Making Growth Inclusive and Sustainable



Chapter 6 Making growth inclusive and sustainable

he goal of economic development is to improve social well-being in the broadest sense: to enable people to enjoy rich and fulfilling lives. Economic growth that benefits a broad cross-section of the population is essential. And if the benefits of regional integration are to be shared by everyone—including the poor and the socially disadvantaged—a wide range of social issues also needs to be addressed. Public policies need to focus on inclusive growth so as to create opportunities for everyone, in particular the poorest; provide a safety net for those who fall on hard times; and achieve other social and environmental objectives.

As discussed in previous chapters, Asia's increasing integration creates a new platform to bolster economic growth, with the poorest countries in the region typically having most to gain. This boosts social welfare directly and provides the means for extra spending on essential public services, such as health and education. Poverty has fallen in all integrating Asian economies and income inequality across most of them has decreased, as the PRC, India, Viet Nam, and others catch up with the more prosperous economies in the region. Continued regional dynamism combined with appropriate social policies could make a huge contribution to reducing poverty and other social problems. Regional cooperation could also support individual economies in implementing policies that make growth more inclusive.

But economic integration can also be associated with negative side effects, such as the greater dislocation of exposed sectors and negative impacts on the poor. For sure, the devastating social repercussions of the 1997/98 crisis cannot be blamed on regional integration per se—a combination of factors, not least premature financial liberalization combined with inadequate social protection

systems, is responsible.⁷⁷ Inevitably, though, some people benefit more from change than others—and some may lose out initially. Coastal regions tend to grow faster than more remote parts; urban areas that combine industrial factories and dense markets tend to pull ahead of rural areas; people with skills that are in demand prosper most; those who are best able to adapt to the rapid pace of change, notably the young, tend to fare better; and so on. Inequality within many Asian countries has increased—as, indeed, it has in many non-Asian countries.⁷⁸

A rapidly modernizing economy therefore needs effective social policies to make growth broadly acceptable and to complement traditional mechanisms—based on extended families and small communities—for caring for those left behind. It also needs to address other important issues, such as threats to health, safety, and the environment.

These areas are of interest not only because they have large welfare implications, but also because they are amenable to regional—as well as national and global—action. Each requires a complex mix of national and regional policies, including extensive knowledge and experience sharing. Successful collaboration on these issues would improve equity and boost efficiency by making the most of everyone's potential, and thus help to generate broad support for the policies required for economic growth.

Section 6.1 examines achievements and challenges and their implications for regional cooperation. Section 6.2 looks at how to widen opportunities to participate in regional growth. Section 6.3 considers how to provide regional public goods in areas such as health and safety, environmental protection, infrastructure, labor migration, and knowledge exchange. Section 6.4 concludes with a social and environmental agenda for the region.

6.1. Achievements and challenges

Given the complexity of Asia's social problems, efforts to tackle poverty and inclusion need to rest on systematic information on which groups are left behind and why. Much progress has been

 $^{^{77}}$ Poverty incidence increased in Indonesia from 15% in 1997 to 33% by the end of 1998 (Suryadi, Sumarto, and Pritchett [2003]); in the Republic of Korea from 3.0% in the last quarter of 1997 to 7.5% in the third quarter of 1988; and in Malaysia from 6.7% in 1997 to 7.6% in 1998 (Knowles, Pernia, and Racelis 1999).

⁷⁸ Chaudhuri and Ravallion (2007) argue that post-reform growth in both the PRC and India has not been pro-poor.

Emerging Asian Regionalism

made in recent years—especially in the context of the Millennium Development Goals (MDGs)—toward understanding the scope and causes of poverty, in both its income and non-income dimensions. This work needs to continue, especially in pinpointing the factors that lead to exclusion—such as geography, skills, age, gender, and race—and the policies that can offset them.

Poverty

Asia has made remarkable progress in reducing poverty (Table 6.1), but large challenges remain. The good news is that Asia looks set to meet the MDG of halving extreme poverty by 2015. Whereas, more than one fourth of Viet Nam's population lived on less than \$1 a day in early 1990s, by 2004 less than a tenth did. In the PRC, the proportion has fallen from 28% in 1993 to 11% in 2004. In Indonesia, which was particularly badly hit by the crisis, the extreme poverty rate more than halved between 1993 and 2002. That, despite the crisis, poverty

Table 6.1. Gains in the battle against poverty

		Povert				
Economy	\$1-a-day		\$2-a-da y		Survey year	
	Initial	Final	Initial	Final	Initial	Final
PRC	28.3	10.8	64. 5	37.8	1993	2004
Cambodia	25.5	18.5	76.5	61.6	1993	2004
India	41.8	35.1	85.1	79.6	1993	2004
Indonesia	17.4	7.7	64.2	52. 9	1993	2002
Lao PDR	47.8	28.8	89.9	74.4	1992	2002
Malaysia	0.0	0.0	19.2	9.8	1993	2004
Philippines	18.1	13.2	52.7	43.6	1994	2003
Thailand	6.0	0.0	37.5	25.8	1992	2002
Viet Nam	27.3	8.4	73.5	43.2	1993	2004

PRC = People's Republic of China; Lao PDR = Lao People's Democratic Republic. Note: Poverty index = percentage of population below the poverty line.

Source: Data from ADB 2007c.

has fallen everywhere in the region is a huge achievement—and the boom years since 2003 will doubtless have made another big dent in it.

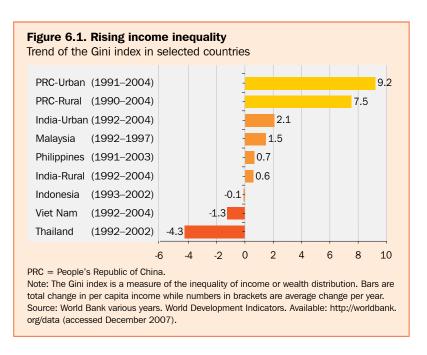
Yet progress has been much slower in some countries, especially on non-income measures. Extreme poverty fell by less than a third in the Philippines between 1994 and 2003, and by only a sixth in India between 1993 and 2004. Across Asia, the fall in those living on less than \$2 a day has been less impressive: in no country has it halved in the decade or so surveyed in Table 6.1; in many, it has not fallen much. People who earn a little over \$1 a day clearly risk slipping back under the bar during hard times. Meanwhile, nearly 2 billion people in the region are without basic sanitation, and over 650 million are without clean water (ESCAP-ADB-UNDP 2007). Nearly 100 million children under five are underweight; 4 million die each year before reaching the age of five. Nearly 30 million children of primary school age do not attend classes. Nine million Asians have tuberculosis; 6 million are infected with human immunodeficiency virus (HIV).

