

II LESSONS FROM THE RURAL TRANSFORMATION

Developing Asia as a whole has made remarkable progress since the food crisis years of the 1960s. Initiated by the green revolution, there have been substantial gains in food security, poverty reduction, and per capita incomes. To illustrate, the following dramatic changes occurred between 1970 and 1995:

- Although human fertility declined almost universally, Asia's population increased by 60% with the addition of over one billion people.
- But cereal production almost doubled. One of the most remarkable aspects of the rural transformation was that nearly all the additional cereal production was obtained from a doubling of yields. The cereal area harvested barely changed, increasing only 4%. In other words, had cereal yields stagnated at the levels prevailing in 1970, it would now take twice the crop area to produce the same amount of cereal output in developing Asia.
- Hence, instead of widespread famine, food availability (measured as calories available per person per day) increased by 24%.
- And, driven increasingly by urban-industrial growth from the 1980s onwards and by growth in the rural nonfarm economy, incomes (measured as per capita GDP) increased by 190%.
- These changes also had a profound impact on poverty. In 1975, nearly three out of every five Asians lived in poverty, but by 1995 this ratio had fallen to less than

8 Rural Asia: Beyond the Green Revolution

one in three. The absolute number of poor declined by 28%, from 1,149 million in 1975 to 824 million in 1995. These reductions in poverty would have been even more impressive if population growth had been slower.

As shown in Tables 1 and 2, these impressive gains mask considerable diversity of experience among countries. While some countries, particularly in Southeast Asia, have roared ahead from poverty to middle income within a mere three decades, others in South Asia have lagged behind. Even within countries that have done well in aggregate, the gains have not been shared equally; many rural households, disadvantaged groups and resource-poor areas have been left far behind. For Asia as a whole, an intolerable number of rural people still live in poverty. Women bear the maximum brunt of poverty and female-headed households are among the poorest. There has also been serious environmental degradation in many areas. Some of this has been in the green-revolution areas and is associated with the misuse of modern farming inputs. But much of the environmental degradation, particularly soil degradation and deforestation, has been concentrated in more backward areas that did not benefit from the green revolution. In these cases the problem was inadequate agricultural intensification, so that yield growth failed to keep up with population growth.

In thinking about approaches for achieving strategies that will improve the overall quality of life in rural Asia, it is useful to begin with a conceptual framework showing how the three goals of the critical triangle are impacted by government policies and strategies (Figure 2). Outcomes for growth, poverty reduction, and environmental sustainability are determined by the private and collective decisions of millions of rural people. They make decisions every day about agricultural and rural nonfarm production that affect incomes, employment, wages, food prices, and the distribution of land in rural areas. These decisions in turn are affected by weather and prior decisions about private investments in farm and rural

Table 1. Indicators of Change in Asia, 1970 to 1995

Indicator	India	Other S. Asia ^a	P R C ^b	Southeast Asia ^c	Developing Asia
Population (millions)					
1970	554.9	156.2	834.6	204.4	1750.2
1995	929.0	293.9	1226.3	343.7	2792.9
% Change	67.4	88.2	46.9	68.2	59.6
Cereal Production (million metric tons)					
1970	92.8	25.4	161.1	33.8	313.2
1995	174.6	48.1	353.3	73.6	649.6
% Change	88.1	89.3	119.3	117.8	107.4
Per Capita Income (US \$/Year)					
1970	241.0	187.0	91.0	351.0	177.0
1995	439.0	299.0	473.0	1027.0	512.0
% Change	82.2	60.0	419.8	192.6	189.3
Calorie Consumption (Kilocalories/person/day)					
1970	2083	2184	2019	1945	2045
1995	2388	2274	2697	2596	2537
% Change	14.6	4.1	33.5	33.5	24.1
Cereal Area Harvested (million hectares)					
1970	100.4	21.3	91.1	25.0	237.7
1995	100.2	26.0	88.2	32.9	247.3
% Change	-0.2	22.0	-3.2	31.6	4.0
Cereal Yield (t/ha)					
1970	0.925	1.197	1.769	1.352	1.317
1995	1.743	1.846	4.007	2.237	2.627
% Change	88.4	54.2	126.5	65.6	99.5

Notes :

^a Bangladesh, Bhutan, Nepal, Pakistan, and Sri Lanka

^b People's Republic of China

^c Cambodia, Indonesia, Lao People's Democratic Republic (PDR), Malaysia, Myanmar, Philippines, Thailand, and Viet Nam

Sources: Population: FAOSTAT at <http://faostat.fao.org>

Cereal Production, Area Harvested, Cereal Yield: FAOSTAT at <http://faostat.fao.org>

Updated June 1998, Accessed September 1998.

Calorie Consumption: FAOSTAT at <http://faostat.fao.org>

Per capita Income: World Bank. 1998. The World Development Indicators 1998 CD-ROM. Washington, D.C.: World Bank.

nonfarm businesses. Government impacts on the system in three major ways. First, it invests in rural people (health and education), in rural infrastructure (roads, electricity, communications, irrigation, etc.), and in agricultural research and extension, which in turn impact on private investment

10 Rural Asia: Beyond the Green Revolution

Table 2. Poverty Changes in Asia, 1975 to 1990s

	South Asia ^a	PRC ^b	Southeast ^c Asia	Developing Asia
Poverty (millions)				
1975	472.2	568.9	108.1	1149.2
1990s	514.7	269.3	40.2	824.2
Poverty (percent)				
1975	59.1	59.5	52.9	58.7
1990s	43.1	22.2	11.5	29.9

^a India, Bangladesh, Bhutan, Nepal, Pakistan, and Sri Lanka

^b People's Republic of China

^c Cambodia, Indonesia, Lao Peoples Democratic Republic (PDR), Malaysia, Myanmar, Philippines, Thailand, and Viet Nam

Sources and Notes: The benchmark is the international poverty line, US\$1 per day (Purchasing Power Parity, 1985 dollars). Data for the PRC, 1978, are for rural areas only. Data for South Asia, 1975, are based on estimates derived from similar trends across different national poverty line estimates. Data for Southeast Asia and the PRC, 1990s, are for 1995, while those for South Asia are for 1993.

Ahuja, V., B. Bidani, F. Ferreira, and M. Walton. 1997. *Everyone's Miracle? Revisiting Poverty and Inequality in East Asia*. Washington, DC: The World Bank.

World Bank. 1996. *Poverty Reduction and the World Bank: Progress and Challenges in the 1990s*. Washington, D.C.: The World Bank.

and production in the farm and nonfarm sectors. Second, government sets policies about prices, land ownership, nonfarm activity, and credit availability and costs, which again impact on private investment and production in the farm and nonfarm sectors and also on labor, land, and agricultural markets and income determination. Third, government determines the type and effectiveness of public institutions that implement its policies and investment strategies. These institutions act as a filter that may facilitate or impede the effective implementation of government strategies.

