking sponge for a rising labour force. Industry in fact lost labour in absolute terms (by about 6 per cent), agriculture gained marginally (by 13 per cent), but services gained a whopping 45 per cent. Clearly, services were acting as the shock absorber during this phase of reconstruction and adjustment.

Industry played a much more dynamic role during the phase of rapid growth (1993–1998). Sectoral GDP increased by 80 per cent for industry, as compared with 48 per cent for services and 22 per cent for agriculture (Table 4.7). Since industry had already become as important as agriculture in terms of the share of GDP by the time the growth spurt started, the share of industry in incremental GDP also turned out to be very high. As much as 45 per cent of incremental GDP during 1993–1998 originated from industry as against 13 per cent from agriculture and 42 per cent from services (Table 4.8).

[16] A prominent example of this is a highly ambitious car manufacturing project.

Table 4.7 Value-added Index by Sector: Vietnam

Year	Total	Agriculture	Industry	Services
1993	100.0	100.0	100.0	100.0
1994	108.4	103.4	113.5	109.6
1995	119.2	108.4	128.8	120.3
1996	130.3	113.1	147.5	130.4
1997	141.0	118.0	166.1	140.3
1998	149.0	122.1	180.0	147.5

Source: Compiled from the information provided in Weeks et al. (2003).

Table 4.8 Incremental Output and Employment in Vietnam during 1993–1998

	Total	Agriculture	Industry	Services
Output	100.0	13.0	45.1	41.9
Employment	100.0	47.7	16.3	36.0

Source: Compiled from the information provided in Weeks et al. (2003).

However, in order to understand the sources of poverty reduction, it is important to note that despite contributing heavily to GDP industry made a disproportionately small contribution to employment generation. Over the period from 1993 to 1998, only 16 per cent of additional employment originated from industry, 36 per cent from services and a massive 48 per cent from agriculture (Table 4.8).

One implication of these divergent patterns of output growth and employment growth is that productivity in industry grew much faster in industry than in agriculture. In 1998, labour productivity in industry was as much as 54 per cent higher than its 1993 level. In agriculture it was just 13 per cent higher and in services 18 per cent higher (Table 4.9).

Table 4.9 Labour Productivity Index by Sector: Vietnam

Year	Total	Agriculture	Industry	Services
1993	100.0	100.0	100.0	100.0
1994	106.3	101.5	110.0	105.0
1995	114.0	104.7	122.2	110.4
1996	121.9	107.7	135.2	114.8
1997	129.1	110.8	147.2	117.7
1998	133.6	113.1	154.3	118.1

Source: Compiled from the information provided in Weeks et al. (2003).

Industry thus clearly led the way in terms of both output growth and productivity growth. However, since its share of total employment was a meagre 12 per cent, which was practically unchanged during the growth phase, its direct impact on aggregate poverty could not have been substantial. Those lucky enough to find employment in industry surely benefitted as rapid productivity growth also translated into rapid increase in wages. This must have helped many poor workers to get out of poverty. However, given the magnitude of overall poverty reduction and the rather paltry share of industry in total employment, it does not seem likely that this direct impact accounts for anything but a small part of poverty reduction during the rapid growth phase.

Industry could have had an indirect impact on poverty by inducing transfer of labour from other sectors and thereby by raising the level of wages in those sectors. However, the nature of industrial development was not very helpful in this regard. Except for garments industry, most other leading sectors were not labour-intensive. Certain selected industries, most of which were state-owned, capital-intensive and import-substituting, were promoted at the cost of the rest of the economy, through investments, subsidies, concessional taxes and high tariffs for their import-competing products. Small and medium scale private enterprises and export-oriented industries, that were often very labour-intensive, could not compete on this uneven playing field and were crowded out by SOEs or import-substituting industries.

The dominance of capital-intensive industries can be seen in the very limited impact of strong industrial output growth (13.4% per annum) on employment (4% per annum) between 1992 and 1997, implying an employment elasticity of under 0.30 for the industry sector (Belser 1999). In

sharp contrast, Republic of Korea, Singapore and Taiwan, China during the 1970s and 1980s, and Indonesia in the early 1990s were able to raise manufacturing employment annually with an elasticity close between 0.70 and 0.80 (Poverty Working Group 1999).

The inability of industry to pull labour away from other sectors in large numbers meant that if poverty had to be reduced in other sectors it could happen primarily through what was happening in the respective sectors. Evidence indeed suggests that overall decline in poverty has been associated with declining poverty rates within each sector, rather than from shifts in employment from low-wage sectors such as agriculture to high-wage ones. An empirical study by Bales *et al* (2001) has estimated that over 90 percent of the reduction in poverty occurred because earnings rose within each sector, with the largest gains (55–60 percent) of the poverty reduction being accounted for by improvement in income within the agricultural sector. Inter-sectoral employment shift accounts for only 6.0 to 8.8 percent of the reduction of poverty.

The preceding argument suggests that, as in the case of Uzbekistan, the key to poverty reduction in Vietnam lies in agriculture. Over the period between 1993 and 1998, productivity increased in agriculture by 13 per cent. This may not seem like a huge improvement, but its significance can be better gauged when note is taken of the fact that this improvement affected over 70 per cent of the workforce, and that it did so in a reasonably equitable manner.[17]

Vietnam's program of reforms known as *doi moi* began in the agricultural sector. Collectives were dismantled in 1988 and land was distributed amongst farming households. In 1993, a new Land Law clarified that peasants had the right to use the land distributed to them for 20 years and that this right could be renewed. Peasants could sell or mortgage the right to use their lands. The land distribution pattern that emerged following these reforms was highly egalitarian by international standards. As a result, any benefit that came from improvement of agricultural productivity was shared reasonably equally by a huge agricultural population, which was a powerful factor behind rapid poverty reduction in the1990s.

The improvement in productivity itself was ushered in by other components of the reform programme, including price liberalisation, exchange rate reform, export orientation of the economy, and so on. The combination of price liberalisation and export orientation created an enabling environment for the farmers not only to intensify the production of the traditional staple crop rice but also to diversify into higher-valued crops in response to market demand at home and abroad.

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[17] It was also a help that there was heavy concentration of households just below the poverty line, so that even a moderate rise of income around the poverty line was able to pull up a large number of people above the line.

The reforms opened the economy to the world, raised the relative prices of agricultural products relative to both agricultural inputs and other non-agricultural prices and improved efficiency. While fertiliser price increased only less than 1.2 times, producer crop price almost doubled, especially for non-rice crops over the period 1993–98 (Benjamin and Brandt 2001).[18] Since land reforms had ensured that most rural households net sellers rather than net buyers of agricultural products, these changes in output-input price ratio benefited most of them. Favourable agricultural terms of trade at the time Vietnam opened up the economy further reinforced the gains. Between 1992 and 1998, Vietnam's rice export price increased on average by 9.2 percent per year in nominal terms. It has been estimated that almost half of this increase was due to realignment of the exchange rate, a fifth due to increases in international rice prices and the remainder due to improved marketing efficiency and quality (Poverty Working Group 1999). Agricultural export earnings rose by 14.3 percent per annum over 1990–98, more than fourfold from USD 1 billion in 1990 to USD 4.3 billion in 2000.

All this led to large increases in net returns from the production of almost all crops. Whilst real revenues from rice cultivation increased by 21.2 percent over the period 1993–98, that from livestock and aquaculture rose by 52.3 percent, from other food crops by 55.0 percent, industrial crops by 65.6 percent, fruit trees by 112.3 percent, and perennial crops by 127.1 percent (Poverty Working Group 1999). Consequently, rural agricultural income grew by over 60 percent between 1993 and 1998. Thanks to equitable land distribution, this increase in average income translated into widespread poverty reduction.

In turn, higher household income generated in agriculture created increasing demands for goods and services in the non-farm sector, which were met by an emerging private sector, thereby boosting the growth of non-farm jobs. In addition, agro-processing businesses, which were established to serve large-scale agricultural production areas, raised value added, created additional jobs and raised the income of the rural poor. Production activities in traditional craft villages have also responded to the policy of encouraging private sector development. All these activities resulted in the growth of rural non-farm self-employment by 6.7 percent compared to the increase in rural income from this source of 30.5 percent. The resulting increase in productivity in the rural non-farm sector, stimulated by agricultural growth, must also have contributed to poverty reduction.

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[18] Between 1993 and 1998 the price of rice rose by 62 per cent, while the price of non-food items increased by just 23 per cent (Haughton 2001).

4.4 Indonesia

Indonesia followed very different strategies of growth before and after the mid-1980s. For over a decade since the early 1970s, Indonesia's growth relied heavily upon agriculture, followed by an emphasis on construction and import-substituting industries. Investments in all these sectors were financed by its new-found oil wealth. Over time as the oil boom dissipated and growth began to slow down in the early 1980s, Indonesia switched to the strategy of market liberalisation and outward-oriented industrialisation.

Although the strategies were different, or perhaps because of it, high growth rates were maintained in both periods, and the rate of poverty reduction was also equally high in both periods, giving a remarkably similar elasticity of poverty reduction for the two halves of Indonesia's growth phase. But the mechanisms through which growth helped reduce poverty in the two halves were different. This difference arose out of the difference in economic structure on the one hand and differences in the strategies of growth on the other. It was the ability to adapt its growth strategy to the changing economic structure that enabled Indonesia to maintain a high rate of growth as well as high responsiveness of poverty to growth throughout the period from the mid-1970s to the mid-1990s. The employment nexus played a crucial role in making poverty responsive to growth, but it did so in slightly different ways in the two halves of the period.

In the first phase, when manufacturing was highly import substituting and inward-oriented in character, its ability to absorb labour was limited. As a result, industrial expansion at that stage led to rapid increase in labour productivity and correspondingly rapid increases in real wages. Productivity of labour in the manufacturing sector increased at the rate of 9.4 per cent and real earnings increased at the rate of 6.2 per cent per annum during 1976–86 (Table 4.10).

Table 4.10 Growth of Productivity and Real Earnings per Worker in Indonesia

	Total	Agriculture	Industry	Trade	Services
Productivity					
1976–1986	3.5	2.3	9.4	2.7	0.5
1986–1997	5.5	3.3	6.2	2.4	2.9
Real Earnings					
1976–1986	5.7	4.6	6.2	2.8	3.1
1986–1997	4.3	4.8	4.8	6.4	4.2

Source: Compiled from the information provided in McKinley et al. (2003).

Such high rates of growth in productivity and real earnings have not been experienced by any other sector in either of the two phases of Indonesia's rapid growth. But the limited ability of manufacturing to absorb labour in the first phase meant that the benefit of high manufacturing wages remained confined to the workers in this sector. There was little scope of transmitting the effect of higher wages in this sector to the rest of the economy. In this respect, the experience of Indonesia was no different from most other developing countries that had come to grief by following the strategy of import substituting industrialisation.

What distinguished Indonesia from the rest was that, unlike most of them, Indonesia did not try to finance industrial growth by squeezing agriculture. Instead, it made heavy investment in agriculture, by way of improving rural infrastructure, upgrading the irrigation system, and augmenting the human capital of rural people through widespread provision of health and education services. Of course, the windfall of oil wealth was a great help in this regard, as it made it unnecessary to squeeze resources out of agriculture in order to finance industry. But then many other developing countries had also enjoyed the oil bonanza and squandered it. By contrast, Indonesia made good uses of its oil wealth, by not ignoring agriculture while financing construction and industry.

By promoting labour-intensive green revolution technology in agriculture, Indonesia succeeded in raising enormously the demand for rural labour. Further boost to the demand for labour came from the construction boom that was initiated in the process of creating rural infrastructure.

Higher demand for labour did not, however, translate immediately into higher wages. In the mid-1970s, agricultural wages hardly improved at all, the reason being the existence of large-scale underemployment. It was only after underemployment was substantially reduced that wages began to rise in the latter part of the first phase. During 1976–78 real earnings of workers actually declined at the rate of 1 per cent annum, while it increased at the rate of 6 per cent per annum during the 1978–86 period (Table 4.11).

Table 4.11 Growth of Real Earnings per Worker in Different Periods in Indonesia

	1976–78	1978–82	1982–86	1986–89	1989–97
Total	0.7	9.1	4.8	-1.7	6.6
Agriculture	-1.0	7.9	4.0	0.0	6.6
Manufacturing	8.5	6.8	4.4	-3.1	7.7
Trade	-4.8	7.1	2.3	-0.9	5.6
Services	4.5	5.6	0.0	-0.4	5.9

Source: Compiled from the information provided in McKinley et al. (2003).

Two aspects of the employment nexus in this period are worth noting. First, higher demand for rural labour was generated largely independently of the pull effect from industry, through measures undertaken in the rural sector itself. Second, higher demand for labour translated itself first into higher quantity of employment – in the form of reduced underemployment, and afterwards into higher quality of employment – in the form of higher earnings per unit of labour. But regardless of the origin of demand and of its manifestation in the form of either quantity or quality of employment, the fact remains that higher demand for labour was the key to the massive reduction of poverty during the period before 1986.

The experience of the first phase of Indonesia's growth phase can thus be summarised as follows. The strategy of industrialisation would have helped some manufacturing workers to escape poverty with the help of higher wages. However, this did not induce any significant reduction of poverty outside the urban areas because of slow absorption of labour into manufacturing. Nevertheless, productivity did increase in rural areas, primarily because of heavy investments made into physical and human capital in rural areas and the dissemination of labour-intensive agricultural technology. Higher productivity led to higher demand for labour, which first raised the quantity of labour by reducing underemployment and then raised the quality of labour by raising wages. Either way, poverty declined in rural areas. Thus urban and rural poverty both declined, albeit through largely independent processes, and the overall economy witnessed a massive reduction of poverty.