While primary-school enrolment is becoming nearly universal across the region, some countries have vastly lower infant mortality, maternal mortality, and malnutrition rates than others. Within countries, huge disparities persist too. The rich fare much better than the poor; urban dwellers do better than rural ones, notably in access to sanitation and clean water; women, those of a lower caste, minorities, and indigenous people also do worse then most (ADB 2007c). Over 250,000 mothers die in childbirth each year. Women's participation in nonagricultural employment is low and their representation in government or parliament remains minimal.

Inequality

The persistence of inequality is socially unacceptable, and may undermine support for regional integration. While the pattern of development in Asia is highly uneven—Hong Kong, China is among the richest territories in the world; Viet Nam among the poorest—this is not self-evidently problematic: 40 years ago, all of Asia (except Japan) was poor, and is now considerably richer. And since the poorer economies in the region, notably the PRC, India, and Viet Nam, are also among the fastest growing, the gap is closing.

More worrying, perhaps, is that inequality within many Asian countries is high and rising. Measured by the Gini coefficient, inequality has fallen in Thailand and Viet Nam, but has risen considerably in



the PRC and India (Figure 6.1).⁷⁹ Spending by the richest fifth of the population is rising much faster than that of the poorest fifth (Figure 6.2). Even so, this does not involve "the poor getting poorer and the rich getting richer", rather the "rich getting richer faster than the poor" (ADB 2007c). The region's overall development model is working, but the gains need to be shared more equally.

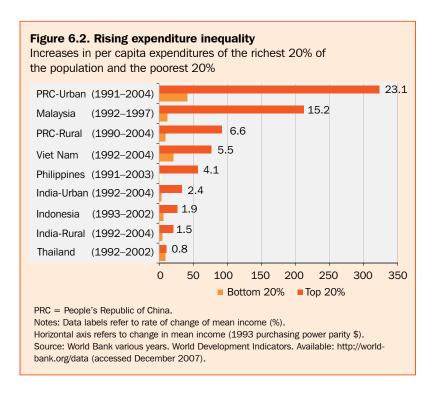
Several studies suggest that high inequality can limit the impact of economic growth—and thus that of regional integration—on poverty reduction. ⁸⁰ It may also hinder growth itself, since the potential of the less fortunate is wasted. It may spur demands for growth-sapping redistributive policies. And it may undermine the institutions that foster growth by making them more vulnerable to elite capture (ADB 2007c). Cross-country data suggests that inequality has a negative impact on growth, particularly in low-income countries. ⁸¹

The causes of growing inequality vary, but one, generally, is that the rich are better equipped to exploit the opportunities offered by

Gill and Kharas (2007) show that inequalities within countries are more significant than those between them; such disparities—for instance, across income classes, between rural and urban areas, and across regions—persist or are rising.

See for instance Ravallion (2004), ADB (2004b and 2007c).

For instance Barro (2000 and 2008). The earlier results show a positive relationship for high-income countries, but with new data this is no longer significant.



economic change. Urban dwellers tend to be better off than rural inhabitants, but within urban areas inequality has also widened. Some groups are systematically excluded from economic opportunities—especially women, people of lower caste, minorities and indigenous people. Tackling discrimination is critical: in the case of gender, for example, successful regional initiatives have ranged from gendersensitive poverty-alleviation programs to improving access to finance and property. People also fall behind through bad luck—by working in a declining sector or becoming unable to work, for instance.

Unemployment and underemployment

Asia's official unemployment rates are not high by global standards. But despite Asia's spectacular growth, unemployment is higher in most countries in the region than it was before the crisis (Table 6.2). Studies also show that employment growth is less responsive to output growth than previously (Felipe and Hasan 2006, Kapsos 2006). Because the poor's main asset is generally their labor, fewer new jobs tends to imply less poverty reduction.

Underemployment, while difficult to define and harder still to measure consistently, is an even bigger issue. In 2005, some 500

Table 6.2. Formal unemployment is low but rising

	Unemployed					
	Rate (%)		Number (in millions)		Survey Year	
Economy	Initial	Latest	Initial	Latest	Initial	Latest
Cambodia	1.0	1.8	0.1	0.1	1996	2001
PRC	3.0	4.1	20.9	32.1	1996	2006
Hong Kong, China	2.8	4.8	0.1	0.2	1996	2006
India	2.6	3.1	7.8	11.9	1994	2005
Indonesia	4.9	10.4	4.4	11.1	1996	2006
Korea, Republic of	2.0	3.5	0.4	0.8	1996	2006
Lao PDR	3.6	5.1	0.1	0.1	1996	2003
Malaysia	2.5	3.3	0.2	0.4	1996	2006
Philippines	8.6	7.9	2.6	2.8	1996	2006
Singapore	2.0	3.4	0.0	0.1	1996	2006
Taipei,China	2.6	3.9	0.2	0.4	1996	2006
Thailand	1.5	1.5	0.5	0.5	1996	2006
Viet Nam	5.9	5.6	2.1	2.4	1996	2004

PRC=People's Republic of China, Lao PDR=Lao People's Democratic Republic. Source: ADB 2008c. Statistical Database System. Available: http://sdbs.asiandevbank.org:8030/sdbs/index.jsp (accessed April 2008).

million—about 29%—of Asia's 1.7 billion workers were reckoned to be either unemployed or underemployed. The segmentation of labor markets between urban and rural areas, as well as between the formal and informal sectors, also constrains growth and perpetuates inequalities. It hampers the adjustment to changes in global demand and crimps the emergence of new sectors. Historical institutional rigidities, such as remaining restrictions on internal migration due to the PRC's *hukou* system of permanent registration, are partly to blame (Tao 2006). Excessive labor-market regulations that have been introduced in several countries to provide social protection—such as minimum wages set above the market-clearing wage and restrictions on hiring and firing employees—often gum up the labor market. Because they mainly relate to workers in the organized sector,

 $^{^{82}}$ Cunat and Melitz (2007) even show how countries with flexible labor markets are able to specialize in sectors with higher volatility implying enhanced ability for diversification.