The role of institutions is crucial in this regard. Even well-conceived strategies and policies will not achieve their desired goals if the institutions that are to implement the strategies are inefficient. The impact of well-functioning institutions becomes even more crucial when these institutions interact with markets and help translate government policies for the benefit of the markets and the private sector. The interaction of institutions and markets helps determine the outcome of crucial public investment. For example, access to resources

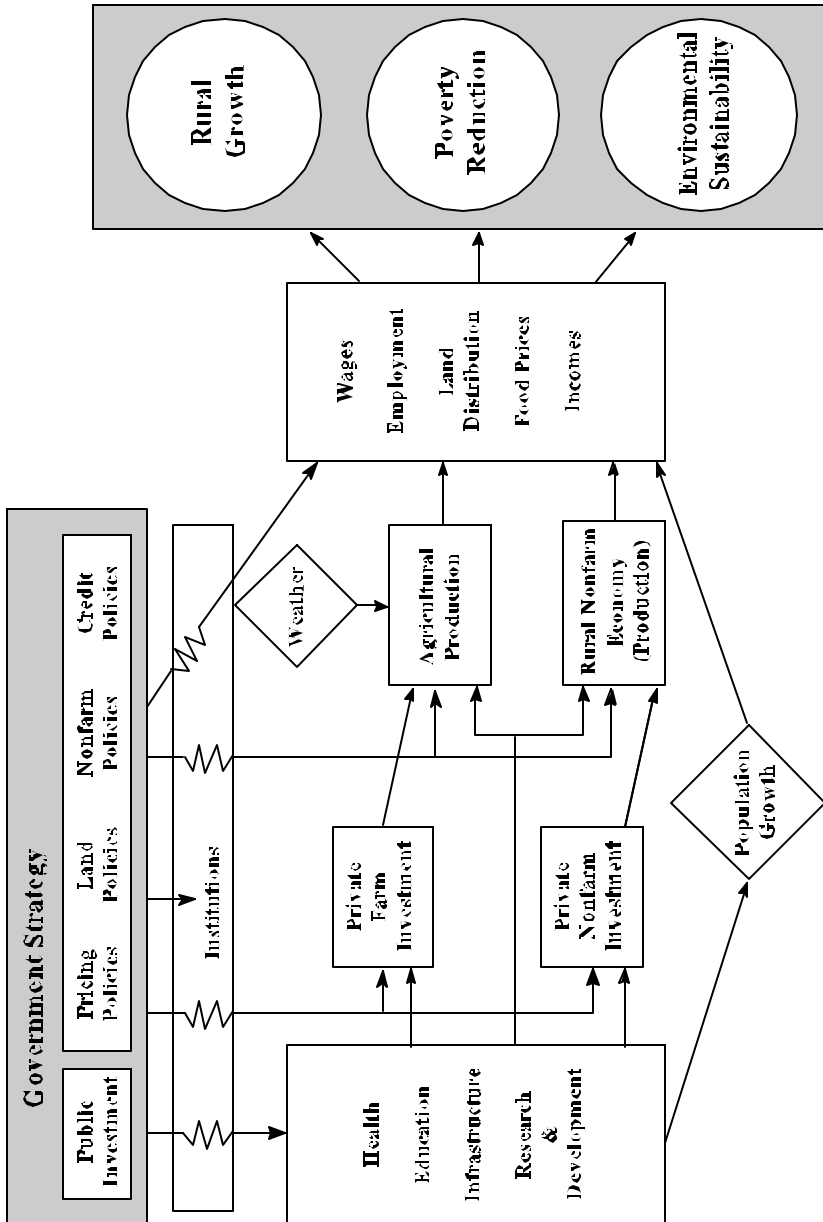


Figure 2. Impacts of Government Policies on Growth, Poverty, and the Environment

12 Rural Asia: Beyond the Green Revolution

and technology, the benefits of health and education services, and ultimately the distribution of production gains will be influenced by how well institutions function and how they interact with markets.

The final link in the system is population growth. Population growth helps determine the consequences of agricultural and rural nonfarm production, and thus the possibilities for achieving growth that is pro-poor and environmentally sustainable. Rural population growth exerts a downward pressure on wages, farm sizes, and per capita incomes and hence can contribute to worsening poverty and environmental degradation. Technological change in agriculture that raises labor productivity can offset part or all of these negative impacts, but only if labor productivity grows faster than the agricultural labor force. The green revolution was successful in achieving this in many areas, but in some areas population grew faster so the welfare of the poor stagnated or worsened despite gains in agricultural productivity.

Government investments in health, education, and rural infrastructure have an important bearing on fertility and death rates and rural-urban migration and hence on the growth of the rural population. These kinds of investments are often needed in addition to technological change in agriculture in order to resolve rural poverty problems. With declining population growth rates, a demographic transition has occurred in much of Asia, particularly East Asia. With declining fertility rates, the number of young children declines and the ratio of workers to dependents increases. This results in a beneficial impact on growth and per capita incomes even if labor productivity does not increase, and the faster the demographic transition the greater the beneficial impact.

Although not shown in Figure 2, the levels of achievement of growth, poverty reduction, and environmental sustainability feed back over time to influence future population growth rates, private investment, and production in the farm and nonfarm sectors, and even on government strategies themselves.

Several major clusters of lessons emerge from the Rural Asia Study that can form the basis for formulating strategies that will shape the future course of development, both economic and human, in rural Asia. These lessons can be summarized as follows:

- Agricultural growth is a prerequisite for economic development in general and rural development in particular.
- To reduce poverty and improve quality of life in rural areas, agricultural growth must be both pro-poor and environmentally sustainable.
- Promoting the growth of the rural nonfarm economy will greatly enhance the pace of rural development.
- Efficient rural financial markets play a key role in promoting rural development.
- It is necessary to ensure effective institutions for rural development.
- To improve the overall quality of life in rural areas it is necessary to go beyond growth, poverty, and environmental considerations and directly address specific concerns of particular relevance to rural Asia.

Each of these is discussed in turn.

IMPORTANCE OF AGRICULTURAL GROWTH

Historically, all the successfully transforming economies in Asia (except single-city economies like Singapore and Hong Kong, China) enjoyed successful agricultural revolutions prior to their industrialization. Most Asian countries began as predominantly agrarian economies in which the agricultural sector accounted for the lion's share of national income, employment, and export earnings. After independence, most Asian countries depended heavily on export crops and inherited a stagnant, low-productivity food-crop sector. Coping

14 Rural Asia: Beyond the Green Revolution

with the twin challenges of low and unstable prices for their exports and a growing inability to feed their populations was the key challenge for the newly formed governments. With uncertain foreign exchange earnings and limited ability to pay for food imports, increasing domestic food production to assure food security was a priority. Until the food problem was solved, the development of the nonagricultural sector was necessarily constrained.

A technologically driven transformation of the agricultural sector was a necessary condition for national economic growth. An agricultural revolution was needed not only to overcome the food constraint, but also to provide an engine of growth on the scale required to initiate the transformation of the national economy. The nonagricultural economy was typically too small to play this role, even if it could have depended on cheap food imports.

Rapid agricultural growth contributed to the economic transformation in a number of important ways. It supplied basic foods, raw materials for agro-industry, and exports and freed up foreign exchange for the importation of strategic industrial and capital goods. It released labor and capital (in the form of rural savings and taxes) to the nonfarm sector. It generated enormous purchasing power among the rural population for nonfood consumer goods and services and therefore supported rapid growth in services and trade in rural areas, and provided a nascent market for an emerging manufacturing sector. It reduced poverty by increasing labor productivity and employment in rural areas, by generating more remunerative opportunities for rural-urban migration, and by lowering food prices for all.