The structure of the economy changed in an important way after the mid-1980, as Indonesia embarked upon market liberalisation and outward orientated industrialisation. Both output and employment in the manufacturing sector began to grow at an accelerated rate. The share of manufacturing in total GDP shot up from 16 per cent in 1985 to 25 per cent by 1996. Equally significantly, the elasticity of employment in the manufacturing sector jumped from a meagre 0.3 in the 1970s to as much as 0.7–0.8 (Islam 2001). This suggests that manufacturing was finally beginning to play the role of the locomotive of the economy, paving the way for transferring surplus labour from agriculture and thereby helping the emergence of an integrated economy.

The transfer of labour out of agriculture assumed such a proportion that after around 1992 the agricultural sector began to experience an absolute decline in its labour force. As a result, productivity and wages of labour began to go up in the agricultural sector even though the original thrust of the Green Revolution technology had begun to run out of steam. It is instructive to note that both productivity and real wages increased at a

more rapid rate during this period than in the first phase (1976–86) when agriculture had enjoyed the benefits of massive investment and technological advancement. Thus productivity increased at the rate of 3.3 per cent per annum during 1986–97 as compared with 2.3 per cent during 1976–86 (Table 4.10),and real wages increased at the rate of 4.8 per cent during 1986–97 as compared with 4.6 per cent during 1976–86 (Table 4.11).

Greater labour intensity of a rapidly a growing manufacturing sector, promoted by market liberalisation and outward orientation, thus played a central role in bringing about all-round reduction of poverty in Indonesia. It has been noted, though, that labour intensity did begin to decline in the mid-1990s; according to some estimates the elasticity of manufacturing employment had dropped to 0.3 during 1993–96 (Islam and Nazara 2000a). This has led some observers to wonder whether the Indonesian manufacturing had lost its potential to lead poverty reduction in the economy as a whole even before the financial crisis struck in 1997.

The evidence on recent decline in manufacturing elasticity needs to be interpreted with extreme care, however. It is important to note that just as there were two subperiods of the first phase, the second phase too consisted of two subperiods – the second half of the 1980s and the first half of the 1990s – that differed in significant ways. Although manufacturing output and productivity responded almost immediately to the strategy of outward-oriented industrialisation launched in the mid-1980s, wages in fact did not rise in the second half of the 1980s – in either manufacturing or in agriculture. It is only with a lag, during the first half of the 1990s that wages began to rise – at the rate of 8 per cent in manufacturing and 7 per cent in agriculture (Table 4.11)

This suggests that the Lewisian process of transition (see p. 108) was operating in Indonesia. In the first subperiod, i. e. in the second half of the 1980s, surplus labour in agriculture was being drawn into manufacturing. As long as this process was continuing, wages failed to rise either in manufacturing or in agriculture. However, surplus labour became exhausted by the early 1990s, which is confirmed by the evidence that agricultural labour force began to decline in absolute terms around that time. In other words, the Lewisian transition had begun – the supply curve of labour finally turned upward sloping. It was only with the onset of this transition that real wages could begin to rise – in both manufacturing and agriculture. And so it did.

But the implication of a rising supply curve is that with any given shift in the demand curve for labour less labour will be employed in manufacturing than in the situation of a horizontal supply curve that would exist in the presence of surplus labour. To put the contrast differently, any given up-

ward shift in the demand curve for labour will translate itself almost wholly into greater employment in a situation of surplus labour, but will translate partly into higher wages and partly into higher employment when surplus labour is exhausted. As a result, employment elasticity will be found to be higher in the former case and lower in the latter, even though demand for labour has increased by the same magnitude in the two cases.

Evidence suggests that this is what has happened in Indonesia. The second half of the 1980s (stretching into early 1990s) saw little rise in wages and a high elasticity of employment, while the mid-1990s saw rapidly rising wages and reduced elasticity. It is arguable, however, that reduced elasticity is not a sign of weakening demand for labour but of exhaustion of surplus labour.

One piece of evidence in favour of this argument is the decline in absolute size of the agricultural labour force mentioned earlier, which suggests that the key to reduced elasticity lay in the supply side rather than in the demand side of the labour market. Another kind of evidence is found by looking at elasticities at disaggregated levels of manufacturing activities – elasticities seem to have declined across the board for almost all categories of industries (Islam and Nazara 2000a). If demand for labour had weakened, say, as a result of some massive shift towards capital-intensive activities, one would not have expected such across the board reduction. In fact, elasticities at disaggregated levels may well have remained unchanged and yet aggregate elasticity would have gone down as the weight of capital-intensive activities increased.

One way in which across the board decline in elasticity can be consistent with weakening of demand is if demand for labour falls as a result of labour market distortions such as a binding minimum wage that applies across the manufacturing sector. In fact, Indonesia did enact a minimum wage legislation in the 1990s, and it is at least conceivable that this is what explains reduced elasticity of employment in the mid-1990s. But careful analyses show that the minimum wage legislation had very little effect on the Indonesian labour market for reasons of slackness in implementation, low level of minimum wages, and the failure of minimum wages to keep up with average market wages.[19]

The upshot of these counter-arguments is that reduced elasticity of employment in the mid-1990s does indeed reflect exhaustion of surplus labour rather than a weakening of the demand for labour. The implication of this inference for poverty is that there is no reason to believe that the employment nexus between growth and poverty had weakened in the

[19] See Islam and Nazara (2000b) for arguments along these lines. See, however, SMERU (2001) for an opposite view.

mid-1990s, only the character of the nexus had changed. In the early days of economic reforms adopted from the mid-1980s onwards, the nexus consisted almost solely of expansion in the quantity of employment, with little rise in wages, as surplus labour was being sucked into rapidly expanding labour-intensive manufacturing. By the mid-1990s, as the surplus labour got exhausted, the nexus consisted partly of expansion of quantity of employment and partly of rise in real wages. Either way, poverty got reduced. That is why, the pace of poverty reduction did not slacken in Indonesia, until the financial crisis struck.

In summary, Indonesia maintained a high rate of poverty reduction for more than two decades since the early 1980s by adapting its growth strategy to the changing structure of the economy. In the early stage of development the strategy of import-substituting industrialisation was complemented by a major thrust in agriculture and rural development in general. The strategy paid rich dividends in terms of both growth and poverty reduction. In particular, it resulted in an all-round increase in the demand for labour leading to a rapid rate of poverty reduction in all sectors of the economy, even though the strategy of industrialisation by itself was not capable of reducing poverty much beyond the urban sector. Poverty came down initially through reduction in unemployment and subsequently through increase in real wages.

As the strategy of heavy investment on several fronts became unviable with the dissipation of oil wealth, special emphasis was given to the strategy of outward oriented industrialisation. This strategy ushered in the process of Lewisian transition, drawing in surplus labour from agriculture in increasing numbers. So long as surplus labour existed, poverty reduction occurred primarily through growing employment in manufacturing where wages were higher than in agriculture. When the surplus labour got exhausted, in the early 1990s, poverty reduction occurred primarily through higher wages.

4.5 Bangladesh

It has been noted in Chapter 3 that faster growth in Bangladesh in the 1990s was associated with faster rate of poverty reduction compared to the 1980s. There are reasons to believe that this was more than a mere association. Since overall income inequality increased during this period – in both rural and urban areas – faster growth must have played a causal role in reducing poverty. In order to identify the precise nature of this causal relationship, it is necessary to look more closely at the growth process and the nature of the growth-poverty nexus it engendered.

An analysis of the proximate source of growth shows that all three broad economic sectors – namely, agriculture, industry and services – contributed to the growth acceleration of the 1990s. The growth of agricultural GDP accelerated from 2.5 per cent in the 1980s to 3.2 per cent in the 1990s; industrial GDP accelerated from 5.8 to 7.0 per cent, and the service sector GDP from 3.7 to 4.5 per cent.

At a further level of disaggregation, the two fastest growing sub-sectors are found to be fisheries (which experienced a very sharp growth acceleration from 2.4 per cent in the 1980s to 8.2 per cent in the 1990s) and manufacturing (which experienced a moderate acceleration from 5.8 per cent to 7.0 per cent). It is no coincidence that fisheries – especially, frozen shrimp – and manufactured goods – especially, readymade garments and knitwear – also happened to be the fastest growing export items in the 1990s. The export of readymade garments and knitwear grew especially fast, their share in total export earnings increasing from some 40 per cent at the close of the 1980s to nearly 75 per cent at the close of the 1990s.

It would thus appear that the outward-looking macroeconomic policy pursued by Bangladesh in the recent past did succeed in stimulating some parts of the economy – so much so that they turned out to be the most rapidly growing activities in the 1990s. But it does not necessarily follow that the superior growth performance of the Bangladesh economy in the last decade can be explained primarily by these activities. For identifying the major sources of growth acceleration, it is not enough to look at the sectoral rates of growth. The weights of the sectors also matter and the fact is that the combined weight of the most rapidly growing activities in the overall economy is still rather small.

One plausible way of identifying the sources of growth acceleration is to identify the sectors that made the largest absolute contributions to the incremental growth in national GDP in the 1990s. For this purpose, we first need to estimate the absolute growth in sectoral GDPs over the 1980s and then repeat the exercise for the 1990s. The difference between the two – i.e. the absolute size of the *incremental* growth in sectoral GDPs over the two decades – would indicate which sectors contributed most to the superior growth performance of the 1990s.

As can be seen from Table 4.12, industry and services contributed almost equally to the incremental growth in the 1990s, each with a share of about 41 per cent, with agriculture making a lowly contribution of just 17 per cent. Within the broad group of industry, the manufacturing sub-sector contributed 28 per cent, out of which some 20 per cent came from large and medium industries, and the rest from small-scale industries. In agriculture, fisheries made an overwhelmingly large contribution,

accounting for 15 out of the 17 per cent contribution that came from all of agriculture.

Table 4.12 Sectoral Contribution to Growth Acceleration in Bangladesh between 1980s and 1990s
(In 1995/96 prices)

Sector	GDP growth over the 1980s (billion taka)	GDP growth over the 1990s (billion taka)	Incremental GDP growth from 80s to 90s (billion taka)	Sector share in incremental GDP growth (%)
Agriculture	**65.36**	**113.67**	**48.31**	**16.86**
Crop production	40.51	38.42	-1.73	-0.60
Fisheries	11.36	54.57	43.21	15.08
Others	13.49	20.68	7.19	2.51
Industry	**102.36**	**222.33**	**119.97**	**41.86**
Manufacturing	56.22	135.73	79.51	27.75
Large & medium	39.66	97.72	58.12	20.28
Small-scale	16.58	37.99	21.41	7.47
Construction	29.26	68.68	39.42	13.76
Others	16.88	17.92	1.04	0.36
Services	**174.05**	**292.33**	**118.28**	**41.28**
Total GDP	**341.77**	**628.33**	**286.56**	**100.00**

Notes:
(1)1980s refer to the nine-year period from the triennium 1979/80–1981/82 to the triennium 1988/89–1990/91; 1990s refer to the nine-year period from the triennium 1988/89–1990/91 to the triennium 1997/98–1999/00.
(2)GDP growth refers to the difference in the average annual GDP of the two terminal triennia of a period.
(3)Acceleration in GDP growth refers to the difference in the GDP growth of the two periods – 1980s and 1990s.

Source: Osmani et al. (2003).

On the whole, at least two-thirds to three-quarters of the incremental growth in the 1990s originated from the non-tradable sectors – mainly, services, construction and small-scale industry.[20] The increasing domi-

[20] Non-tradables refer to those goods and services that are not worth either exporting or importing because it is not profitable to do so – what is produced at home must be consumed at home and vice versa. By contrast, tradables are those goods and services that can be either exported or imported with profit.

nance of non-tradables in general and services in particular is also confirmed by the evidence on changing composition of labour force. During the 1990s, agriculture lost a bit of its share of labour force, and manufacturing lost considerably – from 17 per cent in 1990/91 it came down to just 10 per cent in 1999/00. By contrast, services increased its share from 30 per cent to 37 per cent during the same period and construction raised its share from 1.5 to 2.7 per cent. There was thus a clear shift of labour force towards the non-tradable sectors, which is consistent with the pattern of growth in production discussed above.

Further analysis shows that acceleration of the non-tradable sector cannot be explained by autonomous productivity improvement within the sector. A more likely explanation lies in a more robust demand stimulus originating from outside the sector, especially in view of the existence of widespread underemployment in this sector, which ought to make it particularly responsive to demand stimulus.

Evidence suggests that the demand stimulus came from three major sources – a quantum jump in crop production that occurred in the late 1980s, rapid growth in the flow of income generated by the readymade garments industry, and accelerated flow of workers' remittance from abroad. In relative terms, crop production played by far the major role; even the combined stimulus from the other two sources was less than the stimulus that came from crop production alone (Table 4.13). As the decade progressed, readymade garments and remittance began to assume greater importance. But even towards the end of the decade crop production remained the single most important source of enhanced demand.

It was noted earlier that non-tradable activities, especially those outside agriculture, played the leading role in bringing about accelerated growth in the 1990s. Therefore, the search for the growth-poverty nexus calls for a deeper analysis of the nature of growth in these activities, especially at the rural non-farm (RNF) sector in recognition of the fact that most of the poor live in rural areas.