Whalley and Zhang (2007) provide numerical simulation evidence showing how the removal of migration barriers would reduce inequality in the PRC.

they leave workers in the large unorganized sector unprotected. The use of "inappropriate" capital-intensive techniques may also reduce labor use $^{.84}$

Partly as a result of rigidities in the formal and organized labor market, employment in the informal sector is large and rising. In India, informal work accounted for 80.5% of nonagricultural employment in 1993/94 and 83.2% in 1999/2000. In Indonesia, informal-sector employment rose from 63% of the total in 1997 to 71% in 2003. Although hard numbers are not available, the informal sector in transition economies such as the PRC and Viet Nam is also expected to grow as state-owned enterprises retrench and restrictions on migration from rural to urban areas are eased. The growth of the informal sector is worrying because it tends to provide low-productivity, low-wage work outside the purview of labor laws and social-protection systems, and often detached from the rest of the national—and regional—economy.

Another issue is that the new jobs created in Asia are disproportionately for skilled workers. Outsourcing, foreign direct investment, skills-biased technical change, competition from imports, and quality upgrading to meet the demands of exporting on global markets have all boosted the demand for skilled workers. ⁸⁵ While this is generally a good thing, because it tends to boost productivity and average incomes, it is problematic if the low-skilled poor are unable to obtain the skills required to acquire the new jobs. Since the education system has not been able to keep up with the economy's needs, skill shortages have become widespread in Asia, particularly in high-growth economies. India, for instance, faces a severe shortage of technical skills, particularly in the information technology sector.

Environmental issues

Environmental concerns in Asia are increasing, particularly because economic growth in much of the region remains fuelled by carbonintensive production. As Asia continues to grow, so will its demand for energy. The challenge is to achieve an orderly and affordable

ADB (2007c) cites several causes, such as (1) many production processes involve fixed techniques which are often capital-intensive as they are imported from developed countries where labor is scarce; (2) distortions in developing-country capital markets fail to reflect capital scarcity due to subsidies encouraging use of capital-intensive techniques; and (3) given low labor productivity in many developing countries, it may be efficient to use capital-intensive techniques despite low nominal wages.

⁸⁵ See Goldberg and Pavcnik (2007) for a detailed discussion.

transition toward growth that involves lower carbon emissions and the sustainable management of natural resources. Asia's growth is also leading to rapid and often unplanned urbanization and motorization, which add to the region's environmental woes. Many of Asia's major urban centers have unacceptably poor indoor and outdoor air quality. As Figure 6.3 shows, dangerous air pollutants remain at unacceptably high levels in many Asian cities.

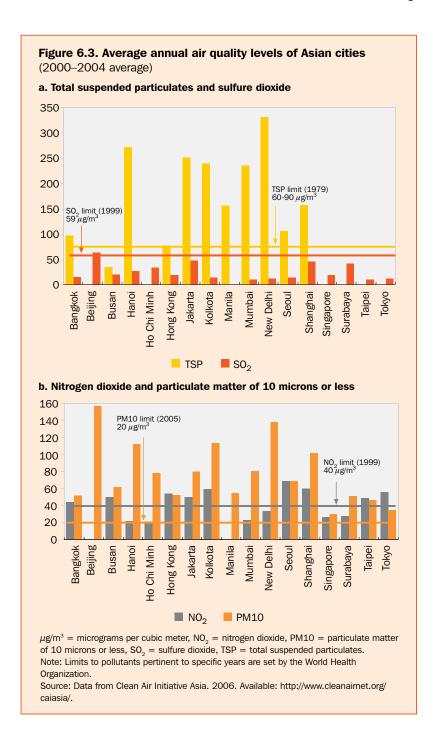
The region's water bodies—including its major water supplies—are also under stress. The discharge of untreated waste and pollutants from households, farms, industries and municipalities also contributes to the spread of waterborne diseases and is a major public health issue.⁸⁶

The region's environmental problems are increasingly caused by factors that cut across national borders. For example, the Asian brown cloud, a haze that covers most of South and Southeast Asia, is caused by pollutants released by the burning of fossil fuels and rural biomass across the region. Haze caused by forest fires is common in Southeast Asia. Problems such as desertification and dust storms, which plague Northeast Asia, cut across national boundaries. Water and natural resources that are shared by several countries are often a source of friction.

Climate change is likely to exacerbate these environmental problems and cause new ones. Sudden shifts in regional weather patterns, such as monsoons and El Niño, may also raise the risk of natural disasters, while rising temperatures will spread the range of vectorborne diseases such as malaria and dengue fever (ADB 2007c). Climate change will affect the poor most. Those living in coastal areas are threatened by rising sea levels and more frequent tropical storms, with poor peasants in drought- and flood-prone areas most at risk. Adaptation measures need to address their needs first.

The region's worsening environment is doing increasing damage to Asia's economy and people's health. Air pollution alone is estimated to cause nearly 2 million premature deaths a year. Many more suffer health problems which affect their productivity. Water pollution and lack of sanitation also are extremely harmful. Agriculture is severely affected by air and water pollution; the cost to the PRC in lost agricultural produce in 2004 was estimated at \$12 billion. Climate

WHO (2004) estimates that 1.8 million people die every year from diarrheal diseases (including cholera), 90% of whom are children under five and mostly in developing countries. About 88% of diarrheal disease is attributed to unsafe water supplies and inadequate sanitation and hygiene.



change is forecast to crimp crop yields by 2.5–10% in parts of Asia by 2020 compared to 1990 levels (Zhang 2007).

6.2. Widening participation in regional growth

If Asia is to make the most of the benefits of regional integration, it needs to widen access to opportunities to participate productively in the economy. This requires labor-market reform, expanding education and skills, measures to promote more inclusive growth, more spending on infrastructure, and stronger social protection systems. Many of the necessary measures are national; some would benefit from regional cooperation.

Labor market reforms

The battle against poverty and exclusion begins with creating high-productivity jobs. But whether people have access to these jobs depends on how well labor markets function, and how effectively the places where they live are connected to dynamic regional and global markets. Policies that favor capital at the expense of labor, such as artificially low interest rates and fiscal incentives, are highly detrimental. Rigid labor laws that cause entrepreneurs to invest in machinery rather than commit themselves to a permanently larger workforce are also harmful. Governments need to provide workers with adequate social protection, including help with retraining and redeployment from units facing closure. The key challenge is to reform regulations that make labor costly and risky.