While an agricultural revolution was necessary during the early stages of the transformation, not all the countries that had successful agricultural revolutions went on to industrialize and grow rapidly. Several other key factors are also needed to enable countries to successfully convert agricultural growth into national economic growth. Among these requirements are the following:

- Agricultural growth must be equitable, so that it puts increased purchasing power into the hands of the rural masses and not just a privileged few. Although the green-revolution technology was, in and of itself, basically scale-neutral, access to rural resources—particularly land—has been a key determinant of the equitability of agricultural growth.
- A well-developed infrastructure is required to foster the links between the farm and nonagricultural sectors.
- As agriculture develops and food security diminishes as a major constraint, countries need to move quickly toward market liberalization and pro-trade and pro-investment policies. Protecting domestic industries and overvaluing exchange rates penalize agricultural growth and impede the development of competitive industries that should be at the forefront of export-led growth. They also shield a country from the new technologies that are embedded in many imports and that have the potential to raise economic efficiency and competitiveness significantly.
- Strong rural financial institutions are required to mobilize resources and allocate them efficiently to promote a wide array of economic activities. As agriculture develops, rural nonfarm activities become more dynamic. Both farm and nonfarm enterprises and households demand a broad range of financial services, including savings facilities, not just credit.
- Investment in human capital and especially in rural education is necessary to ensure continued productivity increases in agriculture and to allow rural workers to be more readily absorbed in nonagriculture if necessary.

The earliest emerging economies in Asia were successful in meeting these requirements. Several (Japan; Taipei, China; and the Republic of Korea) had major land reform that led to equitable agricultural growth; they also invested heavily in rural infrastructure and rural education and pursued pro-

growth macroeconomic and trade policies. The People's Republic of China (PRC) had a successful agricultural revolution from a technical perspective, but was only able to take full advantage of this once it moved to the "household responsibility system," which released labor to the nonagricultural sector and effectively put huge amounts of additional purchasing power into the hands of the rural masses. India and the Philippines have both had successful agricultural revolutions, but have been slow to convert these into rapid economic growth. In India, agricultural growth has been relatively equitable and rural infrastructure is well developed, but the country has only recently begun to liberalize its domestic markets and to move to pro-growth macro and trade policies. The results are encouraging, with national income now growing at more than twice the rate of recent decades. In the Philippines, on the other hand, agricultural growth has been highly inequitable, due mainly to the skewed distribution of landholdings, and rural infrastructure remains weak. Despite pro-growth macro and trade policies, overall performance in growth and poverty reduction has been disappointing because of the unequal distribution of wealth.

As the economic transformation of an economy advances, agriculture's share in national income falls quite rapidly and its importance for national economic growth diminishes. The nonagricultural sector becomes the primary engine of growth and is no longer so dependent on resource flows from agriculture or on agriculture's demand linkages. The economic problem is then to absorb workers released from agriculture at a sufficiently rapid rate to stop agricultural productivity (and hence incomes) from lagging too far behind the levels achieved in the nonagricultural sector. Typically, agriculture's share of total employment falls much more slowly than its share of national income, with the inevitable result that labor productivity, and hence per capita incomes, in agriculture lag behind the nonagricultural sector.

However, even though agriculture's role in national economic growth changes as the transformation proceeds, it should not be viewed as a "sunset industry". Its importance

only declines relative to other sectors; total agricultural output continues to grow steadily. Indeed, for many Asian countries, it must continue to grow if they are to continue to meet their food needs. Total production of livestock and horticultural products has to grow even faster than the production of cereals to meet changing consumer demands as incomes rise. Total agricultural employment also increases until late in the economic transformation and in most Asian countries there are more workers employed in agriculture today than at any previous time in their history.

Agricultural growth also underpins much of the growth and employment in the rural nonfarm sector, because of the importance of its demand for farm inputs, marketing services, and agro-industry and because farm income accounts for the largest share of total rural purchasing power for nonfood goods and services. If agricultural growth were to slow down, it could jeopardize national food security and increase child malnutrition in many countries, cause significant new unemployment and poverty (particularly in agriculture and the rural nonfarm economy), and slow nonagricultural growth.

Agricultural growth must be accelerated in much of Asia. For many countries this will require reversal of recent slowdowns in their agricultural growth rates. Although much of the agricultural sector is private, a key lesson is that the required growth cannot be left to the magic of the marketplace alone. While the private sector has been playing an increasingly important role, the public sector must continue to play a key role in providing what have traditionally been “public goods” and this requires deliberate public interventions and appropriate and effective institutions to implement them. The most important that are necessary for agricultural growth can be grouped as follows:

- *Innovation.* Both public and private investments in agricultural research and extension are necessary to provide a continuous stream of yield-enhancing technologies that can be profitably adopted by

farmers. The green revolution has run its course; new scientific breakthroughs, such as may be offered by biotechnology, are now required to raise yield potentials. This is especially important because land and water are increasingly scarce in Asia and future agricultural growth will increasingly have to come from yield-enhancing technologies on already cropped land.

- *Infrastructure.* Investments are required in a) *physical* infrastructure, especially irrigation, roads and electricity (the importance of farm-to-market roads in determining marketing margins, agricultural profitability, and farm diversification cannot be overemphasized); and b) *human* infrastructure, especially education, nutrition, and health of rural people to increase their well-being and productivity.
- *Inputs.* Policies and investments must assure that farmers have access to a) key farm inputs (irrigation water, fertilizers, seeds, etc.), b) efficient rural financial markets that can provide them with a broad range of financial services at minimal transaction costs, and c) land through efficient sale and lease markets. Government's role in these cases is primarily to create an enabling environment for the private sector to function efficiently.
- *Institutions.* It is essential to ensure the securing of property rights to land and, where needed, give property rights to women. This will encourage farmers to make long-term investments in land intensification and conservation. It is also necessary to increase farmers' access to long-term credit to finance those investments. Public institutions that provide key public goods and services must be strengthened so that they perform efficiently and are accountable to the people they are intended to serve.
- *Incentives.* Nondiscriminatory price policies for agriculture, a progressive shift towards market

liberalization policies, including the removal of restrictions on imports and exports, and appropriate risk management options are all needed.

MAKING AGRICULTURAL GROWTH PRO-POOR AND ENVIRONMENTALLY SUSTAINABLE

Concerns about the adverse impacts of modern agricultural growth on the poor and on the environment have been widespread since the green revolution first began in the 1960s. The key lesson that emerges from past experience is that to be pro-poor, agricultural growth must be broad-based, involving small and medium-sized farms as well as large, women farmers as well as men, and backward rainfed areas as well as irrigated and high-potential rainfed areas. To ensure such broad-based agricultural development, policymakers need to

- ensure more equitable access to land for both men and women farmers. This may require land reform where appropriate, the introduction of efficient markets for sale and lease of land if possible, and the provision of secure ownership and tenancy rights as needed;
- ensure that agricultural research focuses on the problems of small farmers as well as large, and that to the extent possible, new technologies are scale-neutral and can be profitably adopted by farms of all sizes;
- invest in clean water, nutrition programs, and human capital, such as rural education, to improve the productivity of rural people, especially poor people and women, and to increase their opportunities for gainful employment;
- promote a wide array of viable and sustainable rural financial institutions that effectively and efficiently

meet the demand for financial services and that are accessible to the broadest possible range of rural residents;

- ensure that agricultural extension and education, as well as inputs and credit, reach women farmers and address gender-based constraints in land ownership and access to credit, training, markets, and decision-making;
- ensure the participation of all rural stakeholders, not just the rich and powerful, in setting priorities for public investments that they are expected to benefit from or to help finance;
- give higher priority to backward areas with high population densities; and
- avoid subsidizing inputs, as such policies contribute to overuse and waste, and lead to their concentration among the rich.