A sizeable proportion of rural labour force has shifted from farming to non-farm activities in the last two decades. In 1983/84, some 34 per cent of the rural labour force were engaged in non-farm activities (such as petty trading, transport services and small industries) as their principal occupation; by the year 2000 this figure stood at 39 per cent. The growth process of the 1990s was characterised by a structural change in this sector that was especially favourable for poverty reduction. The nature of structural change is inferred by piecing together a number of different kinds of evidence for the 1980s and the 1990s, as there are no systematic surveys of this sector to throw a clear light on how its structure might have changed over time.

Table 4.13 Sources of Demand Stimulus to Growth Acceleration in Bangladesh in the 1990s
(Figures are in billion taka at constant 1995/96 prices)

Year	Crop Production		Readymade Garments		Foreign Remittance	
	Value-added	Excess over 86/87-88/89	Value-added	Excess over 86/87-88/89	Value	Excess over 86/87-88/89
1986/87-1988/89	215.49	–	9.37	–	36.10	–
1989/90	241.18	25.69	–	–	33.76	-2.34
1990/91	243.21	27.72	–	–	32.68	-3.42
1991/92	245.91	30.42	8.46	-0.91	37.66	1.57
1992/93	248.29	32.80	13.07	3.69	43.04.	6.94
1993/94	244.17	28.68	20.39	11.01	48.74	12.64
1994/95	235.82	20.33	–	–	50.20	14.10
1995/96	239.93	24.44	43.43	34.06	49.70	13.60
1996/97	255.37	39.88	–	–	61.10	25.00
1997/98	258.06	42.57	35.26	25.89	63.87	27.78
Average annual stimulus in the 1990s	**---**	**30.28**	**---**	**14.75**	**---**	**10.65**

Source: Osmani et al. (2003)

For the 1980s, evidence suggests that the increment in landless agricultural households were absorbed almost entirely in the RNF sector. The following pieces of evidence are worth noting. First, according to the 1990/91 LFS data, self-employed workers, including unpaid family helpers accounted for about two-thirds of rural male non-farm workers. This proportion remained unchanged, or may even have increased, since the early 1980s.[21] In a dynamic setting, one would expect this proportion to fall over time as the average scale of activity becomes larger and as the

[21] According to the LFS data, this proportion is estimated to be about 55 per cent for 1983/84 compared to 66 per cent for 1990/91. However, the estimate for 1984/85 is almost similar to that for 1990/91.

importance of semi-urban-type employment increases within the broadly defined 'rural' areas. The fact that the reverse has happened suggests that the shift of labour force from agriculture to the RNF sector took place disproportionately at the lower end of the productivity scale where self-employment predominates.

Second, the proportion of landless households among all rural households increased in the 1980s – from 34 to 41 per cent according to Population Censuses. However, there is no evidence of an increase in the proportion of the landless among agricultural households. This suggests that the increment in landless households were absorbed almost entirely in the RNF sector. In fact, the size of this increment is large enough to account for the entire shift of labour force that occurred during this period. It would thus appear that the shift of labour out of agriculture can be entirely accounted for by increasing landlessness, and not by increasing number of land-owning households diversifying their sources of income towards non-farm activities. One may conclude, therefore, that this shift has taken place at the lower end of the income scale, since land ownership and income are strongly correlated.

Third, for the period of the 1980s, the Household Expenditure Surveys (HES) data do not show much increase in per capita rural income, but the annual growth in agricultural real incomes according to the national income estimates appear to have slightly exceeded that of rural population. This implies that the growth rate of income in the RNF sector could not have been higher than that of rural population. This would give a scenario of declining overall labour productivity in the RNF sector, given the shift of rural labour force from agriculture to the RNF sector. This pattern would be consistent with a proliferation of low-productivity activities within the RNF sector and possibly some overcrowding in these activities.[22]

The picture changes quite significantly in the 1990s. Labour Force Surveys show that after being more or less static in the 1980s, the proportion of self-employed workers in the RNF sector declined in the 1990s – from 66 per cent in 1990/91 to 59 per cent in 1995/96. This implies a rise in the proportion of wage-labour based enterprises. Such enterprises are likely to be somewhat larger in scale and more productive than the enterprises involving mainly self-employed workers that predominated in the 1980s.

Independent evidence from Household Income and Expenditure Surveys does suggest increasing dominance of larger and more productive non-farm enterprises. First, the distribution of non-farm income became noticeably more unequally distributed in the 1990s. Among all the com-

[22] There is also some direct evidence of overcrowding and declining productivity in some specific areas such as handloom and other cottage industries (Mahmud 2001).

ponents of rural income, non-farm enterprise income experienced the sharpest increase in inequality – the concentration ratio increased from a lowly 0.22 to a surprisingly high 0.48. The concentration ratio of income from salaried employment in this sector also increased – from 0.45 to 0.55. These findings suggest that during the 1990s the growth of the RNF sector tilted to some extent away from low-productivity self-employment towards relatively larger-scale enterprises that generated larger profits for better-off entrepreneurs and allowed greater differentiation between skilled and unskilled workers.

Second, Household Income and Expenditure Surveys show there was a sharp increase in the share of non-farm income out of total rural household income in the 1990s – from 26 per cent in 1991/92 to 41 per cent in 1999/00. But this was also a period when, according to the Labour Force Surveys, there was a slowdown in the shift of agricultural labour to the RNF sector. This would mean that not only did the RNF sector grow more rapidly in terms of value-added compared to the 1980s, there was also an increase in average labour productivity in the RNF sector. Since average labour productivity is positively correlated with the scale of the enterprise, this finding indicates a tilt towards relatively larger-scale enterprises in the 1990s.

Based on these sets of evidence, the transformation that has occurred between the two decades can be summarised as follows. The 1980s were characterised by a rapid shift of labour force into the RNF sector, the predominant nature of the shift being absorption into self-employment at the lower end of the productivity scale. By contrast, the 1990s have witnessed a less rapid shift of labour force into the RNF sector, but one that has been characterised by faster growth of relatively larger-scale enterprises that are more productive and employ more wage labour. The poor rural workers have thus found an increasing opportunity to secure wage employment in the RNF sector instead of overcrowding into petty small-employed activities.

This transformation in the dynamics of rural labour force has important implications for the dynamics of poverty in rural Bangladesh. Analysis of the 2000 HES shows that salaried employment in RNF is much more rewarding for the poor than any other mode of employment. For example, the extreme poor working in the rural non-farm sector earned on average *taka* 56 per day from salaried employment as compared with *taka* 38 from self-employed activities (Table 4.14). Thus the relative expansion of larger non-farm enterprises allowing for greater absorption of labour into salaried employment may have played a key role in bringing poverty down in the 1990s.

Table 4.14 Returns to Labour by Mode and Sector of Employment and by Poverty Status in Rural Areas of Bangladesh: 1999/00
(Taka per day per worker)

Poverty Status	Farm		Non-Farm		
	Self-employment	Casual wage labour	Casual wage labour	Self-employment	Salaried wage labour
Extreme Poor	16.43	30.15	40.53	38.47	56.10
Moderate Poor	25.76	35.93	49.93	65.60	71.38
Moderate Non-Poor	36.07	35.70	57.16	85.75	85.85
Rich Non-Poor	47.73	37.39	72.42	239.58	125.30
All Poor	22.75	33.33	45.70	57.22	63.75
All Non-Poor	40.51	36.71	61.10	157.68	107.28
All Households	**33.15**	**33.85**	**51.98**	**116.08**	**96.29**

Source: Osmani et al. (2003).

The nature of the growth-poverty nexus that operated in the 1990s can now be summarised as follows. Boosted by enhanced demand – emanating initially from the crop sector and increasingly also from the readymade garments and workers' remittances – the non-tradable non-farm sector experienced accelerated growth in the 1990s. Faster growth enabled the non-farm enterprises to increase their scale of operation, thus tilting the structure of RNF sector more towards the relatively larger enterprises. This structural change in turn brought about a change in the nature of labour absorption in this sector, as salaried wage employment became more plentiful with the emergence of larger enterprises. Whereas in the 1980s most of the surplus labour that got absorbed in the non-farm sector found their way into low-productivity self-employment, in the 1990s the absorption occurred more into salaried employment in the relatively larger and more productive enterprises. Since salaried employment in larger scale enterprises was far more rewarding for the poor than the shift into self-employment that occurred in the 1980s, the structural change engendered by the growth process of the 1990s was especially conducive to poverty reduction.

The Integrability Factor: Impediments Faced by the Poor

CHAPTER 5

The distinguishing characteristic of a growth process that is conducive to poverty reduction is that it opens up opportunities for the poor to improve the quantity and quality of their employment. But the opening up of opportunities does not by itself ensure that the poor will be able to seize them. The poor typically face a range of impediments that often prevent them from integrating into the growth process by taking advantage of those opportunities – the so-called integrability problem. This chapter examines some of the major elements of the integrability factor as it has operated in the countries under consideration.

5.1 Armenia

Agriculture has played a crucial role as a safety net in Armenia. Without it, poverty would have been a lot deeper and more widespread in the wake of economic collapse. Government helped matters in this regard by providing the poor with access to privatised land. It is this access to land that has enabled many laid-off urban workers to integrate themselves in subsistence agriculture, and thereby avoid poverty of the extreme form.

Most probably, agriculture will have to continue to play this role for some time to come yet. But for it to play this role better, more attention will have to be paid to the plight of the landless and the land-poor. Evidence shows that farm households with access to relatively large holdings are much less likely to be poor, and households whose labour is underemployed on relatively small plots are much more likely to be poor. The relationship between land size and the risk of poverty is strongest for the smallest plots and is particularly acute for the landless. This suggests that a relatively small increase in access for small holders and the landless would have the biggest impact on poverty (UNDP 2003a, Chapter 5).

The quality of land also matters a great deal. The results from the recent Farm Household Survey show that not only the productivity, but also the profitability of all crops surveyed increases with access to irrigation. The increased profitability translated into higher consumption levels for farm households, suggesting that improving access to irrigation would also prove effective in rural poverty alleviation. Access to productive and irrigated land will, therefore, be an important instrument for enhancing the integrability of the poor into the growth process.

For the majority of the poor, however, the escape route from poverty will lie in greater integration in the non-farm sector. Poverty has remained widespread in Armenia because of massive industrial decline on the one hand and the inability of agriculture to offload surplus labour in sufficient numbers. For poverty to be reduced faster, it is essential that the people who took refuge in agriculture for survival must find a way back into productive employment into non-agricultural sector. However, given the historically bloated employment pattern of large-scale non-agricultural enterprises in the state sector, most workers shed by agriculture are unlikely to find their way back to where they came from, even if the economy pick ups faster in future.

The only viable option for such labourers is to find their way into the newly emerging small-scale private sector activities. Many of these firms are likely to be more labour-intensive than the large traditional enterprises. Some are also likely to exploit Armenia's comparative advantage in some skill-intensive sectors, such as computers and jewellery. This sector will have to play a much bigger role in poverty reduction than it has done so far. Market forces, both domestically and globally, should be allowed to determine the mix of industries. Since it is difficult for government to "pick winners" in particular economic sectors, it should try to create a supportive environment in which the self-employed and small entrepreneurs can take advantage of whatever opportunities exist in Armenia's growing economy. Instead of restrictions against the creation and growth of informal-sector micro-enterprises, there should be positive incentives to attract entrepreneurs to the formal sector.

However, creating an enabling environment alone will not suffice in the context of Armenia, where lack of tradition in self-enterprise creates a serious integrability problem for the poor. In order to equip the poor people to play the entrepreneurial role, special training programmes in business skills for small entrepreneurs will be necessary. In addition, government will have to re-organize the banking sector so that more credit is allocated to the small-scale private sector.

The government of Armenia already has tried to ensure that the pop-

ulation has equitable access to productive assets. This has taken the form of privatization of land in rural areas and privatization of housing, which has benefited mainly the urban population. But the privatization of state owned enterprises has been less successful. What is needed now is a spontaneous process of "privatization from below", nurturing the emergence of a vibrant small-scale private sector, which is better able than the large traditional enterprises to adapt to the rapidly changing economic conditions that Armenia faces. This will initiate a more "bottom-up growth," which is likely to be more intensive in the employment of poorer workers. Government can contribute to such a process by ensuring that the working poor and the unemployed have the necessary skills and access to credit, resources and infrastructure that they need to become integrated into higher productivity and rapidly growing sectors.

5.2 Uzbekistan

The regional profile of poverty in Uzbekistan shows that in some of the regions, particularly those with dry land or degraded environment, it is very difficult to sustain a livelihood. It would require a great deal of public investment to induce significant growth of the local economy. A more efficient strategy would probably be to undertake programmes to facilitate migration to other regions where jobs are available. Poverty reduction strategies often overlook the fact that labour mobility is often an important factor in reducing poverty. Facilitating labour mobility, such as granting at least temporary residence permits, could play an important role in helping poorer workers secure decent jobs. But such mobility is currently prevented by laws that impose restrictions on residence. The workers who come from rural areas to seek work in the cities of Uzbekistan often have to resort to low-paid casual work because they cannot legally reside in the cities.

Even if they could secure permits to reside in cities or in regions with economic opportunities, they would still have problems moving because of the lack of an effective housing market. The citizens of Uzbekistan benefited greatly when housing was privatised early in the transition but many families would have to sell their housing at a low price if they wanted to move to obtain jobs in more prosperous regions of the country. Removing restrictions on residence and improving the housing market would, therefore, constitute an important element of any effort to improve the integrability of the poor in the growth process.