The vast informal sector needs particular help in improving its productivity and integrating with the wider—including the regional—economy.⁸⁷ In part, this requires measures to make business registration easier and cheaper. De Soto (2000) has famously argued that property-rights systems in developing countries require reform to enable the informal sector to tap formal sources of financing, since untitled assets cannot be used as collateral for loans. Improved access to technology and training would also boost the productivity of workers in the informal sector. Making the formal labor market more flexible and reducing the burden of labor market regulations would also reduce the incentive to operate informally.

See, for instance, Blunch, Canagaraja, and Raju (2001), and Maloney (2004).

Even with sound policies, however, new formal-sector jobs often favor skilled workers, due to skill-biased technical change and the quality requirements of export markets. This is beneficial for the economy as a whole—it boosts productivity and average incomes—but it does not help people who lack, and are unable to acquire, the requisite skills.

Education and skills

Developing the skills needed by Asia's growing economies is therefore essential. The initial priority is broadening access to good quality basic education as well as vocational and skills training. While universal basic education across Asia is achievable within the next decade, vocational and skills training is still not of sufficient quality in many countries.

Investing in trainability—the capacity to learn how to use new technologies—is especially important. This requires a good basic education, over which vocational and skills-enhancing training and tertiary-level education can be instilled. Some economies—such as the Republic of Korea and Taipei,China—have set an example by planning ahead and investing in education ahead of demand. Others, such as Thailand, have changed course after it become clear that severe skills shortages were hampering their growth potential. More is not necessarily better, however. Developing human capital in areas without potential and in ways unmatched to needs can cause problems. In the Philippines, for example, graduates with secondary and higher education suffer the highest unemployment rates (Orbeta 2002).

Sectoral strategies for inclusive growth

Another important approach is to target sectors, geographical areas, and social groups that are falling behind, so that they too can share in the region's development (World Bank 2007a).

Appropriate policies in agriculture—the mainstay of Asia's poor—are particularly important. Unfortunately, these are often misguided. Subsidizing staple food crops, for instance, discourages diversification into higher value crops and the adoption of productive planting and marketing strategies (World Bank 2007a). Aid for trade could make an important contribution: in the Greater Mekong Subregion (GMS), for example, innovative programs promote cross-border agricultural trade and investment, supported by public-private partnerships in agricultural science and technology (ADB 2007d).

Soaring food prices and recent shortages have highlighted many issues that beset the agriculture sector, including the restrictions—

artificial and structural—on trade. Fears about food supplies are leading food-surplus countries to withhold exports to deficit ones, exacerbating the problems. Food-price rises disproportionately affect poor—particularly urban poor—consumers, who spend a large share of their income on food. While food shortages have many causes, governments' ill-advised responses highlight the need for regional

Box 6.1. Tackling the food crisis

or decades, real food prices had been declining. In recent years, however, they have not merely recovered: by the end of 2007 they were roughly double the 2002 level. Since then, food prices have skyrocketed, stoking fears of a food crisis. The World Bank's food price index climbed 57% in the first quarter of 2008. The price of rice has increased dramatically: Thai rice, for example, fetched a monthly average record \$930 per metric ton in May 2008 from \$380 in January. Soaring food prices have contributed to sharp increases in inflation in Asia, while also threatening macroeconomic stability by increasing the fiscal cost of food subsidies and widening current account deficits in food importing countries.

The impact of rising global food prices on the region is particularly acute as about 1 billion Asians spend at least 60% of their income on food. As measured by its share of the consumer price index, food is typically the largest single component of Asian household budgets—and its weight is especially great in the region's poorer economies. (Figure B6.1).

As a net food exporter with fairly large grain stocks, the People's Republic of China is in a relatively strong position. But, for net food importers, such as the Philippines, soaring food prices are more worrying. They reduce the real incomes of the poor, forcing them to spend less on vital health care, education, and clothing

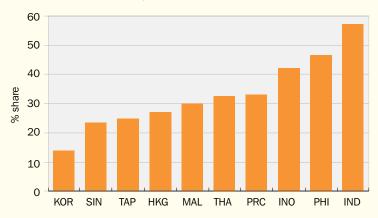
and causing the poorest to go hungry. While the urban poor are generally worst-hit, net food buyers in rural areas are also suffering. Millions of poor people risk falling below the poverty line, while those already below it face hunger and malnutrition. Much of the remarkable poverty reduction that Asia has achieved in the past decade risks being undone.

While cyclical factors—such as flooding in South Asia, plant-hopper infestation in Viet Nam, and Australia's drought—partly explain soaring world food prices, the causes are mostly structural. Falling global food stocks show that production has not kept up with consumption. For example, in the first quarter of 2008, world rice and wheat stocks were more than 40% below their 2000 levels. A growing population, together with rising incomes in emerging economies—notably, Asia—which has contributed to a change in diets toward grain-intensive meat and dairy products, are increasing consumption. At the same time, food production has been diverted toward biofuels; the rising cost of energy-intensive inputs, such as fertilizers; as well as continuing soil degradation, increasing water scarcity, and underinvestment in new high-yield and pest-resistant crops have curbed the growth of agricultural productivity.

Governments have exacerbated the problem through the long-standing protectionism that blights global agricultural trade and through their ill-conceived responses to the food cooperation to address food issues. Rice, Asia's staple, is a particular priority. Box 6.1 discusses the recent increase in food prices and the consequences on poverty reduction in Asia.

Rural areas, where 70% of Asia's poor live, continue to lag behind. In many countries, such as Indonesia, Malaysia, and Thailand, poverty in rural areas is much higher than in urban ones. Greater efforts are

Figure B6.1. Food weights in the consumer price index Selected Asian economies, 2008



HKG = Hong Kong, China; IND = India; INO = Indonesia; KOR = Republic of Korea; MAL = Malaysia; PHI = Philippines; PRC = People's Republic of China; SIN = Singapore; TAP = Taipei, China; THA = Thailand.