The shift to more intensive farming systems has helped relieve the pressure on the land base and slowed the conversion of forest, hillsides, and other environmentally fragile lands to cropping. But it has also brought new environmental problems through inappropriate management practices in the use of irrigation water, fertilizers, and pesticides. These problems have often been worsened by inappropriate policies that subsidized inputs, encouraging farmers to use these inputs in excess of economically and environmentally appropriate levels. A lot of recent environmental degradation in rural areas has little to do with modern farming systems, however. In particular, a great deal of deforestation and land degradation has occurred in backward areas that did not benefit from the green revolution and was driven by insufficient agricultural intensification relative to population growth.

Policy interventions that seek to overcome environmental problems in agriculture need to be based on a proper understanding of *why* farmers degrade their environment. Why, for example, do farmers often seem to overgraze rangeland, deplete soil nutrients and organic matter, and

overuse irrigation water, pesticides, and nitrogen, when these actions cause health problems and reduce future incomes for themselves, their children, and the communities in which they live? The answer lies with the incentives they face. Farmers are not irrational. On the contrary, they maximize income and minimize risk in a dynamic context and often under harsh conditions and serious constraints. They degrade resources when there are good economic and social reasons for doing so, i.e., when the benefits they obtain exceed the perceived costs that they, as individuals, must bear.

If the management of natural resources is to be improved, these economic and social incentives must be changed in appropriate ways. Several factors impinge on the incentives for managing natural resources. Policymakers can influence these incentives in the following ways:

- Improve the management and regulation of natural resources through institutional reforms and greater devolution of management decisions to resource users or user groups, wherever possible.
- Ensure that farmers have secure property rights over their resources. In the case of common property resources, community management arrangements should be strengthened.
- Establish resource monitoring systems and ensure that those responsible for causing environmental degradation are made accountable through appropriate taxes and charges.
- Correct price distortions that encourage excessive use of inputs including water and electricity. It is also necessary to educate farmers about the environmental effects of their actions, including “externality” problems where the consequences of environmental degradation are borne by people other than those who cause the problem.
- Ensure that agricultural research gives more attention to broader aspects of natural resource management, including the problems of resource-poor areas.

Particular attention must be paid to increasing yields in resource-poor regions, to sustainable pest control, to soil and plant nutrient problems, and to genetic erosion within major food crops.

In order to achieve strategies that attain the multiple goals of sustainable growth, poverty reduction, and improved quality of life, it is not sufficient to target single goals of the critical triangle irrespective of their consequences for other goals. The aim should be to achieve a high degree of complementarity among all three goals. For example, greater investment in the health and education of rural people, especially women and girls, and in population control, improved performance by public institutions, more secure property rights over resources, and more open and liberalized markets should contribute to growth as well as help poor people and improve the quality of life for all (See Box 1). They should also reduce environmental degradation. Strengthening the management of common property resources would not only help reduce poverty and environmental degradation but would also increase the productivity of these resources and hence contribute to growth.

But there could also be tradeoffs between goals. For example, recommendations for public investment in agricultural research and extension have different and potentially competing objectives when focused on different goals. To achieve more growth, agricultural research is best focused on the development and spread of yield-enhancing technologies in irrigated and high-potential rainfed areas where the returns to research have historically been the highest. To reduce poverty and environmental degradation, on the other hand, more research should be focused on rainfed areas, including many with low potential. But research for these areas is typically more complex and costly, and the net returns are less certain and more difficult to demonstrate. Given that funding for research is scarce, research institutions naturally prefer to work on the problems of irrigated and high-potential rainfed areas where they can expect to have a larger impact.

Part of the answer to this tradeoff is to allow the private sector to do more of the research for irrigated and high-potential areas where returns to investment are high, and to redirect funding for public research to the problems of poorer people and regions.

Similar tradeoffs can arise in targeting more resources for infrastructure investment in backward areas. Although this can be very beneficial to the poor and can reduce some of the worst environmental degradation, it may well involve some tradeoff with growth. An equitable distribution of land has traditionally been good for both growth and poverty reduction. This is because small farms have proved more efficient than large farms in much of Asia. But in some countries farm sizes are now becoming so small that some consolidation may soon be necessary to enhance efficiency and growth. This could lead to another example where more growth is achieved at the expense of the poor (See Box 2).

Pricing policies can have mixed outcomes for the three goals of the critical triangle. Liberalized markets can be good for growth and poverty reduction, but may have unfavorable impacts on backward areas with poor infrastructure because of their higher transport costs. Proper pricing of key inputs like water and fertilizer is good for growth and the environment in most areas, but again, backward regions facing high transport costs can suffer. Reduced access to key inputs like fertilizers may worsen poverty and soil fertility problems in backward regions. There has been a tendency in many countries in Asia to keep output prices depressed, particularly to maintain low food prices for urban consumers. While price stabilization policies do serve a purpose in reducing risk, keeping output prices low acts as a disincentive and results in loss of efficiency at the farm level. Setting the right priorities and envisaging the various outcomes of any policy become crucial.

The purpose of highlighting potential tradeoffs is not to argue against any of the three goals, but to help show why strategies that target multiple goals are not always easy to achieve. Nevertheless, the available evidence clearly suggests that most Asian countries could do much better in reducing

Box 1 – The Role of Education and Health Care in Improving Quality of Life in Rural Asia

Education and health care are two basic factors that contribute to quality of life. Education provides a way for individuals to participate fully in the development of society; it allows a more adaptable and productive work force that can adjust to technological change. Similarly, good health allows individuals to participate fully in economic activities and permits an active and reliable work force. Hence, education and health services are important components of government assistance in promoting development and welfare of rural populations in Asia. Indeed, the lack of such assistance in some countries is said to have compromised the full benefits of the green revolution. Overall, the evidence shows that despite marked improvements over time in the nature and availability of both health and education services and facilities in Asia, the benefits are enjoyed disproportionately in urban areas; rural populations are being left behind.

In education, there have been major changes in Asia over the past few decades. Primary school enrollments have risen dramatically; there has also been considerable growth in secondary and tertiary education. East Asian countries have the best record of educational attainment; this has contributed greatly to the exceptionally high income growth in these countries. The lowest literacy rates occur in South Asia.

Improved health facilities, especially hospitals, and technology, particularly in mass immunization campaigns, have reduced mortality rates in Asia substantially. However, there are marked differences between regions and countries and within countries. The PRC, Sri Lanka, and Viet Nam have made dramatic steps in improving health services by investing in countrywide

(continued next page)

the necessity for such tradeoffs. Where tradeoffs cannot be avoided, however, the answer may have to be some sacrifice in one or more goals, or an increase in the total resources allocated to rural areas (e.g., use additional resources for

Box 1 (continued)

primary health care systems. As with education, South Asia lags, having the major share of the world's malnourished children.

Within countries, there is a general bias toward the provision of government-funded education and health facilities in urban areas, where they can be provided more easily and with more political advantage. The private sector has become increasingly involved in providing services, but again has focused on urban areas.

In rural Asia, education is clearly seen as the key to improving life, for example by enabling access to urban work and attaining social mobility. However, most rural populations have inadequate access to education due to such constraints as distance, costs, gender and social bias, lack of parental motivation, and cultural and language bias in curricula. Lack of teaching quality and poor facilities in rural schools are common additional problems. Local communities and educational institutions are using innovative approaches to raise funds, but with private investment in education growing, public-sector funds thus saved could be reallocated to rural areas.