As in Armenia, lack of appropriate skills and other means to undertake small-scale entrepreneurial activity is an important aspect of the integrability problem facing the poor of Uzbekistan. Household-level data

show that the poor have lower levels of skills compared to the non-poor. It is possible that people who have climbed out of poverty by now are mostly those who already had the skills but had nevertheless fallen into poverty due to the disruptions caused by transition. As growth picked up, these people quickly moved out of poverty. This may explain why the reduction of poverty has been so rapid in Uzbekistan during its recovery phase. But in future poverty reduction would slow down if the problem of relative lack of skills among the remaining poor is not addressed.

There is also a regional dimension to the skill problem. The poorer regions had faster employment growth but not faster reduction of poverty. This shows that wage increase rather than employment expansion has been the route to poverty reduction. But the benefit of wage increase went mainly to those who had the necessary skill to outcompete others in a labour market, which was severely constrained on the demand side. The poorer regions lagged behind because their inhabitants had lower levels of skill. Therefore, if the skill problem of the remaining poor is not addressed soon, not only would the pace of poverty reduction will slow down, regional disparities will also grow, creating social and political tensions.

The skill problem also has implications for the scope of escaping poverty through the route of small-scale enterprise. In most economies, small and medium enterprises tend to be more labour-intensive than large enterprises. This is also the case in Uzbekistan, where large enterprises have become more concentrated in capital-intensive sectors as part of a strategy of import-substitution industrialization. During the early stage of the transition, from 1991 to 1995, small and medium enterprises (SMEs) began to grow dramatically, primarily because of the privatisation of enterprises in trade and services. The majority of SMEs at this time specialized in trade. While the state did not take appropriate measures to promote SME development, the number of SMEs still more than quadrupled and their total employment doubled during this period.

In recent years, small and medium enterprises have played an increasingly important role in creating employment. Beginning in 2000, the Government of Uzbekistan began to provide more systematic support to SMEs. It simplified and speeded up the procedure for their registration, improved their access to raw materials and marketing channels, facilitated their access to credit (especially to foreign sources of financing, such as micro-credit), eased licensing and inspection procedures, introduced a simplified tax system (based on a unified rate of 10 per cent on income) and opened up opportunities for SME exporting. From 1999 to 2001, SMEs have increased in number and enlarged their share of both GDP and employment. While their share of GDP grew from about 29 per cent

to almost 34 per cent between 1999 and 2001, their share of employment jumped from 39 per cent to 53 per cent (UNDP 2003b, Chapter 6).

In 2001 alone, SMEs created 372,000 new jobs, 80 per cent of the total in the economy. The majority of these, however, were in rural areas and included household farms and small-scale private farms, where production levels are still low. Rural non-farm SMEs are still not well developed. But it is in these enterprises that the rural poor will have to be absorbed in future. The problem of skill in running non-farm enterprises operates as a serious obstacle in this regard. This problem will have to be addressed seriously if the poor are to integrate fruitfully into the growth process based on a thriving small-scale private enterprise sector.

5.3 Vietnam

Improvement of agricultural productivity and terms of trade, aided by export orientation of trade policy, has played the most crucial role in bringing about a very impressive reduction of poverty in Vietnam in the last decade. One problem, however, with such trade-induced agriculture-propelled growth is that remote areas with unfavourable conditions are left out of the growth process. This has proved the single most important integrability problem in Vietnam. This is not a reason for abandoning the growth process that Vietnam has followed, but reason for being alert to future needs.

While poverty has declined in all seven regions of Vietnam, it has done so at very different rates. The fasted reduction took place in the Red River Delta, where the incidence of poverty fell by 34 percentage points (from 63 per cent to 29 per cent) during 1993–98. By contrast, it decreased by only 10 percentage points in the Mekong Delta (from 47 per cent to 37 per cent). The proportion of the population living under the poverty line now varies from 8 percent in the South-East to 59 per cent in the Northern Uplands.

The persistence of the high levels of poverty and its severity in the Northern Uplands and Central Highlands reflects the many constraints these regions face in participating in the growth process. These include the difficult terrain, which limits agricultural development and hinders access to infrastructure, and the low level of human capital. When the economic reforms began to take effect, poorer regions, usually the mountainous and remote ones, generally gained less from growth than richer regions. This pattern of unequal regional growth has contributed to growing income disparity over the 1990s.

Unequal reduction of poverty also has an important ethnic dimension. Ethnic minorities, most of whom, except the Chinese, reside in up-

lands, have substantially higher poverty rates. They have also witnessed much smaller reductions of poverty during 1993–98 – from 86 per cent to 75 per cent, while for the rest of the population the rate fell from 54 per cent to 31 per cent. Thus the economic gains of the 1990s barely reached the remote areas where the ethnic minorities are concentrated, and consequently ethnic people are beginning to lag further behind. In 1993, they constituted 20 percent of the poor, but by 1998 the figure had risen to 29 percent. (Poverty Working Group 1999). The growing ethnic disparity is not only creating a potential threat to social stability in Vietnam, but is also blighting the prospect of further poverty reduction in future, unless steps are taken to address the integrability problems of ethnic minorities that prevent them from gaining adequately from the growth process.

One problem the ethnic minorities share with the rest of the poor is low productivity stemming from low level of educational attainment. Evidence suggests that productivity is closely associated with qualifications of the labour force in Vietnam (Huong *et al.* 2003). There has been some improvement in the skill level of the workforce over the period 1997–2001 with the composition of the work force changing away from unskilled and semi-skilled workers toward workers with qualification. But this shift has been small, and by 2001 an overwhelming majority of the employed labour force (84 per cent) still had no relevant skills. Another important issue is whether qualifications and skills on the supply side match demand in the labour market.

Agricultural workers have much lower skill levels and are less educated than workers in manufacturing and services. The lower level of skills and qualifications in agriculture hinders the use of new technology and thereby makes agricultural productivity grow slowly relative to that of manufacturing and services. This has the effect of depressing the relative income of rural people, and hinders the process of reducing poverty, which is still a predominantly rural phenomenon. Vietnam has done better than most developing countries in providing basic education to its people. It now needs to pay greater attention to upgrading the skill level of its population so as to equip them for integrating more fully into a modern industrial economy.

Apart from education and skill, the rural poor also suffer from lack of access to resources, including land and credit, which act as a barrier to their escape from poverty. Poor households typically have small holdings or are landless, and this tends to perpetuate itself. This is especially the case in Mekong River Delta. Lack of access to land helps explain why this region experienced the slowest rate of poverty reduction in spite of a rice export boom and favourable agricultural terms of trade. A recent study of

a rice growing area in Angiang province has found that higher prices had little impact on the poor, because they lacked resources to take advantage of them, most notably land.

The same study also found that poor households had limited access to credit. Although their situation improved in response to the "Project on Providing Credit to the Poor", a considerable number of the poor remained without access to credit. There is clear evidence of credit rationing to the disadvantage of households with limited land and low level of educational attainment. The majority of poor and very poor households in the rice growing area in the Mekong River Delta resorted to credit in informal markets, with interest rates five to thirty per cent per month, whereas the typical rates in formal market are between 1.2 and 1.5 per cent. The same study found that sixty-five per cent of poor households regarded improved access to credit as their greatest need.

Addressing the problems of skill and lack of access to land and credit is, therefore, essential if the poor of Vietnam are to overcome their integrability problem. Without success in this area, it is unlikely that Vietnam will be able to maintain its impressive record of poverty reduction in the coming decades.

5.4 Indonesia

Before the crisis of 1997, a vigorous process of labour-intensive industrialisation enabled many poor people in Indonesian rural areas to improve their living standards by finding jobs in urban industries. Nevertheless, the majority of the poor of Indonesia still live in rural areas. While the process of escaping poverty through employment in urban industries will hopefully resume now that Indonesia has almost recovered from the reverses of the crisis period, for the majority of rural poor the possibility of escaping poverty will depend on very much how the rural economy itself develops.

In the prosperous period before the crisis, agriculture faced relative neglect compared to the high profile it used to enjoy in the 1970s – public investment dwindled, upgradation of rice technology did not receive the attention it deserved, and efforts to diversify agriculture into higher-valued crops were inadequate. The experience of the crisis, however, had a sobering effect, as agriculture demonstrated its ability to act as a shock absorber par excellence in times of crisis. Since then, renewed emphasis is being accorded to agriculture in particular and rural development in general, within a framework of decentralised governance.

These efforts will, however, fail to have the desired effect if due attention is not paid to one particular problem that seriously hampers the

integration of the rural poor in any process of agricultural growth. This is the problem of increasing landlessness among the rural poor. The process of land fragmentation is consigning increasing numbers of farmers to pitifully small, uneconomic plots or outright landlessness. While the total amount of land for food crops decreased during 1983–1993 from about 16.7 million hectares to 15.4 million hectares, the number of holdings of less than one-tenth of a hectare increased by nearly three and a half times during the same period. Evidence for the second half of the 1990s suggests a continuing trend towards land fragmentation as well as landlessness. Between 1995 and 1999, the share of landless farm labourers in total agricultural workforce has increased from 27.6 per cent to 31.6 per cent, and the share of farm households holding less than half of a hectare has edged up from 43.7 to 44.9 per cent.

With continuing land fragmentation, it will be difficult to either improve agricultural productivity or to alleviate poverty further in Indonesia. One option is to consolidate land holdings, which would ease some of the problems associated with fragmentation in areas of high population density such as Java. Even though the international evidence for efficiency gains through land consolidation is not very encouraging, some consolidation of land could be beneficial, if it is achieved through the formation of co-operatives or other forms of organization, such as water use associations. This will enable the land-poor farmers to integrate much better into any growth of the rural economy.

Another dimension of the integrability problem that deserves special mention in the context of Indonesia relates to the educational attainment of the workforce. Rapid growth in the pre-crisis era was accompanied by a substantial deepening of the skills of the labour force. The proportion of less educated/unskilled workers (defined as those who have primary education or less) fell from 87 per cent to 79 per cent between 1990 and 1996, while the share of the educated/skilled workforce (defined as those with at least secondary education) increased from 14 per cent to 21 per cent. This upgrading of the skill level has played a big role in ensuring rapid decline in poverty.

This is corroborated by household–level evidence that demonstrates a strong correlation between educational attainment and poverty incidence. For example, in 1999, poverty rates varied between 39 per cent and 48 per cent for groups with primary education or less, whereas for those with secondary education or more, the incidence varied only between five and eight per cent.

It would thus appear that skill upgrading of the Indonesian workforce during the 1990s was an important mechanism of bringing about the

impressive decline in poverty prior to the crisis. This also means that ensuring broad access to the education and training system, particularly at the secondary level, must remain a major policy goal for the Indonesian government, if the poor people are to continue to integrate fully into the growth process.

5.5 Bangladesh

Analysis of the growth-poverty nexus in Bangladesh has shown (in Chapter 4) that transfer of rural labour from casual agricultural work to regular salaried jobs in small and medium sized non-farm enterprises has provided the major escape route for the poor in the 1990s. For this mechanism to work with greater vigour in the future, a first pre-requisite is to augment the demand for the products produced by such enterprises. However, mere expansion of demand will not help reduce poverty, even if it gives a boost to growth, if the poor are not able to take advantage of the opportunities being opened up. New jobs may go to the non-poor, especially the marginally non-poor who compete with the poor for similar types of work. This will be the case if the poor face greater impediments than the non-poor in integrating themselves with the growth process.

Information on the structure of employment indicates that such impediments do in fact exist. For instance, in spite of the fact that salaried jobs in the non-farm sector offer the highest returns for labour to the poor, the proportion of their workforce employed in this mode is found to be the lowest. A comparison of employment structure between the poor and the moderate non-poor shows that the poor in fact lag behind in self-employment as well, in both farm and non-farm sectors, but the biggest difference lies with respect to salaried jobs in the non-farm sector, where their involvement is only half of that of the moderate non-poor (Osmani *et al.* 2003). Thus, only about 6–7 per cent of the poor households' workforce has salaried jobs in the non-farm sector, as compared with twelve per cent among the moderate non-poor. This suggests that access to salaried jobs in the non-farm sector is a major distinguishing feature between these two groups. Evidently, the impediments that lie in the access to such jobs play a crucial role in preventing the poor from escaping the poverty trap.

This is not to suggest that access to salaried jobs is the only route out of poverty. As the data in Table 4.14 reveal, self-employment in non-farm activities can be quite enriching too, but not if these are the kinds of employment that are available for the extreme poor. For them, self-employment in the non-farm sector does not bring any higher reward compared to casual labour in the same sector. Self-employment is more rewarding

only if they can engage in the kind of work in which the moderate non-poor are engaged. Otherwise, salaried jobs are a better option – for both the extreme poor and the moderate poor. It is only after one crosses the poverty threshold that self-employment in non-farm activities begins to catch up with salaried jobs, and it is only for the richest segment of the population it emerges as the unambiguously most rewarding mode of employment. This suggests that the poor face serious impediments in enhancing the return to labour from self-employment, not just in gaining access to salaried jobs.

The nature of impediments can be explored further by comparing the poor with the moderate non-poor in terms of their employment pattern.[23] It is especially instructive to identify the activities in which the moderate non-poor were mostly engaged and to find out whether the poor had any problems in engaging in those activities. Such an analysis points out that the poor seem to face two kinds of problems.

First, there appears to exist some kind of entry barriers for the poor, especially the extreme poor, for the activities in which the moderate non-poor are mostly engaged. Thus in Table 4.15, we list the activities that together account for ninety per cent of the time devoted by the moderate non-poor to productive activities and find that the extreme poor are able to devote only half as much time to such activities. Second, to the extent that the poor do engage in these activities, the return to labour per unit of time is distinctly lower for them compared to the moderate non-poor.