Sources: National statistics offices; Asian Development Bank resident missions.

crisis, such as export bans, taxes, and price controls. Such "beggar-thy-neighbor" policies deter farmers from expanding production and may suppress domestic food trade. Conversely, by liberalizing agricultural trade Asian governments could help moderate food prices, reduce uncertainty, and increase food security. Substantial investment should also be made throughout Asia to improve agricultural infrastructure and technology, increase productivity, enhance institutional capacities, improve governance, and provide educational facilities. And by facilitating information exchange, increasing policy dialogue, and spreading best practices, regional cooperation could also help find a lasting solution to the food crisis.

needed to help rural areas participate in the trade and growth that regional integration fosters. Investment-climate surveys show that many factors prevent rural nonfarm enterprises from expanding. The factors include (1) limited access to financial services; (2) poor infrastructure, notably power, transport, and communications; (3) limited information about market opportunities; (4) a lack of education and training; and (5) limited access to new technologies, including information and communication technology. It is important to identify which constraints bind most where, and to design public policies and efficient institutions to overcome them.

While economic growth enables households to spend more on education and health and provides governments with the means to invest more in public services, it is not sufficient to achieve the MDGs. Republic provision of basic services therefore needs to be improved, by increasing budgets and making existing programs more effective. While evidence of the overall effectiveness of public spending is mixed, studies consistently show that it significantly benefits the poor. This suggests that the delivery and targeting of public services need to be improved. On

There is increasing evidence of the importance of good governance and participation to development in general and the welfare of the poor in particular. Decentralizing government functions to local authorities can give the poor more voice and improve the delivery of basic services (Shah and Chaudry 2004). This has occurred during the last two decades—swiftly in some countries, such as Indonesia; more slowly in others, such as the Philippines and Viet Nam. The effectiveness of delivery depends crucially on local authorities' capacity to deliver public services and the proper design of programs and institutions governing their implementation. Measures to equalize disparities across regions are needed, however. Preventing local elites from capturing local governments by local elites is also important, notably by closely involving communities in public programs. Involving the private sector and civil society is another

ADB (2004b): *Key Indicators* estimates that while the income-poverty elasticity for countries in the Asia-Pacific region is nearly 2, nonincome poverty elasticity is around or below 1.

For example Gupta, Verhoeven, and Tiongson 2002; Bidani and Ravallion 1997.

Studies have identified inefficiencies such as "inefficient composition of public spending" (Al-Samarrai 2006) or "spending on the 'wrong' goods and the 'wrong' people" (Devarajan and Reinikka 2004). Leakages and corruption are also well documented (Bhushan, Keller, and Schwartz 2002) and must be prevented.

effective way of enhancing service delivery in health, education, and water (Ahmad et al. 2005).

Tackling discrimination and other forms of exclusion is also vital. In the case of gender, initiatives include gender-sensitive povertyalleviation programs; improving access to productive assets and resources, education and health services, and property ownership; and increasing representation in society's decision-making bodies. In the Philippines, for example, a budget for gender-oriented programs is mandatory at all levels of government. Mechanisms have also been established to oversee and monitor their implementation. The caste system prevalent in much of South Asia is another major source of discrimination. It causes significant inequity in the acquisition of capital assets, employment, education, health, and other humandevelopment outcomes. Special policies are needed to counteract these social exclusions. India, for example, has enacted laws against discrimination, reserved places for members of particular castes in state services and political bodies, and promoted economic empowerment though specific plans and the allocation of targeted funds through financial institutions. India has also established an administrative machinery to oversee the implementation of these programs.91

Infrastructure development

Strategic investments in infrastructure—in transport, communications, and energy—can also connect low-income regions with Asia's dynamic core. Growth in remote areas can save substantial social, financial, and relocation costs; it benefits people who move as well as also those who are unable to do so.

Infrastructure projects play an important role in poverty reduction by increasing aggregate demand and employment and alleviating bottlenecks that constrain growth. By increasing the availability of goods and reducing transport costs, transport projects lower the prices of essential commodities and inputs for farmers, and thus help reduce poverty. They also increase the poor's mobility, enabling them to find higher-paying work. And they encourage the production of higher value cash crops by enhancing access to markets. Improved transport infrastructure also improves access to education, health, and other social services.

Thorat (2007) provides a detailed discussion of the Indian experience.

⁹² Several studies have discussed the nexus between infrastructure and poverty.See for example, ADB-JBIC-World Bank 2005. and Chatterjee et al. 2004.

Energy projects fuel economic activity. They allow small-scale rural entrepreneurs to process agricultural products, work longer hours, and hence earn more. They help disseminate information on crops and farming methods via radio and television. They increase study time in the evening for children. Investments in rural infrastructure raise agricultural growth and employment, provide increased incomes to the rural poor, and help reduce income poverty.

Cross-border infrastructure projects also help improve connectivity and open up opportunities for higher growth (Box 6.2),

Box 6.2. Transport corridors in the Greater Mekong Subregion

eveloping an integrated transport network that enables goods and people to move quickly and cheaply within the subregion is a strategic priority for the Greater Mekong Subregion (GMS) Economic Cooperation Program.¹ With the support of multilateral funding organizations and aid agencies, GMS countries are working together to build and upgrade their road, rail, and port links. This will reduce production costs, stimulate economic activity, enhance development, and thus alleviate poverty.

Since its inception in 1992, cooperation in the GMS has made substantial progress in developing physical connectivity. Infrastructure projects worth nearly \$10 billion have been completed or are being implemented, including upgrading the Phnom Penh-Ho Chi Minh City highway and the East-West Economic Corridor that runs from Mawlamyine in Myanmar to Da Nang in Viet Nam.

Regulations, procedures, and standards also need to be harmonized. The costs and benefits of infrastructure development are unevenly As of April 2008, more than 150 new investment projects related to the transport corridors have been proposed. These include 31 high priority projects with an estimated cost of \$2.4 billion, including 20 road, 2 railway, 4 airport, and 5 water transport projects. Nine transport corridors have been identified to connect the north, central and south areas of the GMS into a single loop (Figure B6.2).

The development of the transport network will enable Yunnan Province of the People's Republic of China and northern Lao People's Democratic Republic to gain access to international seaports in Thailand and Viet Nam; provide a continuous land route between the South China Sea and the Andaman Sea: offer access to seaports in northeast Thailand and the central regions of the Lao People's Democratic Republic; accelerate the westward flow of goods, eventually to India; and ease the movement of goods and people, especially tourists, in the region.

distributed; this calls for the coordinated design, planning, and implementation of infrastructure projects. Cooperation on regional infrastructure projects would be a powerful instrument for growth and poverty reduction.