As with education, health services in rural areas receive relatively less government assistance than in urban areas. There is a need to identify and bring about the use of more cost-effective technologies appropriate for the large rural areas found in most Asian countries. Nongovernment organizations and village health workers are being used in some countries, but the government needs to guide these approaches and to reallocate public health funding to rural areas where the private sector response is inadequate.

Source: Bloom, D. E., P. H. Craig, and P. Malaney. 1999. *The Quality of Life in Rural Asia*. Hong Kong: Oxford University Press.

investment in backward areas rather than cutting investment in high-potential areas).

Box 2 – The Land Reform Debate

Land reform or the lack of it is frequently cited as a factor influencing both agricultural growth and the distribution of its benefits in Asian countries. The striking negative correlation between landholding and poverty has led many analysts to believe that the roots of poverty lie in the structure of landholding. Viable land reform policies are based on land redistribution and/or tenancy reform. Land reform has been advocated on both efficiency and equity grounds.

Land redistribution involves transfer of the control of land from large landholders to landless labor or smallholders. While this process might seem likely to result in loss of farm efficiency, several studies have shown a negative relationship between farm size and yields per hectare, implying that within limits, small is beautiful. For agricultural growth to be equitable, a prerequisite is equitable distribution of land.

Tenancy reform can be effected either by regulation of tenancy contracts or by confiscation of land from the owner to give to the tenant. The present sharecropping system is deemed both inefficient and inequitable: lack of property rights discourages farmers from investing in technologies that conserve and increase long-term productivity growth, while the landlord's share of the

(continued next page)

**TAPPING THE POTENTIAL OF THE RURAL
NONFARM ECONOMY**

The rural nonfarm economy is an extremely important part of rural Asia. It accounts for a large proportion of total rural employment (the range is from 20 to 40 percent) and total rural income (from 25 to 50 percent) in Asia. It is also an important source of income for women, small farmers and landless workers, as well as for the urban poor in rural towns. Formal manufacturing activities only account for a small part

Box 2 (continued)

harvest is generally set at an unfairly high level. However, the system serves to apportion the risk between tenant and landlord, and the latter may provide some inputs and access to credit. Evidence for the inefficiency of sharecropping seems to be conclusive.

Many land reform laws have been enacted. Where political will has been lacking implementation is the problem: land ceilings have been set too high; loopholes are common; tenants have been evicted when legislation has been pending. Data on the effectiveness of reform itself are scarce. What little evidence there is, however, shows that land reform does reduce the rural poverty gap.

East Asian economies have achieved the most significant reforms. Elsewhere, the difficulties of implementation suggest that alternative means of reform be sought, for example, progressive taxation on land and access to credit for land purchase by landless persons.

Source: Rosegrant, M. W., and P. B. R. Hazell. 1999. *Transforming the Rural Asian Economy: The Unfinished Revolution*. Hong Kong: Oxford University Press.

Bloom, D. E., P. H. Craig, and P. Malaney. 1999. *The Quality of Life in Rural Asia*. Hong Kong: Oxford University Press.

of rural nonfarm employment in most Asian countries, typically less than 20 percent. Most rural nonfarm employment arises in service, trade, and household manufacturing activities. These are dominated by small, part-time, mostly family businesses that are highly labor-intensive. These activities depend to a large extent on local and regional demand and tend to grow rapidly in the context of rapid agricultural growth.

Past experience shows that to enhance the growth of the rural nonfarm sector, it is necessary to

- Give high priority to broad-based agricultural growth because this is the most important impetus for most rural nonfarm activity. Equitable and broad-based

agricultural growth is not only desirable for both growth and poverty reduction within agriculture, but the impact is multiplied to provide additional benefits within the rural nonfarm economy (See Box 3).

- Develop rural infrastructure. Villages need to be connected to local towns so that agricultural inputs and outputs can flow freely and so that people can go shopping. Rural towns also need good infrastructure, especially roads, electricity, schools, sewers, water, and communications, in order to attract new firms and to grow. In particular, rural areas must not be allowed to be left behind in the use of modern communications technology to forge links with larger markets. Since the transaction costs of poor infrastructure are borne unequally by the poor, improvements help level the playing field for the most disadvantaged.
- Promote a legal and regulatory environment (e.g., to secure property rights and enforce contracts) that will help to promote trade, commerce, and manufacturing.
- Provide training in relevant technical, entrepreneurial, and management skills. The rural nonfarm economy provides much of its own training through apprenticeship schemes and on-the-job learning, but in an increasingly technical and communications-oriented world, specialized training schemes (e.g., computing, accounting) are needed, including training for women, who dominate many service and trading activities.
- Pursue industrialization policies that foster the development of all kinds of rural nonfarm firms and not just manufacturing. Despite the relatively small importance of manufacturing in rural employment, policymakers have been enamored of this sector; rural industrialization policies have showered manufacturing firms with all kinds of preferential tax, subsidy, licensing, and regulatory benefits, as well as with targeted and subsidized credit and technical assistance programs. Moreover, these policies have typically

avored larger capital-intensive manufacturing firms (the lure of the shiny rice mill or shoe factory), and neglected small labor-intensive firms and informal household manufacturing activities. It is necessary to level the playing field, to revamp rural industrialization policies to a) be more inclusive, perhaps by redefining them as “rural enterprise” policies; and b) to remove all unnecessary subsidies and protective policies that prevent rural firms from becoming competitive in the marketplace.

To help ensure that growth of the rural nonfarm economy is pro-poor, it is necessary to offer training and financial services to all kinds of nonfarm businesses, including small, informal, part-time, home-based and women-headed establishments. Many of these establishments do not have access to credit, especially in their start-up phase, and rural financial markets should be strengthened to ensure that all creditworthy firms do have access to financial services. Targeted and subsidized credit programs have not been effective in achieving this goal (see below). Some rural nonfarm activities contribute to environmental pollution and degradation (e.g., tanneries, silk and cloth dyeing, and charcoal production). To minimize these negative effects, it is necessary to establish and enforce appropriate environmental safeguards. In addition, introducing safer and more efficient technologies in such industries almost always results in lowering pollution as well.

CREATING EFFICIENT RURAL FINANCIAL MARKETS

In order to boost agricultural growth, reduce poverty, and promote equity, governments in most Asian developing countries have intervened to provide assistance to small-scale farmers. A major component of such assistance has been

Box 3 – Linkages Between Agricultural Growth and The Rural Nonfarm Economy

In the process of rural transformation, the expansion of the rural nonfarm economy is one of the most important steps by which agricultural growth generates economic growth. In its early stage of transformation, the nonfarm economy produces mainly regional nontradable goods and is therefore dependent on agricultural production and farm incomes for its demand. The farm sector can contribute to the growth of the nonfarm sector through linkages with production, consumption, and factor markets.

As agriculture grows, it will use more inputs supplied by the nonfarm firms. At the same time, it stimulates forward production linkages in the nonfarm sector by providing raw materials for processing and distribution. Demand for inputs varies across agricultural zones and with technological change. Irrigated agriculture demands considerably more inputs than rain-fed agriculture, while mechanized and animal traction systems require more tools, equipment, and repair services than do hand-hoe cropping systems. Technological change strengthens the linkage as it increases the demand for modern inputs, e.g., improved seeds, fertilizer, and pesticides.