Thus the poor are disadvantaged twice – they are unable to access fully the activities that have the potential to raise them above the poverty line and even when they do gain access to such activities they are unable to earn as much as the moderate non-poor do from the same activities. Both these disadvantages surely have a lot to do the poor's relative lack of ability to access salaried jobs in the non-farm sector or to earn high rates of return from self-employment.

The next task is to identify the differences in the characteristics of the poor and the moderate non-poor that might account for these disadvantages. The objective is to locate more precisely the impediments that prevent the poor from gaining access to activities and modes of employment that offer a high rate of return to labour. For this purpose, Osmani *et al* (2003) selected those rural households among the moderate non-poor that enjoyed a relatively high return to labour and compared them with the poor in terms of various types of endowments – viz. human capital,

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[23] The reason for taking the moderate non-poor as the comparator group is that in the short to medium term it is this group that the poor can aspire to join at best, if they are able to escape the poverty trap. As such, it is this group rather than the very rich that should be taken as the relevant comparator group for the purposes of policy-making.

Table 4.15 Returns to Labour and the Extent of Involvement in High-Productivity Activities by Different Income Groups: Rural Bangladesh 1999/00

Description of Activities	Productivity of Time (Tk/hour)			Fraction of Time Allocated to Each Activity (%)		
	Moderate Non-Poor	Moderate Poor	Extreme Poor	Moderate Non-Poor	Moderate Poor	Extreme Poor
Other Trade	12.22	10.09	7.28	26.79	25.34	8.58
Road Transport	10.34	8.54	7.40	10.13	17.87	10.64
Fishery	18.12	9.60	8.84	6.71	8.52	2.42
Food Processing	10.36	7.80	4.28	5.50	3.89	2.02
Construction	10.27	8.99	8.93	5.40	6.45	3.57
Educational Services	13.65	13.72	8.71	5.23	2.75	1.00
Cloth Production	8.50	7.55	6.52	5.05	5.09	4.40
Health & Social Welfare	9.90	6.91	4.31	4.71	1.84	1.51
Furniture & Misc. Mfg	13.21	10.34	6.95	4.48	1.09	2.80
Hotel/Restaurant	7.21	6.75	5.77	4.08	2.49	1.71
Ready-Made Garments	10.53	7.90	7.40	3.95	4.17	1.64
Public Administration	13.22	11.98	8.60	2.99	2.56	0.95
Marine Transport	10.20	6.83	7.34	1.73	1.23	1.67
Petty Trading & Repair Srvc	9.77	11.01	6.51	1.54	0.87	0.56
Wood Products	14.01	11.83	10.40	1.42	1.15	0.77

Source: Osmani et al. (2003)

physical assets (both personal and collective) and support from social network. The results show that the poor have distinctly lower endowments of all these types – indeed there is a clear downward gradation from the moderate non-poor to the moderate poor and to the extreme poor.

In terms of human capital, the poor are endowed with a smaller labour force – especially, male labour – and burdened with a higher dependency ratio. Crucially, they have much lower educational achievement – for both male and female labour. Thus, compared to the moderate non-poor, the average education of workers among the 'extreme poor' households is less than half and that of 'moderate poor' workers is only just over half. As expected, the poor have much less physical assets – both land and non-land

assets. They also have less access to collective assets such as physical infrastructure – proxied in our case by access to electricity. Thus, while nearly a quarter of moderate non-poor households in rural areas have access to electricity, only 3 per cent of the extreme poor and twelve per cent of the moderate poor do so. And finally the poor also receive less support from social network in the form of remittances sent by relatives working elsewhere.

These disadvantages in terms of endowments of various kinds can go a long way towards explaining why the poor are unable to escape poverty by raising the return to their labour. Thus the shortage of workers per household can dissuade them from looking for salaried jobs because poor households would tend to maintain a minimum level of subsistence production in order to minimise the risk of food insecurity. High dependency ratio can also act as a barrier even if they wanted to take up salaried jobs. More importantly, lack of education can act as a serious impediment to moving up the hierarchy of salaried employment.

Lack of education, coupled with shortage of physical assets and lack of access to physical infrastructure, can also prevent the poor from moving into highly rewarding types of self-employed activities that are capable of emancipating them from the clutches of poverty. Such activities would typically involve a somewhat larger scale of operation than the kind of microenterprises in which the majority of the self-employed poor are engaged. But, as a recent survey shows, no more than 10 per cent of members of the Microfinance II project of PKSF – the apex body of microfinance institutions in Bangladesh – are even willing to take much larger loans for scaling up their operations. The possible entry barriers include poor managerial capability related to lack of education, inability to provide own equity participation needed in view of high interest cost of microcredit, and low expectations of rates of return due to poor access to infrastructural facilities.

If these barriers to scaling up the operations of small enterprises can be removed, it will be possible both to enable the more enterprising among the poor to upgrade to highly rewarding self-employed activities and to enable the less enterprising among them to escape poverty by taking up adequately remunerative salaried jobs in such enterprises.

Some Lessons for Policy

CHAPTER 6

The experience of the five countries studied in this report offers a rich reservoir from which it is possible to draw important lessons for pro-poor growth policy. Some of these lessons are discussed below under five headings: (1) the role of agriculture in a transition economy, (2) complementarity between macroeconomic and structural reforms, (3) how to use a resource bonanza for the benefit of growth and poverty reduction, (4) striking the right balance between tradables and non-tradables in the process of pro-poor growth, and (5) the role of population dynamics in the context of pro-poor growth.

6.1 The Role of Agriculture in a Transition Economy: Lesson from Uzbekistan

Uzbekistan was highly successful in both containing the severity of contraction in the early phase of transition and in promoting pro-poor growth in the revival phase, which started around the mid-1990s. The policy framework underpinning this success holds important lessons for not just transition economies but also developing countries in general. In both phases, policy towards agriculture played a key role. The policy was composed of two apparently contradictory components – one extractive and the other supportive. The policy framework squeezed agriculture on the one hand and supported it on the other. This may seem inconsistent, but in fact it was not so, because the squeeze and the support were applied to two different sub sectors of agriculture, and in effect they nicely complemented each other and together formed the basis of pro-poor growth.

The supportive component consisted mainly of institutional reforms allowing the emergence of a small-scale household-farm sector from the gradual break up of state and collective farms. Especially during the recovery phase, both the number of household farms and their average plot

size increased substantially. But more importantly, the policy framework left a space for the household sector to specialise in highly remunerative activities – such as horticulture and livestock – in which the state and collective farms could not enter. The reason why the latter could not enter the remunerative activities lay partly in the extractive policy to be explained below. The important point to note here is that by creating the household sector and by enabling it to find its niche in remunerative activities, the supportive component of agricultural policy played a critical role in promoting pro-poor growth.

It could be argued, however, that the success of the supportive component was predicated to a large extent on the existence of the extractive component. The extractive component consisted in the policy of surplus extraction from agriculture, which was executed by forcing state and collective farms to cultivate cotton and wheat and to sell them to the government at artificially low prices. The cotton procured at low prices was exported by the government at higher world prices, which provided the government with badly needed surplus that largely made up for the loss of subsidy from the Soviet Union after the collapse of communism. No doubt some of this surplus was wasted in the form of inefficient import substitution in the industrial sector. But of more important consequence was the fact that the surplus enabled the government to maintain a high level of public expenditure – much higher than in most other former Soviet republics – without courting inflationary pressure. By stimulating aggregate demand, the high level of public expenditure enabled the Uzbek economy to escape from the kind of recessionary tailspin in which most of the other republics had been sucked into after the break up of the Soviet Union.

One consequence of avoiding a severe recession was that, unlike in most other republics, there was no mass exodus of laid off workers from urban to rural areas seeking to eke out a subsistence from land. This was crucial for the success of the supportive component of agricultural policy. If agriculture had become overburdened with excess population, Uzbekistan might have met the same fate as Armenia – both marginal and average productivity of the household sector would have been too low to provide a viable basis for escape from poverty. Thus by taking pressure off agriculture, the expansionary demand management policy ensured the success of the supportive component of agricultural policy. But the policy of expansionary demand management was itself possible only because the extractive strategy in agriculture provided the government with the necessary surplus. It is in this sense that the success of the supportive component of agricultural policy was predicated on the success of the extractive component.

This analysis raises certain old questions regarding the role of agriculture in economic development. The importance of attaching priority to agriculture in the early stage of development has been increasingly recognised since the 1970s, especially in the light of the stimulus to development that green revolution has evidently provided in Asia and Latin America. But the earlier tradition in development economics tended to view agriculture rather as a source of resources to be extracted for industrial development, which tended to result in the squeezing of agriculture instead of its development. It is this tendency to squeeze rather than promote agriculture that underlay the notion of primitive accumulation in the early days of Soviet industrialisation and more recently the institution of marketing boards in much of Africa whose job was to purchase crops from farmers at artificially low prices. The disastrous consequences for agriculture in both cases are there for all to see. And yet Uzbekistan seems to have used this now-disreputable practice to rather good effect – using it to engineer a less painful transition, and ensuring in the process that the support given to smallholder agriculture did not dissipate through reverse migration from urban areas.

How can one explain this puzzle? A plausible explanation lies in two parts. First, unlike in other cases where resource extraction bled agriculture dry, the extractive policy in Uzbekistan was only one component of agricultural strategy, the other being a supportive one. The crops on which the extractive policy was applied and the producers of those crops were physically distinct from the beneficiaries of the supportive policy. This distinction ensured in the first place that any direct adverse consequences of resource extraction did not fall on the poor farmers, and the indirect consequences were in fact beneficial for the reasons explained above.

Second, while the extractive policy did doom the state and collective farms to eventual destruction, these farms were doomed anyway. The programme of economic and institutional reforms undertaken as instruments of transition to a market economy had no place for the old-style state and collective farms in the new scheme of things. They were doomed to die with or without extraction. In most other instances, the policy of resource extraction from agriculture has been described as a policy of killing the goose that lays the golden egg. This was one instance, however, where killing the goose in search of an instant basket of golden eggs may not have been such an irrational policy after all, because the goose was about to die in any case – so better to extract the eggs while it was still possible! It was thus the logic of transition to the market economy that made sense of a policy that would otherwise have been indefensible. Transition from communism to the market economy is not a normal phenomenon; it should

not, therefore, come as a surprise that policies that are appropriate for such abnormal situations would not always be appropriate for the normal process of development. By luck or by design, Uzbekistan seems to have hit upon a strategy that was in retrospect right for a transitional economy, though it would not be right for a traditional developing economy.[24]

6.2 Complementarities between Macroeconomic and Structural Reforms: Lessons from Vietnam

Vietnam's remarkable success in combining rapid growth with rapid poverty reduction provides interesting lessons regarding possible complementarity between macroeconomic policy and structural reforms in inducing pro-poor growth. Much of development literature has tended to be polarised between the so-called neoliberal and structuralist camps, the former emphasising the importance of 'sound' macroeconomic policies and latter stressing structural reforms such as redistribution of assets, including land reforms. But Vietnam's experience shows that the two approaches need not be mutually exclusive; indeed, they could nicely complement each other resulting in a happy combination of rapid growth and rapid reduction of poverty.

By far the major part of Vietnam's poverty reduction in the 1990s occurred in the rural areas, spurred by rapid agricultural growth. The rate of return to farm employment increased substantially as both internal and external terms of trade improved for the major food crop rice and opportunities increased for diversifying into more remunerative horticultural products. Macroeconomic policies played a crucial enabling role to make this possible. The opening up of the economy through trade liberalization (albeit partial) and exchange rate realignment reduced the anti-export bias in the incentive structure, which enabled the Vietnamese economy to exploit its inherent comparative advantage in agriculture. The resulting export orientation of the agricultural sector acted as a strong stimulus to production of both traditional crops and new horticultural products as farmers received higher prices for their products. The fact that as much as half of the increase in the price of rice has been attributed to adjustment in the exchange rate is indicative of the support provided by macroeconomic policies to agricultural growth.

Not surprisingly, the proponents of so-called neoliberal policies have flaunted the Vietnamese success story as a vindication of their preferred

[24] An analogy can be drawn here with the policy of drastic capital controls (administrative restrictions on the flow of capital across borders), which would not be economically justified under normal circumstances, but could be justified as a short term measure when a country is gripped by a severe financial crisis, as exemplified by the experience of Chile and Malaysia in the 1990s.

strategy. Yet, it can be argued that neither growth nor poverty reduction would have been as impressive as it actually was unless the macroeconomic policies were complemented by structural reforms. The poverty effect of structural reforms is quite straightforward. In an economy where land ownership is concentrated in the hands of a few large households, the stimulus of the kind provided by macroeconomic policies in Vietnam would only make the rich richer by raising the relative price of their marketable surplus. The poorer households among the farming community may actually suffer from higher prices if they happen to be net buyers of food. Some benefits may still accrue to them through the labour market, provided higher prices of products stimulate higher levels of either employment or wages in agriculture. But any such benefit would have to be weighed against the higher price of food they have to pay. The only unambiguous way in which the majority of a farming community can benefit from higher prices is if most them are in fact net sellers of food. This is precisely what Vietnam ensured through its land reform policies. Equitable land reform at the very beginning of transition to the market economy ensured that the vast majority of farmers would have enough land to be net seller of food. So when macroeconomic policies ensured better terms of trade for agriculture, the benefit was shared widely. This is what made the Vietnamese growth pro-poor.