¹ The Greater Mekong Subregion includes Cambodia, the People's Republic of China, the Lao People's Democratic Republic, Myanmar, Thailand, and Viet Nam.



but complementary policies are needed to ensure that infrastructure projects reduce poverty. Projects in poor areas should be prioritized and market mechanisms that translate improvements in infrastructure into tariff reductions used (Chatterjee et al. 2004). In the GMS, infrastructure improvements have been shown to improve trade (Fujimura and Edmunds 2006) and reduced poverty (Menon and Warr 2006).

Social protection and demographic ageing

Even with the best efforts to ensure that as many people as possible share in the region's growth, some will be left behind or require additional help. Effective social protection systems are therefore essential. While these have greatly improved since the crisis, they remain inadequate in most of Asia. Ortiz (2001) attributed this to a combination of factors: limited coverage, insufficient funds, inadequate or inappropriate instruments, legal restrictions on access, administrative bottlenecks, and/or problems with compliance. A more recent assessment conveys a similar picture (Van der Auwera 2006).

A comprehensive assessment in 2003 of direct social protection programs in ADB developing member countries concluded that while most had programs covering almost all the facets of social protection, these had "low effectiveness." ADB has helped develop a social protection index to monitor progress in implementing measures in the five areas identified in the 2001 social protection strategy: labor markets, social insurance, social assistance, community protection schemes, and child protection.⁹³ As Table 6.3 shows, coverage is patchy and targeting often poor, but expenditures are already quite considerable in some countries. ADB is supporting the expansion of the project from the initial 6 countries to a further 23.

The social protection index provides a means of comparing the overall level of social protection provision across countries and over time on a consistent basis. It is thus a useful tool for diagnosing policy weaknesses, setting priorities, and learning from other countries' strengths. Through information sharing, spreading best practices, and peer pressure, regional cooperation could help improve social protection across the region.

The four dimensions of the index are cost (the share of GDP spent on social protection), coverage (the proportion of the relevant population that benefits from social protection), poverty targeting (the proportion of the poor that receive social benefits), and social impact (value of social benefits relative to the poverty line). The social protection index uses the maximum value as the standardizing value and applies equal weights to each of the dimensions of the index.

The priorities are how to increase the coverage, affordability, and targeting of social protection programs. Effective schemes need not be unaffordable—the United Nations' World Economic and Social Survey calculates that the cost of providing a pension of \$1 a day to everyone over 60 in 66 developing countries (including those covered by this study) is less than 1% of GDP a year (UN 2007b).

Even low-income countries need to provide public assistance to the extremely poor. But to remain affordable, such schemes must be targeted at the needlest. Targeted nutrition programs, such as those for children and lactating mothers in poor households, are particularly effective. In the Philippines, a food-for-school program has helped fight hunger. Embedding such targeted nutrition programs in community-driven development programs increases their effectiveness (World Bank 2004).

Conditional cash transfers targeted to pay for social services are another important instrument. These have had considerable success in Latin America, where they have reduced overheads and corruption. They provide money to the poor on condition that children remain in school and mothers visit health clinics and have their children immunized. So far, the use of such programs in Asia has been limited, but Indonesia recently replaced an unsustainably expensive general fuel subsidy with a conditional cash transfer program for poor families.

It is also important that when an economic shock strikes, spending on social protection schemes and essential services is maintained. Except in Malaysia, education and health budgets were severely cut in countries affected by the crisis in 1997/98, just when the need was greatest (Knowles, Pernia, and Racelis 1999). Countercyclical support to sustain social spending in hard times could be provided by regional and international development banks.

Because formal-sector jobs with formal social insurance are rare in most of Asia and security in formal-sector jobs is eroding too, social protection for the informal sector is desperately needed. Innovative ways of enhancing access to formal-sector services are also required. ADB (2003) recommends micro- and area-based schemes involving measures such as micro-insurance, agricultural insurance, and social funds. Micro-insurance schemes are voluntary contribution schemes that generate small savings and provide small-scale cash flows to address community risks. Their coverage needs to be expanded, particularly in rural areas. Challenges include a lack of re-insurance, a shortage of reliable data on which to base premiums, and the

Table 6.3. Key social protection indicators for selected Asian countries, 2006

		Coverage of social protection: indicators						
Countries	Social- protection costs	Unemployed/ underemployed	Elderly	Sick	Social assistance	Micro- credit	Disabled	
Cambodia	1.4 (0.8)	5.0 (5.0)	8.0 (8.0)	7.0 (7.0)	16.0 (16.0)	41 (-)	9.0 (9.0)	
PRC	4.6	31.0	26.0	29.0	100.0	10.0	28.0	
India	4.0	14.0	23.0	10.0	100.0	16.0	23.0	
Indonesia	1.9	1.6	16.0	42.0	7.5	0.9	2.0	
Lao PDR	1.3	19.0	7.0	3.0	18.0	57.0	10.0	
Malaysia	4.0	21.0	59.0	24.0	64.0	0.0	61.0	
Philippines	2.2	7.0	16.0	70.0	5.0	32.0	24.0	
Viet Nam	3.5	1.7	34.0	23.0	7.5	2.2	35.0	

Lao PDR = Lao People's Democratic Republic, PR C= People's Republic of China.

^aNumbers in parentheses are Asian Development Bank estimates without the microfinance programs.

Social protection component Indicator

Social protection costs Coverage of social protection Elderly Sick Social assistance

Microcredit

Total social protection expenditure as percent of gross domestic product Beneficiaries as % of total unemployed/underemployed Elderly receiving assistance as percent of population aged 60+ years % of population with health insurance or in receipt of subsidies Population receiving some social assistance/welfare as % of poor population

Population receiving microcredit as % of poor population

Source: Adapted from Baulch, Wood, and Weber 2006.

high costs of dealing with many small transactions (which could potentially be overcome using mobile phones). Targeted agricultural insurance can help small-scale farmers more than subsidies do. Social funds that channel public resources to meet pressing social needs can deliver quick, visible, efficient, and accountable results in poor communities.

While human development and social protection systems are primarily national concerns, regional cooperation can also play a part, notably in sharing best practices and encouraging the portability of social protection benefits across countries through regional agreements. Exchanges of expertise ought to be promoted, as should sharing lessons on methods, institutions, and technologies; the provision of technical expertise; and capacity building.