As farm incomes grow, consumption increases; more important, it diversifies into nonfood goods and services, many of which are produced by rural nonfarm firms. The strength of the consumption linkages depends not only on the level of per capita farm income, but also on how that income is distributed. Broad-based agricultural growth involving small and medium-sized farms has the strongest consumption linkages to the rural nonfarm

(continued next page)

massive programs of targeted and subsidized credit through state-owned banks and other programs. Several rationales have been given for such subsidized and targeted credit: that small farmers cannot afford market interest rates, that low real rates of interest are essential for agricultural growth, and that low interest rates can compensate to some extent for the disadvantages faced by smallholders in input and output

Box 3 (continued)

economy, since it allocates larger shares of farmers' incremental income to locally produced goods and services.

Agriculture also affects the rural nonfarm economy through the labor and capital markets. Agricultural wages determine the opportunity cost of labor in the nonfarm sector, while seasonality of labor demand in agriculture affects availability. Nevertheless, wages can increase if the nonfarm economy is expanding due to increased demand and increasing labor productivity. This is a "pull" situation where the nonfarm sector is attracting labor out of the farm sector to better-paying jobs. Therefore, wages in the nonfarm sector will be higher than wages in the agricultural sector.

A converse situation can occur if there is a growing surplus of rural workers that the agricultural sector is unable to absorb at the prevailing wage. Workers are "pushed out" of agriculture into low-productivity work in the rural nonfarm economy. Since the push is from agriculture, farm and nonfarm wages are likely to be the same.

Data from selected Asian countries (Bangladesh, India, Indonesia, Pakistan, Thailand) show a positive relationship between agricultural income and the nonfarm share of total rural employment. Studies of rural areas in Asia estimate regional income multipliers ranging from 1.5 to 2.0: for each dollar increase in agriculture's value added, there is an additional \$0.5 to \$1.0 increase in the value added of the nonfarm sector; 67 to 80 percent of this increment is due to household consumption linkages.

Source: Rosegrant, M. W., and P. B. R. Hazell. 1999. *Transforming the Rural Asian Economy: The Unfinished Revolution*. Hong Kong: Oxford University Press.

markets because of distortions in input and output prices, poor infrastructure, and other factors.

In the 1960s and 1970s such programs may have seemed a justifiable political response to the failure of existing markets to provide efficient sources of credit to meet the demand for funds. Time has shown government credit programs to be hugely expensive, however: their interest rates were not

adequate to cover the true cost of providing the credit. Hence the programs made the institutions providing them highly fragile and financially unsustainable and created a continuing demand for subsidized funds in order for them to continue operations. With their overriding emphasis on credit, the programs failed to mobilize the rural savings that resulted from dynamic and diversified growth in rural areas. Finally, they focused almost exclusively on agriculture and neglected the growing rural nonfarm sector.

Even by their own highly uneconomic standards, government-subsidized credit programs have failed, reaching only a small proportion of their targeted groups—and in general not the poor or women—let alone of the potential market for rural financial services. In most countries the bulk of the subsidized credit has gone to those who need it least: large landholders; most smallholders still continue to suffer from lack of access to institutional financial services. In addition, subsidized credit has proved highly inequitable, because the built-in subsidies are directly proportional to the amount of the loans: large loan, large subsidy; small loan, small subsidy; no loan, no subsidy. Subsidized credit has invited rent-seeking and political manipulation and thus has adversely affected governance of the financial institutions.

It is high time for Asia to shift the emphasis to market-oriented financial services for the rural sector and do away with the subsidized-credit paradigm. Several Asian developing countries, notably in Southeast Asia, have indeed undertaken a paradigm shift to more of a market approach to rural finance, but many have not and are paying the price in the form of costly, poorly performing institutions. There is an urgent need to promote the development of efficient rural financial markets with the institutional capacity to mobilize savings effectively and efficiently, leverage funds in the commercial markets, provide credit based on prudent banking principles in cost-effective ways, reduce their own transaction costs as well as those of their clients, improve management information and accounting systems, and manage risks to expand their services (See Box 4).

The transition to more efficient rural financial markets requires

- an improved policy environment that permits financial institutions to adopt pricing policies based on commercial considerations and eliminates political interventions in their operations;
- creation of an adequate financial infrastructure, including an effective legal and regulatory framework and reliable information systems to reduce information asymmetry in financial markets;
- the rehabilitation or closing down of government-owned agricultural and rural development banks that do not enjoy adequate autonomy and that lack professional managers to improve their services and make them financially viable and sustainable;
- investments in infrastructure and communications to drive down the transaction costs of providing financial services in rural areas; and
- the use by governments of new mandates, incentive structures, and staff training in existing financial institutions to develop their institutional capacity to respond efficiently to market demand: to create a more client-oriented service mentality, promote competition, offer a broader range of financial services including savings accounts, and to serve nonfarm rural people as well as farmers, women as well as men.

There is a need for efficient, cost-effective financial services for the poor, especially for poor women. Because of the unique difficulties of servicing the rural poor, including women, governments will have to continue to assist microfinance institutions in improving their commercial orientation and outreach effectively and efficiently through market-friendly policies. At the same time, other financial institutions should be encouraged to expand their services to the poor where it can be done on a commercial basis.

Box 4 – The paradigm shift in rural finance

A move away from government-subsidized credit programs began in some Asian countries in the early 1980s as a result of the negative evaluations of these programs and the financial drain they imposed, along with the success of some microfinance projects. Microfinance organizations in some countries introduced innovations that reduced lending costs and risks without the collateral normally required by banks; large numbers of poor borrowers had access for the first time to formal financial services.

The paradigm that emerged—the financial market approach—limited the market to financial mediation rather than being a tool to stimulate production, compensate for distortions in other markets, and alleviate poverty. In this paradigm, the fund sources are mainly voluntary savings deposits rather than government and donors; the institutions strive for sustainability, rather than depending on subsidies themselves. The problem of political intrusion is thus removed and real interest rates are charged on loans to borrowers, who are selected based on creditworthiness rather than on their “preferredness”. Borrowers are seen as clients choosing products rather than as beneficiaries of subsidized loans. Evaluation of success in the new paradigm

(continued next page)

ENSURING EFFICIENT INSTITUTIONS FOR RURAL DEVELOPMENT

An important lesson has been that good policies and investments can go sour not because they are poorly conceived, but because the institutions that implement them don't work well. There is a need to reengineer some public institutions, both to improve their performance and to better clarify their roles in a changing world. With the rapid emergence of the private sector in direct rural investment and an increasingly

Box 4 (continued)

is based not on credit impact on beneficiaries, but on the performance of the financial institution in terms of sustainability, breadth and depth of outreach, and quality of services.

Suprisingly, many countries have made little progress in adopting the new paradigm. However, three “flagship” institutions—the Bank for Agriculture and Agricultural Cooperatives (BAAC) in Thailand, the unit desa system of Bank Rakyat Indonesia (BRI-UD), and the Grameen Bank (GB) in Bangladesh—illustrate the possibilities. These institutions each serve millions of rural clients. BAAC is the most successful, having reached about 90 percent of Thailand’s farmers, directly or indirectly, in 1996. All three provide loans: to individuals in the case of BRI-UD, to groups in GB, and to both individuals and groups in BAAC. BRI-UD and BAAC accept savings deposits, while GB has compulsory savings. Of the three, only BRI-UD is subsidy-free and could have reduced its yield on loan portfolio in 1995 from 31.6 percent to 16.3 percent and still have remained independent: the other two institutions need to increase their nominal interest rates to become free of subsidies.