The effect of structural reform was not, however, confined to making the growth process pro-poor; it can be said to have contributed to growth itself. Recall that the growth process was stimulated by macroeconomic policies that reduced the real exchange rate, which in turn raised the price of exportable crops and thereby stimulated agricultural growth. Exchange rate adjustment played a crucial role in this process, but it can be argued, following an argument first suggested by Jeffrey Sachs, that the ability of the Vietnamese government to adopt a supportive exchange rate policy was itself predicated on the prior execution of land reform.

The issue at stake here is the political economy of exchange rate policy. Like any other policy, exchange rate policy usually entails both winners and losers. It is the political economy of the tussle between potential winners and losers that often determines whether a particular policy would be adopted, even when the overall effect of the policy might be favourable for the country as a whole. If depreciation of the real exchange rate raises the price of agricultural goods, it would benefit those who are net sellers of agricultural products but hurt those who are net buyers from the market. Policy makers would generally take these opposing interests into account in deciding whether to let the real exchange rate fall. Sachs (1987) has argued that these political economy considerations explain why

the East Asian countries such as Korea and Taiwan were able to let their overvalued currencies depreciate to more appropriate levels in the early stage of their development while other countries such as Brazil could not. By instituting egalitarian land reforms early in the process, the East Asian countries ensured that the vast majority of farmers would become net sellers of food and therefore benefit uniformly from any rise in agricultural terms of trade resulting from depreciation of the exchange rate.

The policy of correcting overvaluation of the exchange rate was thus not only economically sound but also politically popular and hence more feasible to implement. By contrast, a similar policy might have created serious social unrest in Brazil, where land was very unequally distributed. The majority of rural Brazilians were landless agricultural labourers. They would have been hurt by higher food prices resulting from depreciation of the exchange rate. According to Sachs, this social consideration must have weighed heavily in the calculations of Brazilian policy makers, who decided to live with an overvalued exchange rate, even though it had a depressive effect on Brazilian agriculture. The upshot of this line of reasoning is that an egalitarian land reform makes it politically more feasible to bring down overvalued exchange rate in a predominantly agrarian economy.

The same logic may explain why Vietnam was able to adopt an exchange rate policy that helped promote agricultural growth by raising agricultural prices. Land reform was thus the foundation on which the success of macroeconomic policy was built. It is in this sense that structural reform was complementary to macroeconomic reform in promoting growth.

The complementarity also runs the other way. Without appropriate macroeconomic policies, structural reform alone would have achieved very little by way of pro-poor growth. Armenia too distributed land fairly equally to all those coming back to rural homes after losing their urban jobs in the first thrust of transition. But while access to land did provide many jobless Armenians with a means of subsistence, it did not enable them to escape poverty in the absence of growth. In Vietnam, by contrast, growth-promoting macroeconomic polices ensured that egalitarian land reform would act as a means of reducing poverty widely rather than just sharing poverty equally.

Thus, in more ways than one, structural reform and macroeconomic reform complemented each other in promoting pro-poor growth in Vietnam. One obvious lesson from this experience is that it may be wise to avoid excessive polarisation between the so-called neoliberal and structuralist approaches to development.

6.3 How to Use a Resource Bonanza for the Benefit of Pro-poor Growth: Lesson from Indonesia

One of the many positive achievements of the Indonesian economy in the past three decades is the manner in which it has made use of its oil wealth. Unlike in many other countries where the sudden bonanza of a natural resource has proved more of a curse than a boon, Indonesia has used its oil bonanza in the wake of OPEC price hike in 1973 for laying the foundation of pro-poor growth.

Quite often the discovery of a natural resource like oil leads to a scramble for rent. In countries suffering from weak governance, the resulting rent-seeking activities can lead not just to a squandering of the newfound wealth in the pursuit of personal gain but also to the weakening of the moral fabric of the society by inducing widespread corruption. What happened to Nigeria with its oil bonanza is a prime example of such squandering of wealth. Even when the wealth was not squandered, as in Holland after the discovery of the North Sea oil, oil exports created a problem for the rest economy that has come to be known as the 'Dutch disease'. The sudden rise in export earnings strengthened the real exchange rate, which made non-oil exports more expensive. The resulting loss of non-oil exports led to loss of production and employment in the rest of the economy. The gain from oil wealth was thus partially offset by induced losses in the non-oil sectors. In extreme cases, this process of displacement of one form of wealth by another may even lead to an overall loss for the economy. These processes explain the apparently paradoxical result found in cross-country regressions designed to explain growth and poverty reduction across countries, that the existence of an important natural resource often has a negative impact.

Indonesia is an outstanding exception in this regard. It neither squandered the oil wealth nor fell into the trap of the 'Dutch disease'. Instead, it put its oil wealth to the services of growth, employment and poverty reduction to great effect. The way it did so holds important lessons for other developing countries for managing their natural resources as part of an overall development strategy.

The first stage of Indonesia's march to prosperity since the mid-1970s was based on the three-pronged strategy of (a) extensive rural development through massive investment in agriculture and rural infrastructure, (b) emphasis on rapid expansion of human capital through public provision of education and healthcare facilities on a universal scale, and (c) development of a large import substituting manufacturing sector. The investment requirement for this massive programme of development on

several fronts was enormous. Under normal circumstances, the undertaking of such a massive investment programme would have forced the government to resort to large-scale deficit financing. The resulting inflationary pressure and a possible crowding out of private investment might have scuttled the ambitious development programme. Oil, however, came to rescue at this stage by providing the resources necessary for investment. The government, to its credit, seized the opportunity offered by the newfound oil wealth, and invested it judiciously instead of squandering it. Thus by tying up the oil bonanza with an ambitious investment programme, Indonesia was able to achieve rapid expansion of the economy on several fronts in a relatively non-inflationary manner. Non-inflationary growth, in turn, created opportunities for labour to enjoy higher levels of income through either reduced underemployment or higher wages. As a result, poverty declined at a rapid rate. In this way, Indonesia used its oil wealth as the foundation for a take-off into poverty-reducing growth instead of squandering it.

The particular development strategy adopted at this stage also enabled Indonesia to avoid the Dutch disease (see p. 107). The strategy of development that was adopted at this stage may be seen as the Nurksean theory of balanced growth (see p. 108) in action. By its very nature, such a strategy is inward looking rather than outward looking. By investing massively in several sectors at the same time, this strategy sought to ensure that the economy would grow from an internal stimulus as each sector of the economy derived its strength internally from other sectors in a mutually supportive manner instead of relying on the export market. Non-oil exports were quite negligible to begin with, and no attempt was made to expand them rapidly with the help of the oil bonanza either. Since the non-oil export sector remained small, there was little scope for the Dutch disease to bite. In other words, the oil bonanza did not lead to a massive displacement of non-oil exports for the simple reason that there weren't much of non-oil exports to be displaced. Indonesia might have caught the Dutch disease if it had tried to embark upon an outward-oriented strategy at this stage as the appreciation of the real exchange rate resulting from oil exports might have thwarted any prospects of developing a competitive non-oil export sector. By choosing to adopt an inward-looking balanced growth strategy, Indonesia managed to avoid the Dutch disease.

Indonesia did move eventually towards outward orientation in the second phase of development beginning around the mid-1980s. But by then the oil wealth had largely dissipated, partly through depletion of oil reserves and partly through a sharp fall in the real price of oil in the world market. Once again, the Dutch disease failed to bite, but this time the

reason was that oil exports were no longer large enough to cause a serious appreciation of the real exchange rate. As a result, non-oil exports were able to grow unhindered. In other words, both the decision to adopt an inward-looking strategy at the initial stage and the timing of the switch from inward-looking to outward-looking strategy were crucial for Indonesia's success in avoiding the Dutch disease and for her ability to use the oil wealth as the foundation of poverty-reducing growth.

6.4 The Relationship between Tradables and Non-tradables in the Process of Pro-poor Growth: Lesson from Bangladesh

The relative emphasis to be given to tradable vis-à-vis non-tradable sectors of an economy has been the subject of much discussion in the development literature. The paradigm of outward oriented development strategy that dominates the development discourse today is based on the primacy of tradables over non-tradables. The policies of import liberalisation, export promotion and maintenance of a 'realistic' exchange rate that form the core of an outward oriented strategy are all aimed at tilting the structure of incentives in favour of tradables. Implicit in this strategy is the assumption that tradable and non-tradable sectors are essentially in a relationship of conflict with each other. That is why, the strategy of outward orientation calls for moving resources away from non-tradables towards the production of tradables; in terms of resource use one is seen as the substitute of another. Yet the Bangladesh experience shows that the two sectors can also form a strongly complementary relationship in the process of promoting pro-poor growth, which raises important policy questions as to how to maintain a proper balance of incentives between them.

Bangladesh experienced a modest acceleration of growth in the 1990s compared to the preceding decade. The employment nexus through which this acceleration of growth translated into accelerated reduction of poverty has been explained in Chapter 4. It was pointed out in that context that the major part of growth acceleration that occurred in the 1990s came from the non-farm non-tradable sectors such as small-scale manufacturing, services and construction. It is important to emphasise, however, that the growth process was such that non-tradables bore a complementary rather than a competitive relationship with tradables. In particular, the tradables helped the non-tradables from both demand and supply sides.

The expansion of non-tradables was primarily demand-driven i.e., driven mainly by the expansion of domestic demand. An analysis of the sources of this expansion of demand shows, however, that tradable sectors played a critical part in the process. Two of the main sources of demand

expansion were earnings of workers in the rapidly expanding garments industries and higher income of the farming community. Since the garment industry of Bangladesh is almost wholly export-oriented, this is an obvious case of expansion in a tradable sector contributing to the expansion of non-tradable sectors. Less obvious is the case of the demand stimulus originating from the agricultural sector since rice, the most important crop of Bangladesh, can be classified as non-tradable for practical purposes.[25] The role of tradables was nonetheless important, because higher income in the agricultural sector owed itself primarily to the greater availability of tradable farm inputs (especially irrigation equipment) following the liberalisation of import of farm inputs in the late 1980s. Thus, the expansion of non-tradable sectors, the main drivers of growth acceleration in the 1970s, was helped on the demand side by at least two categories of tradables – viz. garments and farm inputs. They were also helped on the supply side by yet another category of tradables – viz. raw materials, intermediate inputs and capital equipment needed in their production process. As the push towards import liberalisation in the 1990s led to greater availability and lower prices of these goods, the non-tradable sectors were better able to overcome critical supply bottlenecks.

How can one explain the existence of such a complementary relationship between tradables and non-tradables, when the standard neoclassical theory underlying the strategy of outward orientation postulates a competitive relationship between the two? The explanation lies in the fact the real world is not entirely neoclassical, characterised by smooth substitution possibilities and rapid price adjustment in all spheres of production. In a purely neoclassical world, growth would not be driven primarily by demand, as has been the case in Bangladesh in the recent years. Demand-driven growth is a feature of a non-neoclassical structuralist world in which structural rigidities of various kinds stand in the way of smooth substitution possibilities and rapid price adjustment. One specific symptom of structural rigidities is the existence of a large amount of underemployed (as distinct from openly unemployed) labour. Given the existence of underemployed labour, it is quite possible for demand to play a leading role in boosting growth, and this is what has happened in Bangladesh. And it is in this context of a non-neoclassical demand-driven growth process that a complementary relationship has emerged between tradables and non-tradables.

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[25] In the sense that the cost of production falls somewhere between export parity price (i.e., the price at which it becomes just worthwhile to export a commodity) and import parity price (i.e., the price at which it becomes just worthwhile to import a commodity).

In other words, the complementary relationship between the two sectors that has been observed in Bangladesh is a possible feature of the structuralist world, while the competitive relationship is a feature of the neoclassical world. It has to be recognised, however, that the real world in most cases is part neoclassical and part structuralist. Therefore, elements of both competitiveness and complementarity between the two sectors are likely to exist side by side in any real economy. The simultaneous existence of these apparently contradictory tendencies raises important issues of public policy that the development literature has yet to grapple with. The standard prescription of promoting outward orientation of the economy by tilting the incentive structure in favour of tradables vis-à-vis non-tradables takes cognizance of the competitive nature of the two sectors but ignores possible complementarities between them. What is the right balance between the competitive and complementary tendencies in a particular context, from the point of view of promoting pro-poor growth, and how to achieve that balance are important questions that deserve careful considerations.

6.5 The Role of Population Dynamics in the Context of Pro-poor Growth

Population dynamics has played an important role in shaping the growth-poverty nexus in some of the countries discussed above. Of particular significance is the decline in fertility leading to slowdown in population growth in Uzbekistan, Vietnam, Indonesia and Bangladesh. In Uzbekistan the rate of population growth declined from over 2.0 per cent in early 1990s to 1.5 per cent at the end of the decade; in Vietnam the decline was from 2.3 per cent in the late 1980s to 1.3 per cent in late 1990s; in Indonesia, from 2.4 per cent in the 1970s to 1.3 per cent in the 1990s, and in Bangladesh from close to 3.0 per cent in the 1970s to 1.8 per cent in the 1990s.

Similar slowdown in population growth is known to have contributed significantly to the growth spurt in East Asia. This has happened through the so-called 'demographic bonus' – the phenomenon in which a country enjoys a once-for-all increase in the proportion of working age people in total population following a sharp fall in fertility. The bonus is not automatic, however. For a country to enjoy it, other conditions must be conducive to growth so that the relative increase in labour power can be fruitfully harnessed. This happened in East Asia. To what extent this has happened in Uzbekistan, Vietnam, Indonesia and Bangladesh has not been determined yet. But slower population growth has certainly helped them in at least two other ways.