While demographic ageing is not yet a major issue for most of Asia—only 6.4% of the region's population is aged 65 or above—it

Children with special needs	Overall coverage indicator	Poverty targeting	Impact on expenditures
45.0 (45.0)	17.0 (11.0)	44.0 (30.0)	4.3 (2.7)
100.0	43.0	69.0	44.0
100.0	35.0	100.0	34.0
17.0	34.6	73.0	11.0
44.0	19.5	40.0	6.6
99.0	36.0	56.0	19.0
5.0	33.0	30.0	4.8
14.0	21.7	51.0	11.6

Social protection component	Indicator
Disabled	Disabled beneficiaries as % of disabled population
Children with special needs	Children with special needs receiving assistance as
	% of poor children aged 5–14 years
Overall coverage indicator	Weighted average of coverage subcomponents
Poverty targeting	% of poor population who receive some assistance
Impact on expenditures	Social protection expenditure per poor person as %
	of annual per capita poverty line income/expenditure

will eventually become so. By 2030, five economies—the PRC; Hong Kong, China; the Republic of Korea, Singapore, and Hong Kong, China, and Thailand—will join Japan in having a much higher proportion of elderly people (Table 6.4). They, and others that will face similar problems later, need to start developing appropriate institutions for supporting a larger elderly population now (ADB 2002b). These include efficient and secure pension systems, a well-run financial institutions and health care systems that can provide quality care to the elderly. The current reliance on personal and family support for the aged may not be sustainable: in future there will be fewer children to support the elderly; young people are increasingly leaving home to seek work elsewhere; more women are working; and new ideas about marriage, family, and individualism are emerging.

A recent review of pension programs in the region summarized the common problems as affordability, poor returns on financial

Table 6.4. Ageing population in Integrating Asia

	•	ation 65 and o tage of total p		Population 65 and over as a percentage of population 15–64		
Economy	2005	2015	2030	2005	2015	2030
Brunei Darussalam	3.2	4.2	8.9	4.8	6.0	12.7
Cambodia	3.1	4.0	5.8	5.3	6.2	8.7
China, People's Rep. of	7.7	9.6	16.2	10.8	13.4	24.4
Hong Kong, China	12.0	14.5	25.8	16.4	19.8	40.9
India	5.0	5.8	8.8	8.0	8.8	12.9
Indonesia	5.5	6.6	10.7	8.3	9.6	15.5
Japan	19.7	26.2	30.6	29.8	42.6	52.3
Korea, Republic of	9.4	13.3	23.4	13.1	18.2	36.2
Lao People's Dem. Rep.	3.5	3.4	5.6	6.2	5.3	8.4
Malaysia	4.4	5.8	10.4	6.8	8.7	15.4
Myanmar	5.6	6.3	10.9	8.3	8.9	15.8
Philippines	3.8	4.7	7.5	6.4	7.5	11.2
Singapore	8.5	13.5	27.4	11.8	18.2	45.9
Thailand	7.8	10.2	17.4	11.1	14.5	26.6
Viet Nam	5.6	5.8	10.9	8.6	8.4	15.8
Integrating Asia	6.8	8.3	12.9	10.3	12.1	19.2
Asia	6.4	7.6	11.7	9.7	11.2	17.4
European Union	15.9	17.4	22.6	23.3	25.8	35.9
North America	12.3	14.3	19.8	18.4	21.6	31.7
World	7.3	8.3	11.7	11.4	12.6	18.0

Note: "Asia" refers to the United Nations definition.

Source: UN Population Division. 2008. World Population Prospects. Available: http://www.un.org/esa/population/unpop.htm (accessed May 2008).

assets, inadequate service levels, and inefficient administration. Several options for dealing with ageing have been proposed. ⁹⁴ The options include later retirement, especially in countries where public support remains underdeveloped; basing wages more closely on performance, rather than seniority (as is popular in Japan and the Republic of Korea); and greater job flexibility. Simulations show that a greater reliance on self-support eventually results in higher per capita outlays on social protection than publicly funded pensions.

Health insurance increases in importance with ageing. Coverage is mainly restricted to formal-sector employees in most countries in

See for example Mason, Lee, and Lee (2007)

the region, but promising starts at extending coverage to the poor are being made. The Yeshavani scheme in the Indian state of Karnataka state already has over 2 million members of cooperative societies, mostly small-scale or marginal farmers and rural workers. The success of health insurance schemes for the poor depends on the capacity to provide quality health care services; good cost recovery; and a nodal agency, such as public agency or a civil-society organization, with a strong social focus. Other innovative ways to improve private support for the elderly have emerged. One is to formalize family support for the elderly through legislation. Singapore's Maintenance of Parents Act of 1994 gives courts the right to compel children with sufficient means to provide for parents who cannot support themselves. In India the assets of the elderly are converted into annuities that support their maintenance needs.⁹⁵

6.3. Delivering regional public goods

Regional cooperation is essential for the delivery of regional public goods⁹⁶ that benefit all countries collectively but cannot be produced by countries acting alone. Areas where regional efforts could produce high payoffs include cross-border health and safety issues, labor migration, environmental issues, and education and knowledge exchanges.

Health and safety

Due to its high population densities and the limited health services in some countries, Asia is unusually vulnerable to epidemics. Regional integration and the more frequent movement of people and goods increase its vulnerability. HIV, severe acute respiratory syndrome (SARS) and avian influenza (H5N1) highlight how rapidly local health problems can become regional ones. These threats—and potential future ones—are risks not only to people who are directly affected, but to society at large, as they can have devastating economic and social consequences.

⁹⁵ The program in India is a reverse mortgage where the lender (a bank) pays the borrower a sum every month. The borrower does not pay and the loan is settled on the death of the borrower.

Public goods are characterized by non-excludability (i.e., nonpayers cannot be excluded from their use) and nonrivalry (i.e., use by some does not reduce the supply for others).

Better information and cooperation could have reduced the hysteria about SARS. During the brief outbreak in the second quarter of 2003, 8,422 cases were reported, with an 11% fatality rate. Yet the World Health Organization (WHO) estimates that the economic cost to Asian countries was \$20 billion, mainly from lost tourism revenues and lower consumer spending. SARS highlighted the inadequacy of public investment in health in developing Asian countries and the need for more regional burden sharing on such common threats. It also showed the importance of global monitoring and coordination in containing such epidemics (Lee and McKibbin 2004).

In contrast, the avian flu outbreak showed how regional cooperation can contain a health menace effectively. WHO has recorded 322 human cases of avian influenza with 195 fatalities from 2003 to August 2007. Early assessments find that the macroeconomic impact of avian flu has been minor, but that farmers with little access to social safety nets were worst affected.