Source: Meyer, R. L., and G. Nagarajan. 1999. *Rural Financial Markets in Asia: Paradigms, Policies, and Performance*. Hong Kong: Oxford University Press.

constrained public-sector capacity, there is a need to reorient and reform public institutions so that their approach is less top-down and market-inhibiting. As agricultural and rural development become more location-specific and decentralized, public institutions must be able to cope with, and respond to, a higher level of farmer and community participation. This will require much greater attention to the processes of governance, devolution, and local capacity building. These issues are discussed in chapter III.

While sufficient investment for rural development is necessary, the institutional context within which this

investment is made will determine to a large extent how effective the investment is and whether it achieves the desired goal. Similarly, the impact and efficiency of policies will also be determined to a large extent by the institutional framework within which the policies are implemented. Institutions can interact positively with policy and it is only through an appropriate link with the institutional framework that proper implementation of policies will be achieved.

Institutions develop as a response to the societies in which they operate and thus will vary with changes in social and cultural norms. These differences notwithstanding, there are common roles that all institutions must play in promoting the goals of rural development, such as providing goods and services of several kinds and enforcing laws, rules, and property rights; these roles do not vary widely from one society to the next. Moreover, because institutions have developed over long periods of time and are heavily influenced by social customs and norms, there is a tendency for institutions to suffer from inertia and to be generally slow to change their structure, practices, and behavior. This is true even when the external environment within which the institutions operate demands such changes. Another manifestation of this problem is that institutions tend to become suboptimal from both an individual and social or community perspective and can impede the process of development through the misuse, misallocation, or waste of scarce resources. Under such circumstances it becomes necessary to ensure change through appropriate intervention and action.

The way in which institutions regard and handle equity issues, especially gender issues, can greatly influence both the design and implementation of policies. For example, if the roles that women are expected to perform in the work force are limited by social and cultural beliefs, such a perspective will greatly influence policies to generate employment. Thus it becomes very important to change institutional views regarding gender roles if rural employment for women is to be broadened. It is necessary to develop an institutional framework for gender and to seek ways to achieve gender equity and empowerment.

Without these, the institutionalized structures that produce inequality and poor outcomes for women are unlikely to change. Autonomy and self-determination are goods that should be available to all, regardless of gender. In addition, access to education and jobs is not simply a means to better life outcomes, but is part of the very definition of a high quality of life.

There is a close relationship between the political framework and system and the functioning of institutions. Political systems and structures help shape the incentives for policymakers that will ultimately help influence the design of policy and its impact on development and the quality of life. There is also a close link between political institutions and economic governance. The quality and delivery of goods and services will be determined by the ways in which these services are provided. The trend toward decentralization—the reassignment of at least some authority and functions from the central government to lower levels such as provincial and local governments—has been a deliberate move to help improve economic governance. By being more democratic and more suited to the needs of local communities and individual stakeholders, decentralized structures are expected to be more efficient and transparent.

Decentralization involves the transfer of political, administrative, and financial functions and this requires major institutional change in the way the economy operates. Decentralization must be accompanied by capacity building at the local level if it is to succeed and achieve its desired objectives. It is not an alternative to central government functions, which must also be suitably altered, but a complement to achieve greater efficiency and equity. It requires much greater efficiency and coordination and necessitates more involvement of communities, civil society, nongovernment organizations (NGOs) and the private sector (See Box 5).

One of the main features of social organizations and civil societies is their institutionalized patterns of behavior developed in the pursuit of common or community goals. To build upon these patterns in a positive manner is to develop what has

Box 5 – The Trend Towards Decentralization

Decentralization and/or devolution of government services in developing countries has become increasingly common in the past few decades. This trend mirrors the generally successful decentralization that has taken place in a number of industrialized countries, such as New Zealand, Poland, and Hungary. In Asia, it is usually closely associated with the move away from highly centralized systems of government, with reform movements marked by demands for more competitive politics and greater popular participation in government. In countries as disparate in size and political systems as the Philippines and Nepal, there have been recent forceful moves to decentralize government. In others, such as Mongolia, which are setting up democratic government structures for the first time, decentralized government has become the model to follow.

Demands for decentralization are not new in many Asian countries. In recent years new factors have emerged that have accelerated the process, however. One is the impact of globalization. Better communications have made people at all levels of society more aware of what is happening in their own countries, as well as what is occurring globally. In this rapidly shrinking world, comparisons and informed judgments are much easier to make and more opportunities are available to be involved in governance. A second factor is the impact of the enormous economic and social changes that have occurred in the last 20 years. Liberalization, privatization, and other market reforms all require a different mode of governance. In addition, these changes have also underlined the limited capacity of central governments to handle adequately all the demands placed on them. Allied to both of these factors is the growing demand for participation. Although this varies among countries, many local communities are no longer satisfied to accept the dictates of a central government. There is a strong, growing voice for participation in governance. The perceptions of donors, which reflect the thinking of major

(continued next page)

Box 5 (continued)

sources of development financing in many countries, have also changed. Traditionally dealing only with central governments in their lending operations, believing that central governments alone had both the responsibility and capability to manage development, donors have recently shifted to supporting better governance and with it, greater local participation and autonomy.

Consequently, decentralization of government is now sought in nearly all Asian developing countries. It encompasses the transfer of both administrative and financial authority, since without adequate fiscal resources it will not work. It also involves the participation of local civil society, whether citizens' groups or nongovernment organizations (NGOs).

Yet decentralization is not a panacea that will solve all problems. It requires full political will. Unfortunately, while this will is often expressed in rhetoric, it is not always backed up with full commitment. Political will alone is also not sufficient. Clear legal and administrative mandates are also highly desirable. The time needed for their establishment, however, may just create excuses for inaction by central authorities. Thus, more fundamentally, decentralization requires intensive interaction among stakeholders. But the process has no universal blueprint, given the varied and usually complex political, administrative, and social systems found in the developing countries.

Decentralization also has dangers. If not well managed, central governments could lose control over the macroeconomy as the result of uncoordinated local decisions. Regional disparities could be exacerbated, leading to economic and social tensions. Local governments could also fall under the sway of particular local interests, thereby undermining state power and accountability. Thus, decentralization is a double-edged sword. It is clearly the way to go, but it is not a simple or quick remedy.

Source: Ammar Siamwalla. 1999. *The Evolving Roles of State, Private, and Local Actors in Rural Asia*. Hong Kong: Oxford University Press.

come to be known as “social capital”. Social capital can help improve the efficiency of society by facilitating cooperation, trust, tolerance, and networks to channel governance. Sensitivity to the political, social, cultural, and institutional context (all of which are linked) and improving upon the existing norms of behavior in ways that enhance social capital are essential for policymakers. Such awareness can lead to an appreciable increase in the social and economic return on investment and help in improving the functioning of markets.

IMPROVING THE OVERALL QUALITY OF LIFE IN RURAL AREAS

Growth in per capita incomes is perhaps the single most powerful means of improving the quality of life. This impact is even greater when income growth is equitable and involves the poor and when incomes improve without degrading the environment. But improving the quality of life goes beyond these three goals. As illustrated in Figure 3, the quality of life is also impacted by past investments in health, education, and rural infrastructure; by policies that promote greater gender equity and the empowerment of rural people; and by the availability of effective safety-net programs. These factors contribute directly to improvements in the quality of life because they are things that people value in their own right. But these factors also contribute indirectly to the quality of life by making people more productive and more environmentally aware and hence increasing their contributions to growth, poverty reduction, and better management of natural resources. This is a virtuous cycle in which happier, better-fed, and better-educated people are able to do more to further improve the quality of their lives. The converse is a vicious cycle in which deterioration in the quality of life reduces people’s abilities to improve their lives, leading to further deterioration in the quality of their lives, etc.