First, for any given rate of GDP growth, the growth of per capita income has been faster. The consequent increase in the return to labour has improved the potential for poverty reduction. Second, and more importantly, slower population growth has enabled many poor families to breathe more easily by reducing the dependency ratio. Household survey data show that in each of these countries the poorer households invariably have a higher dependency ratio – in fact, difference in dependency ratio happens to be one of the most common distinguishing features between the poor and the non-poor households.[26] Reduction in dependency ratio has enabled the poor households to spread the benefit of any given return to labour less thinly than before. This has contributed to the overall reduction in poverty, in addition to any contribution coming from higher average return to labour.

Fertility reduction has thus strengthened the growth-poverty nexus in at least two ways – first, by raising the average rate of return to labour and second, by enabling poor households to spread the fruits of labour less thinly than before and thereby improving the living standards of household members.

Another aspect of population dynamics that has had some influence on the growth-poverty nexus is migration, especially international migration. Remittance income generated by international migration has played a prominent role in Bangladesh and Armenia, albeit in somewhat different ways.

As discussed in Chapter 4, remittance income has been one of the three major sources of demand stimulus that led to accelerated poverty reduction in Bangladesh in the 1990s. In Armenia, international migration played two very important roles. First, it provided remittance income that was especially important to the urban poor as a means of survival when many of them lost jobs in the wake of economic contraction. Second, it provided an escape route from poverty for a large number of people. The point is not just that those who left the country managed to escape poverty, but also that those who did not migrate benefited from the tightening of labour market caused by massive out-migration.[27] As noted in Chapter 4, the main mechanism for poverty reduction in the Armenian recovery phase was rising wages in response to rising labour productivity. The tightening of labour market through out-migration must have contributed to this process.

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26 Thus in rural Uzbekistan, the ratio of dependants for each person with regular income is 5.9 for poor households and only 2.9 for the non-poor. In Vietnam, the household survey of 1998 showed that addition of one child increases the probability of being poor by 12 percentage points. In Bangladesh, the dependency rises monotonically from 2.7 for moderate non-poor to 2.9 for moderate poor and to 3.1 for the extreme poor.

27 It was mainly because of this out-migration that Armenia's population declined in absolute terms at the rate of about 1 per cent per annum in the 1990s.

Migration thus strengthened the growth-poverty nexus in Armenia by enabling the remaining workers to improve their average return to labour more than what would have been possible in the absence of migration.

Concluding Observations

CHAPTER 7

This study has examined the relationship between growth and poverty in five selected countries – three transition economies viz. Armenia, Uzbekistan and Vietnam, and two traditional developing economies viz. Indonesia and Bangladesh. The methodological approach of the study has been based on the premise that while sustained economic growth is important for sustained poverty reduction, it is also important that growth is of the type that is particularly conducive to poverty reduction. In other words, not just the rate of growth but also the degree to which poverty is responsive to growth also matters.

Two distinct sets of factors determine the responsiveness of poverty to growth. First is the 'elasticity factor' It determines the extent to which the 'employment nexus' between growth and poverty is strengthened by the growth process i.e. the extent to which the scope for improving the quantity and quality of employment is improved. The second is the 'integrability factor'. It determines the extent to which the poor are actually able to seize the employment opportunities opened up by the growth process. For growth to reduce poverty fast, it is important not only that the rate of growth be high but also that the elasticity and integrability factors are favourable. The experience of the five selected countries has been examined in the light of these ideas.

The comparison of growth and poverty across the five countries confirms the rapidly emerging consensus that growth is a necessary condition for sustained reduction of poverty. Thus, the transition economies of Armenia and Uzbekistan, which experienced massive poverty at the time of economic collapse in the early 1990s, were able to bring down the level of poverty only when growth revived in the second half of the decade. Vietnam and Indonesia made impressive inroads into poverty by riding on the wave of rapid economic growth. Even the struggling economy of Bangla-

desh was able to accelerate the rate of poverty reduction, albeit modestly, when the rate of economic growth accelerated somewhat in the 1990s. The 'growth factor' is obviously important in the fight against poverty.

The evidence also confirms, however, that there is no iron law regarding the extent to which any given rate of growth will be able to reduce poverty, that is, the responsiveness of poverty to growth varies between countries and within the same country at different periods of time. For instance, poverty was more responsive to growth in Vietnam than Armenia during the recovery phase of their respective transition, and Uzbekistan had an exceptionally high responsiveness than either of them. Over the long haul, not only did Indonesia have a higher growth rate than Bangladesh but its poverty was also more responsive to growth compared to Bangladesh. In Bangladesh itself, when growth accelerated in the 1990s, the responsiveness of poverty to growth also improved compared to the 1980s.

Analysis of the causes underlying these variations in the responsiveness of poverty to growth has demonstrated the importance of the employment nexus. Wherever the growth process was able to offer greater scope for improving the quantity and quality of employment, the responsiveness of poverty to growth also tended to be high. This is only to be expected. Since labour power is by far the major asset the poor possess, they can hope to escape poverty only through fuller utilisation of this asset and by earning a higher rate of return on its use. The really interesting lesson the present study offers is that there are a variety of ways in which the growth process can enhance the responsiveness of poverty to growth – the 'employment nexus' can take various forms. In some cases, the employment nexus takes the simple form of increasing the rate of employment of the workforce by reducing the rate of overt unemployment. But in other cases it can work without any visible change in overt unemployment, by reducing the underemployment of the working poor who do not have the scope of making full use of their labour power. In yet other cases, the nexus may work by raising the rate of return to labour. The raising of the return to labour may itself take various forms – for example, higher wages for wage labour or higher rate of return to self-employed labour resulting from either higher productivity or better terms of trade. Finally, the nexus may take the form of transferring labour from low-paid self-employment in subsistence activities to better-paid wage employment. The experience of the five countries studied in this study contains examples of each of these varieties of ways in which the employment nexus may mediate between growth and poverty. There is no a priori basis for preferring one form of the nexus to the others. Different forms may be appropriate for different groups of the poor, or in different socio-economic contexts, or at different

stages of development. To understand which form, or combination of forms, is the right one in a particular context is a crucial challenge facing the policy makers concerned with designing pro-poor growth strategies.

An equally important challenge is to understand the nature of the 'integrability factor' i.e. the nature of impediments the poor people face in trying to improve the quantity and quality of their work. Poverty can be more responsive to growth only if these impediments are removed. The present study shows that while poor people everywhere face some common impediments – such as lack of access to resources – there can be special impediment too in particular circumstances. For example, official restrictions on labour mobility in Uzbekistan prevent the poor people from remote areas to find jobs in other areas where the growth process has generated plentiful opportunities for gainful employment. Even when it comes to the common impediment of lack of access to resources, it is important to know which resource is more important in particular circumstances. In some cases, the crucial resource may be land, or it may be credit, or it may be skill – either the general skill level or some specific skill. A pro-poor growth strategy will have to be sufficiently nuanced to address the specific nature of the integrability problem faced by particular groups of people at particular stages of development.

The rich and varied experience of the countries examined in this study offers important policy lessons regarding different aspects of pro-poor growth policy. Some of these aspects include (a) the role of agriculture in a transition economy, (b) possible complementarity between macroeconomic and structural reforms, (c) how to use a resource bonanza for the benefit of growth and poverty reduction (d) the need to strike the right balance between tradable and non-tradable sectors in the process of pro-poor growth, and (e) the importance of population dynamics for pro-poor growth.

While squeezing agriculture for overall economic development has proved to be a recipe for disaster in most developing countries, the Uzbek experience shows that selective squeezing of commercial agriculture may make sense in a transition economy seeking desperately to acquire the resources necessary to rebuild the economy. For this strategy to work, however, complementary measures must be taken to support smallholder agriculture.

Macroeconomic and structuralist reforms are often seen as mutually exclusive, belonging to alternative strategies of development – one being dubbed as neoliberal and the other as radical or unorthodox. But the Vietnamese experience shows that if properly conceived and implemented the two can nicely complement each other. It can be argued that land reforms, one of the most important structuralist reforms undertaken in

Vietnam in recent years, made it politically feasible to adopt the kind of exchange rate policy – a crucial element of macroeconomic reform – that helped boost agricultural production and reduce poverty. At the same time, it was the adoption of a sensible exchange rate policy that helped realise the productivity-enhancing potential of land reforms.

The discovery of an exportable natural resource such as oil has often proved to be more of a curse than a boon for many countries, resulting in the well-known 'Dutch disease' syndrome. But the Indonesian experience shows that a resource bonanza can be turned into a boon – indeed, into a powerful instrument for employment growth and poverty reduction – if enmeshed into a well-designed development strategy. Since only a small fraction of the non-oil economy was export-oriented at the early stage of development, oil revenues did not create the kind of problem for the rest of the economy that is normally associated with a resource bonanza. On the contrary, Indonesia carefully utilised the surplus generated from oil revenue to ensure widespread rural development and to build up an industrial base under an import-substituting regime. By the time Indonesia moved seriously towards export orientation, oil had already lost its pre-eminent position in the economy, which has helped stave off the 'Dutch disease'.

The theory underlying the policy of outward orientation tends to view tradable and non-tradable sectors of the economy as substitutes of each other – hence the emphasis on changing the structure of incentives in favour of tradables vis-à-vis non-tradables. But the Bangladesh experience shows that the two sectors can work in a complementary relationship with each other, providing in the process the foundations of pro-poor growth. The existence of such a complementary relationship calls for a nuanced development strategy, in which the imperative is to balance the incentives for the two sectors rather than to shift the structure of incentives excessively in favour of one at the expense of the other.

Population dynamics has played an important role in shaping the growth-poverty nexus in several of the countries studied in this report. Reduced fertility has helped reduce poverty by raising the average return to labour and by reducing the dependency ratio of poor households in Uzbekistan, Vietnam, Indonesia and Bangladesh. Massive out-migration and the resulting remittances have had a strong pro-poor growth in Armenia and Bangladesh – albeit through very different mechanisms.

Annex 1:

Tables

Table 3.1 Comparative Growth Performance

Country	Period	Annual average GDP growth rate	Population growth rate	Per capita GDP growth rate
Armenia	1991–2001	-2.2	-1.0	-1.1
	1991–1993	-17.4	-0.8	-16.8
	1994–2001	5.4	-1.4	6.8
Uzbekistan	1991–2001	0.4	1.9	-1.5
	1991–1996	-2.4	2.1	-4.5
	1997–2001	4.4	1.5	2.9
Vietnam	1985–2001	6.5	1.9	4.6
	1985–1991	4.8	2.3	2.5
	1992–1997	8.7	1.8	6.9
	1998–2001	6.1	1.3	4.8
Indonesia	1970–2000	6.3	1.9	4.4
	1970–1979	7.8	2.4	5.4
	1980–1989	6.4	1.9	4.5
	1990–1996	8.0	1.6	6.4
	1997–2000	-0.7	1.4	-2.1
Bangladesh	1980/81–1999/00	4.3	2.0	2.3
	1980/81–1989/90	3.7	2.1	1.6
	1990/91–1999/00	4.8	1.8	3.0

Sources: Compiled from UNDP (2003a) for Armenia, UNDP (2003b) for Uzbekistan, Weeks et al. (2003) for Vietnam, Mckinley et al. (2003) for Indonesia and Osmani et al. (2003) for Bangladesh.

Table 3.2 Comparative Poverty Trends

Country	Year	Poverty ratio
Armenia	1996	54.7
	1998	49.1
Uzbekistan	1997	23.3
	2001	16.0
Vietnam	1993	58.0
	1998	37.0
Indonesia	1976	68.9
	1981	60.8
	1984	51.1
	1987	46.1
	1990	42.8
	1993	34.0
	1996	32.5
Bangladesh	1983/84	52.3
	1991/92	49.7
	1999/00	39.8

Sources:

Armenia: World Bank (2002) "Armenia Poverty Update", cited in UNDP(2003a), Ch 6, p. 104.

Uzbekistan: UNDP (2003b) Ch. 3, Fig. 3.1.

Vietnam: Huong, Tuan and Minh (2003), Fig 2; cited from Poverty Working Group (1999).

Indonesia: Islam (2002), Fig 2.1.

Bangladesh: Osmani *et al.* (2003).

Table 3.3 Relationship between Growth and Poverty

Country	Period	Annual rate of decline of poverty	Per capita GDP growth rate	Growth elasticity of poverty
(1)	(2)	(3)	(4)	(5) = (3)/(4)
Armenia	1996–1998	5.3	7.9	0.67
Uzbekistan	1997–2001	9.0	2.7	3.33
Vietnam	1993–1998	8.6	6.7	1.28
Indonesia	1976–1984	3.7	5.2	0.71
	1984–1996	3.7	5.5	0.67
Bangladesh	1983/84–1991/92	0.6	1.6	0.38
	1991/92–1999/00	2.4	3.2	0.80

Notes and sources: Column (3) is from constructed from Table 3.2, and column 4 is constructed from information provided in the documents cited under Table 3.1.

Table 4.1 Value-added Index by Sector: Armenia

Year	Total	Agriculture	Industry	Construction	Services
1990	100.0	100.0	100.0	100.0	100.0
1993	46.9	172.3	32.4	10.7	35.4
1998	61.2	149.6	27.4	59.5	78.2
2000	67.8	124.3	33.7	73.8	95.8

Source: Compiled from the information provided in UNDP (2003a).

Table 4.2 Employment Index by Sector: Armenia

Year	Total	Agriculture	Industry	Construction	Services
1990	100.0	100.0	100.0	100.0	100.0
1993	94.7	183.1	73.3	63.3	81.8
1998	82.0	200.1	42.3	29.9	76.0
2000	78.4	199.7	36.3	24.5	73.2

Source: Compiled from the information provided in UNDP (2003a).

Table 4.3 Labour Productivity Index by Sector: Armenia

Year	Total	Agriculture	Industry	Construction	Services
1990	100.0	100.0	100.0	100.0	100.0
1993	49.5	94.1	44.2	16.9	43.3
1998	74.6	74.8	64.7	198.9	102.8
2000	86.5	62.2	92.8	300.8	130.8

Source: Compiled from the information provided in UNDP (2003a).

Table 4.4 Value-added Index by Sector: Uzbekistan

Year	Total	Agriculture	Industry	Construction	Services
1990	100.0	100.0	100.0	100.0	100.0
1995	81.1	79.1	71.3	63.3	94.9
1997	86.8	84.7	69.0	68.6	106.2
2001	102.1	106.4	73.8	65.1	127.9

Source: Compiled from the information provided in UNDP (2003b).

Table 4.5 Employment Index by Sector: Uzbekistan

Year	Total	Agriculture	Industry	Construction	Services
1990	100.0	100.0	100.0	100.0	100.0
1995	106.4	111.5	90.9	75.7	114.8
1997	109.4	113.2	92.7	76.5	120.1
2001	115.0	98.1	96.8	95.9	145.5

Source: Compiled from the information provided in UNDP (2003b).

Table 4.6 Labour Productivity Index by Sector: Uzbekistan

Year	Total	Agriculture	Industry	Construction	Services
1990	100.0	100.0	100.0	100.0	100.0
1995	76.2	70.9	78.4	83.7	82.6
1997	79.3	74.8	74.5	89.7	88.5
2001	88.8	108.5	76.3	67.9	87.9

Source: Compiled from the information provided in UNDP (2003b).

Table 4.7 Value-added Index by Sector: Vietnam

Year	Total	Agriculture	Industry	Services
1993	100.0	100.0	100.0	100.0
1994	108.4	103.4	113.5	109.6
1995	119.2	108.4	128.8	120.3
1996	130.3	113.1	147.5	130.4
1997	141.0	118.0	166.1	140.3
1998	149.0	122.1	180.0	147.5

Source: Compiled from the information provided in Weeks et al. (2003).

Table 4.8 Incremental Output and Employment in Vietnam during 1993–1998

	Total	Agriculture	Industry	Services
Output	100.0	13.0	45.1	41.9
Employment	100.0	47.7	16.3	36.0

Source: Compiled from the information provided in Weeks et al. (2003).

Table 4.9 Labour Productivity Index by Sector: Vietnam

Year	Total	Agriculture	Industry	Services
1993	100.0	100.0	100.0	100.0
1994	106.3	101.5	110.0	105.0
1995	114.0	104.7	122.2	110.4
1996	121.9	107.7	135.2	114.8
1997	129.1	110.8	147.2	117.7
1998	133.6	113.1	154.3	118.1

Source: Compiled from the information provided in Weeks et al. (2003).

Table 4.10 Growth of Productivity and Real Earnings per Worker in Indonesia

	Total	Agriculture	Industry	Trade	Services
Productivity					
1976–1986	3.5	2.3	9.4	2.7	0.5
1986–1997	5.5	3.3	6.2	2.4	2.9
Real Earnings					
1976–1986	5.7	4.6	6.2	2.8	3.1
1986–1997	4.3	4.8	4.8	6.4	4.2

Source: Compiled from the information provided in McKinley et al. (2003).

Table 4.11 Growth of Real Earnings per Worker in Different Periods in Indonesia

	1976–78	1978–82	1982–86	1986–89	1989–97
Total	0.7	9.1	4.8	-1.7	6.6
Agriculture	-1.0	7.9	4.0	0.0	6.6
Manufacturing	8.5	6.8	4.4	-3.1	7.7
Trade	-4.8	7.1	2.3	-0.9	5.6
Services	4.5	5.6	0.0	-0.4	5.9

Source: Compiled from the information provided in McKinley et al. (2003).

Table 4.12 Sectoral Contribution to Growth Acceleration in Bangladesh between 1980s and 1990s
(In 1995/96 prices)

Sector	GDP growth over the 1980s (billion taka)	GDP growth over the 1990s (billion taka)	Incremental GDP growth from 80s to 90s (billion taka)	Sector share in incremental GDP growth (%)
Agriculture	**65.36**	**113.67**	**48.31**	**16.86**
Crop production	40.51	38.42	-1.73	-0.60
Fisheries	11.36	54.57	43.21	15.08
Others	13.49	20.68	7.19	2.51
Industry	**102.36**	**222.33**	**119.97**	**41.86**
Manufacturing	56.22	135.73	79.51	27.75
Large & medium	39.66	97.72	58.12	20.28
Small-scale	16.58	37.99	21.41	7.47
Construction	29.26	68.68	39.42	13.76
Others	16.88	17.92	1.04	0.36
Services	**174.05**	**292.33**	**118.28**	**41.28**
Total GDP	**341.77**	**628.33**	**286.56**	**100.00**

Notes:
(1)1980s refer to the nine-year period from the triennium 1979/80–1981/82 to the triennium 1988/89–1990/91; 1990s refer to the nine-year period from the triennium 1988/89–1990/91 to the triennium 1997/98–1999/00.
(2)GDP growth refers to the difference in the average annual GDP of the two terminal triennia of a period.
(3)Acceleration in GDP growth refers to the difference in the GDP growth of the two periods – 1980s and 1990s.

Source: Osmani et al. (2003).

Table 4.13 Sources of Demand Stimulus to Growth Acceleration in Bangladesh in the 1990s
(Figures are in billion taka at constant 1995/96 prices)

Year	Crop Production		Readymade Garments		Foreign Remittance	
	Value-added	Excess over 86/87–88/89	Value-added	Excess over 86/87–88/89	Value	Excess over 86/87–88/89
1986/87–1988/89	215.49	–	9.37	–	36.10	–
1989/90	241.18	25.69	–	–	33.76	-2.34
1990/91	243.21	27.72	–	–	32.68	-3.42
1991/92	245.91	30.42	8.46	-0.91	37.66	1.57
1992/93	248.29	32.80	13.07	3.69	43.04.	6.94
1993/94	244.17	28.68	20.39	11.01	48.74	12.64
1994/95	235.82	20.33	–	–	50.20	14.10
1995/96	239.93	24.44	43.43	34.06	49.70	13.60
1996/97	255.37	39.88	–	–	61.10	25.00
1997/98	258.06	42.57	35.26	25.89	63.87	27.78
Average annual stimulus in the 1990s	**---**	**30.28**	**---**	**14.75**	**---**	**10.65**

Source: Osmani et al. (2003)

Table 4.14 Returns to Labour by Mode and Sector of Employment and by Poverty Status in Rural Areas of Bangladesh: 1999/00
(Taka per day per worker)

Poverty Status	Farm		Non-Farm		
	Self-employment	Casual wage labour	Casual wage labour	Self-employment	Salaried wage labour
Extreme Poor	16.43	30.15	40.53	38.47	56.10
Moderate Poor	25.76	35.93	49.93	65.60	71.38
Moderate Non-Poor	36.07	35.70	57.16	85.75	85.85
Rich Non-Poor	47.73	37.39	72.42	239.58	125.30
All Poor	22.75	33.33	45.70	57.22	63.75
All Non-Poor	40.51	36.71	61.10	157.68	107.28
All Households	**33.15**	**33.85**	**51.98**	**116.08**	**96.29**

Source: Osmani et al. (2003).

Table 4.15 Returns to Labour and the Extent of Involvement in High-Productivity Activities by Different Income Groups: Rural Bangladesh 1999/00

Description of Activities	Productivity of Time (Tk/hour)			Fraction of Time Allocated to Each Activity (%)		
	Moderate Non-Poor	Moderate Poor	Extreme Poor	Moderate Non-Poor	Moderate Poor	Extreme Poor
Other Trade	12.22	10.09	7.28	26.79	25.34	8.58
Road Transport	10.34	8.54	7.40	10.13	17.87	10.64
Fishery	18.12	9.60	8.84	6.71	8.52	2.42
Food Processing	10.36	7.80	4.28	5.50	3.89	2.02
Construction	10.27	8.99	8.93	5.40	6.45	3.57
Educational Services	13.65	13.72	8.71	5.23	2.75	1.00
Cloth Production	8.50	7.55	6.52	5.05	5.09	4.40
Health & Social Welfare	9.90	6.91	4.31	4.71	1.84	1.51
Furniture & Misc. Mfg	13.21	10.34	6.95	4.48	1.09	2.80
Hotel/Restaurant	7.21	6.75	5.77	4.08	2.49	1.71
Ready-Made Garments	10.53	7.90	7.40	3.95	4.17	1.64
Public Administration	13.22	11.98	8.60	2.99	2.56	0.95
Marine Transport	10.20	6.83	7.34	1.73	1.23	1.67
Petty Trading & Repair Srvc	9.77	11.01	6.51	1.54	0.87	0.56
Wood Products	14.01	11.83	10.40	1.42	1.15	0.77

Source: Osmani et al. (2003)

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Glossary

Disguised underemployment:

The phenomenon in which some people are not working to the full extent they can, but it is not visible because they may be working the whole day at a low intensity of work. This happens especially in backward agrarian communities in which all the adult family members of a household work on a small family farm, sharing the work amongst themselves.

Dutch disease:

The term was coined to describe the difficulties the Dutch economy faced after the discovery of North Sea oil in the 1960s. The term is now used more generally to describe the paradox that the discovery of an exportable natural resource or the sudden increase in the price of an export commodity can cause problem for the overall economy in terms of lost production and employment even as export earnings go up.

Elasticity factor:

The contribution that the growth process makes to poverty reduction by generating a particular structure of production (defined by composition of output and choice of technique of production), because the structure of production has a bearing on the opportunities for employment creation and hence on poverty reduction.

Employment:

Any kind of activity for which a person either receives wages – either in public or private sector – or earns some income, in cash or kind, by working in enterprises (in any sector of the economy) owned either by themselves or their family.

Employment nexus:

Refers to the idea that economic growth affects poverty mainly through the creation of productive employment for the poor,

because labour power is the most important asset possessed by the poor.

Growth elasticity of poverty:
The rate at which poverty declines in response to one per cent growth in per capita income. It shows the responsiveness of poverty to growth. For any given rate of growth, the rate of poverty reduction will be faster the higher the value of growth elasticity of poverty.

Growth factor:
The contribution that economic growth makes to poverty reduction by increasing the potential for creating new output and thus employment opportunities.

Integrability factor:
The extent to which the poor are able to integrate themselves with the growth process by seizing the opportunities for productive employment opened up by economic growth.

Lewisian transition:
The stage of development of an economy at which it is fast exhausting its surplus labour, so that industrialisation can only proceed by employing labour at steadily rising wages.

Non-tradables:
The goods and services that are not worth either exporting to foreign countries or importing from abroad, because it is not profitable to do so – what is produced at home must be consumed at home and vice versa.

Nurksean theory of balanced growth:
The idea, first proposed by Ragnar Nurkse, that at the early stage of development an economy must strive to develop a large number of economic sectors at the same time in a balanced manner instead of concentrating on one or two sectors.

Open underemployment:

People working less than full time – working for either a part of the day or a part of the year or both.

Poverty line:

The level of income below which a person is considered poor. In developing countries, this line is usually derived by estimating the amount of income necessary for meeting the minimum nutritional requirements for a healthy active life and some essential non-food needs such as housing, clothing, healthcare, etc.

Production possibility frontier:

Indicates the maximum amount of goods and services an economy can produce with the given technology and the given amounts of factors of production (land, labour, capital and entrepreneurial capacity) available at any moment in time.

Reservation wage:

The minimum wage at which a person would be willing to work in paid employment.

Return to labour:

Refers to the wage rate in the case of wage employment. In the case of self-employment, it means total income earned from one's enterprise minus all costs except cost of own labour.

Surplus labour:

A situation characterised by widespread disguised underemployment i.e., people are apparently working full time but actually working at less than full intensity by sharing work amongst themselves. In this situation, some of the workers may be regarded as surplus in the sense that production will not suffer if they are withdrawn from work because the remaining workers will then work at greater intensity.

Terms of trade:

The rate at which the goods and services of one country (or sector) are exchanged for goods and services of another country (or sector). Improvement in the terms of trade for some goods indicates higher earnings for the producers of those goods, other things remaining the same. The converse is true for an adverse movement in the terms of trade.

Tradables:

Goods and services that are worth either exporting to foreign countries (exportables) or importing from other countries (importables).

Underemployment:

People working less than full time – either openly by working for only a part of the day or a part of the year, or in a disguised manner by working apparently for full time but actually working at low intensity by sharing work with others.

Acronyms

CIS:	Commonwealth of Independent Socialist (countries)
CMEA:	Council for Mutual Economic Assistance
GDP:	Gross Domestic Product
HES:	Household Expenditure Survey
ILO:	International Labour Organisation
LFS:	Labour Force Survey
OPEC:	Organisation of Petroleum Exporting Countries
PKSF:	*Palli* (Rural) *Karma* (Employment) *Shahayak* (Facilitator) Foundation
RNF:	Rural Non Farm (sector)
Sida:	Swedish International Development Cooperation Agency
SME:	Small and Medium Enterprise
UNDP:	United Nations Development Programme
USD:	United States dollar

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