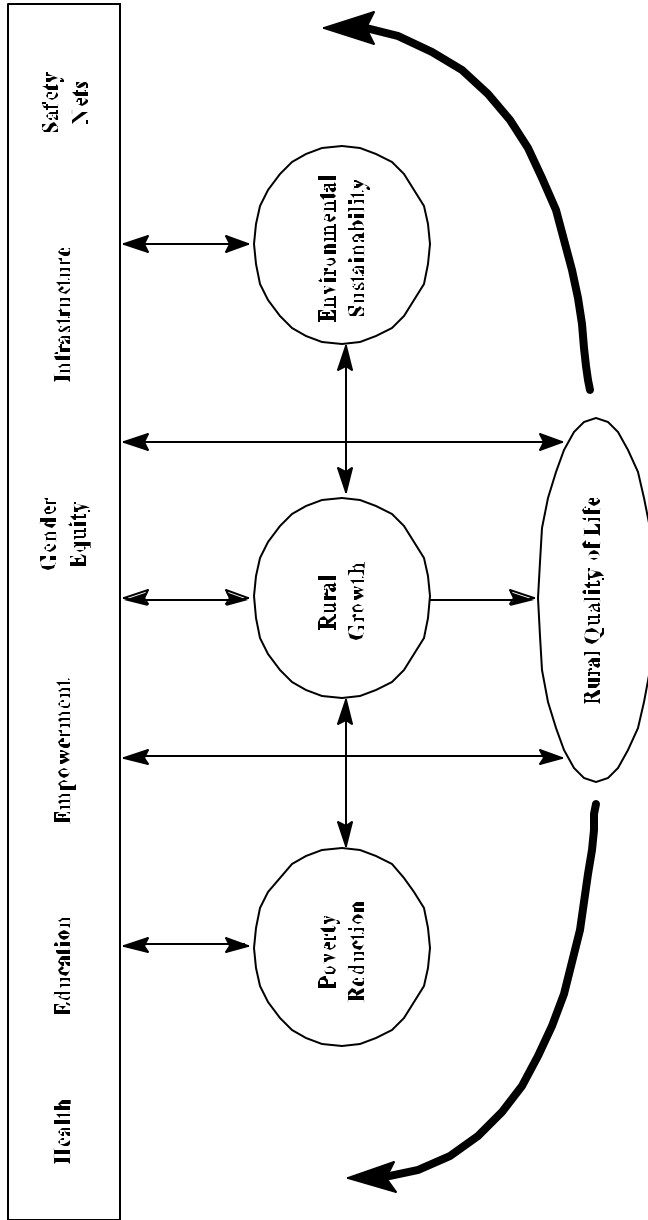


Figure 3. Determinants of the Rural Quality of Life

Government investments and policies to enhance the quality of life directly are particularly important for the poor and for women, because the trickle-down benefits from growth may take too long to realize. In order to achieve higher quality of life in rural Asia, as well as striving for the three goals of the critical triangle, policymakers need to undertake the following:

- Raise levels of public investment in people (education, health, nutrition, etc.) and in infrastructure (roads, electricity, communications, etc.), which may have to go beyond their immediate economic justification (i.e., based on their expected impact on growth). Policies and investments for slowing population growth, crime, the use of drugs, and the spread of HIV/AIDS are particularly important.
- Target the poor through specific programs, such as land redistribution and tenancy reform, improved access to education and training, greater investment in infrastructure for resource-poor areas where many of the poor are concentrated, and improved and cleaner energy sources.
- Target gender inequities. Such policies must go beyond the simple provision of more schooling, health services, financial services, and employment for women and girls, important though these are, and tackle the institutional and cultural biases that result in discrimination against women in the first place. This will require changes in land and labor laws to remove legal constraints on women's participation in decision making, improve their inheritance and ownership rights to land, increase their access to credit, and provide equal employment opportunities. It will also require more enlightened education programs for the young and greater empowerment of women in political processes (See Box 6).
- Create efficient safety nets to help the chronically poor who are unable for various reasons (e.g., disability, age, lack of basic skills or assets) to help themselves out of poverty and to provide a measure of income insurance

Box 6 – The Positive Impact of Gender Equity on Quality of Life

The view of gender issues as a component of quality of life in rural Asia does not simply mean looking at relative outcomes for men and women or whether there is discriminatory access. Rather, it means viewing gender as a social institution that organizes the opportunities that are open to people and defines their social roles. The situation of rural Asian women points to the paramount importance of gender in an examination of quality of life because it raises the question: Whose quality of life?

Extreme gender inequality, which takes myriad forms including denying women access to health care, education, and jobs; physical and psychological abuse of women; and female infanticide, selective abortion, and nutritional deprivation also characterize many parts of rural Asia, especially South Asia. For many, being female and living in rural areas is doubly discriminatory. Indeed, in many Asian nations the gender gap in schooling, literacy, health, social participation, and wages is driven by the rural sector. For example, in Nepal, while urban boys aged 15 to 19 outnumber their female counterparts in school enrollment (45 percent versus 32 percent), the gap is much more pronounced in rural areas (25 percent versus 6 percent). In India, urban women can expect to live about three years longer than men, but there is no gender difference in rural life expectancies. In many countries the combination of high female involvement in agriculture in rural areas and the large gender gap in agricultural wages puts rural women at a disadvantage. These examples demonstrate that gender gaps in core quality of life indicators are larger in rural Asia than in urban Asia.

One of the most formidable challenges facing rural Asia involves overcoming strong and persistent gender inequalities, especially in South Asia. Improving women's quality of life will have a multiplier effect for society as a whole. Increasing women's

(continued next page)

for rural people in areas subject to catastrophic climate risks like drought. Financial markets should not be used to supply so-called loans to those affected by disaster when there is no real intention to collect;

Box 6 (continued)

education not only raises their own quality of life, but also the quality of life of other family members and even of society at large. Policies that promote gender equity, such as establishing female quotas for elected office, may have a symbolic importance if in forcing men to find and groom women for office, it makes them question previously held ideas of gender. The presence of women in governing bodies may also force citizens to rethink their notions about women's capabilities or encourage other women to become socially active.

Increasing gender equity may also make the process of development more sustainable. For example, women's schooling has a bigger social multiplier on family health than men's schooling, because of women's roles as mothers, wives, and daughters-in-law. Similarly, mothers' level of educational achievement (which has a higher impact on children's school performance than their father's level) may eventually translate into higher wages for children when they enter the workforce. Another reason education for women appears to have positive effects on health and other outcomes is that it empowers women to make nontraditional decisions, like controlling their fertility.

Targeting programs and policies to women can also result in lower fertility, an important step in improving overall rural quality of life. Higher rural fertility is partly explained by women's poor access to education and job opportunities. Increasing educational opportunities for girls by providing better access to schools, enforcing compulsory school attendance, or providing scholarships can therefore have long-term demographic benefits. Creating labor market opportunities and providing microcredit for women, as they raise the value of women's time, will also make children more costly and therefore bring down fertility rates.

Source: Bloom, D. E., P. H. Craig, and P. Malaney. 1999. *The Quality of Life in Rural Asia*. Hong Kong: Oxford University Press.

grants should be the preferred form of support, disbursed by agencies designated for the purpose.

- Support more democratic institutions and greater participation of rural people in public decisions that affect their lives.