Halting and reducing the incidence of HIV/AIDS⁹⁷ is one of the MDGs, yet the disease is actually spreading. ⁹⁸ As well as killing people, HIV/AIDS can devastate the economy and society. It often strikes down people in the prime of their working lives, incapacitating or killing a family's primary bread winner. There is no cure, and treatment is expensive. HIV is often transmitted across borders by tourists, visiting businesspeople, and migrant workers, as well as through high-risk groups such as drug users and sex workers. Regional cooperation is urgently needed, yet current activities are characterized as lacking in resources, effective prevention initiatives, sufficient support and care for those infected and affected by HIV/AIDS, institutional and human-resource capacity at all levels and in all sectors, and strong and effective coordination.

Regional cooperation on health issues is a priority. The threat of a pandemic is real. Proposals include (1) strengthening the collection and dissemination of timely information about health threats, both for surveillance and in order to prepare vaccines, treatments, and containment mechanisms; (2) establishing the capacity to produce influenza vaccines; (3) supporting national capacity building, particularly surveillance and diagnostic capacity in poorer countries; (4) declaring HIV/AIDS a regional emergency; (5) developing a propoor compact for prevention and treatment; (6) creating an Asia-

Human immunodeficiency virus/acquired immunodeficiency syndrome.

About 8.2 million people were living with HIV in Asia at the end of 2004, up from 7.2 million in 2002.

Pacific intergovernmental collaboration mechanism to fight HIV/AIDS; and (7) taking concerted action on other diseases covering standards, health promotion, early-warning systems, and communications (ESCAP-ADB-UNDP 2007).

National governments need to give a higher priority to public health. Expenditure on health is generally low; spending on public health particularly so. The overcrowded conditions and failing health services in urban centers are a notable threat, while the lack of transparency and sharing of information during disease outbreaks is a big obstacle to managing them effectively.

Asia, and the poor in particular, are also threatened by natural disasters (Ortiz 2001), as the devastating tsunami of 2004, the cyclone that hit Myanmar in 2008, and the Sichuan earthquake have highlighted. Regional cooperation could help to make the response to disasters faster, more effective, and less costly. It should include regional early-warning systems where appropriate; disaster-management and recovery plans; and arrangements for information-sharing, transport, and communications. Financial innovations—such as regional catastrophe bond and flood insurance markets—could improve the management of such risks (Lin, de Guzman, and Cuevas 2007).

Labor migration

Encouraging labor mobility is broadly beneficial. This is true for migration within countries as well as among them. Among the 200 million or so international migrants, the top three countries of origin are in Asia: the PRC, with 35 million; India, with 20 million; and the Philippines, with 8 million (Global Commission on International Migration 2005). International migration is expected to continue rising, driven by huge wage disparities among countries, ageing populations and low birth rates in advanced countries, and rising education levels in developing countries. This can bring huge benefits—to migrants, to the countries to which they contribute their labor, as well as to their countries of origin, to which they transfer money and skills.

Globally, migrants' remittances through formal channels are reckoned to have topped \$300 billion a year in 2007 (Ratha and Xu 2008), while twice that much may be sent informally. Remittances are the single largest resource transfer to developing countries, exceeding

⁹⁹ These values include all migrants and differ from Table 6.5 which refer only to those who are registered in a census abroad.

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the \$100 billion that governments of rich countries give in overseas aid and the \$200 billion or so that developing countries receive in FDI. Developing countries in Asia are estimated to receive \$112 billion a year in remittances—India tops the list with \$27 billion, followed by the PRC with \$26 billion and the Philippines with \$17 billion (Table 6.5). Official remittances to the Philippines amounted to nearly 12% of GDP in 2007.

Studies show that remittances boost households' expenditure on education and housing, as well as their investment in household enterprises (Adams 2005, Yang 2006, Lu and Tremain 2007). Estimates using cross-country data for a set of 71 developing countries show that a 10% increase in the share of international migrants in a country's

Table 6.5. International migrants by origin and inflows of remittances

			Remittance Inflows		
	Mig (thou		(\$ mil	% of GDP	
Economy	2000	2005	2000	2007 (est.)	(2007)*
Brunei Darussalam	18	13	-	_	_
Cambodia	312	349	121	322	3.74
China, People's Republic of	5,820	7,258	6,244	25,703	0.79
Hong Kong, China	714	716	136	297	0.14
India	9,059	9,987	12,890	27,000	2.46
Indonesia	1,833	1,737	1,190	6,000	1.39
Japan	884	940	1,374	1,578	0.04
Korea, Republic of	1,492	1,609	735	985	0.10
Lao PDR	352	413	1	1	0.02
Malaysia	785	1,459	981	1,700	0.91
Myanmar	315	427	104	125	0.92
Philippines	3,400	3,631	6,212	17,000	11.79
Singapore	279	230	-	-	_
Thailand	857	758	1,697	1,707	0.69
Viet Nam	2,007	2,225	_	5,000	7.14
Integrating Asia	28,127	31,753	31,685	87,418	0.78
World	175,708	190,590	131,500	317,700	0.58

^{- =} no data available, est. = estimate, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.

Sources: Ratha and Xu. 2008. Available: www.worldbank.org/prospects/migrationandremittances; DRC. 2000. Global Migrant Origin Database for 2000 version 4. Updated 27 March 2007. Available: http://www.migrationdrc.org/research/typesofmigration/global_migrant_origin_database. html; and IMF. 2008. World Economic Outlook. Available: http://www.imf.org/external pubs/ft/weo/2008/update/01/pdf/0108.pdf. (accessed June 2008).

^{*}Figures are calculated using the International Monetary Fund's published gross domestic product data and estimates of remittance inflows for 2007.

population tends to lead to a 2.1% decline in the share of people living on less than \$1 dollar a day, while a 10% increase in official remittances leads to a 3.5% decline in extreme poverty (Adams and Page 2005). Pritchett (2007) estimates that if rich countries allowed their labor force to swell by 3% by easing restrictions on labor mobility, poor countries would gain some \$305 billion a year. Those gains would exceed the combined benefits of rich countries' lowering their trade barriers, granting debt relief, and giving overseas aid. Easing labor migration restrictions would also do more to help poor countries meet the MDGs than all the other measures combined.

Unfortunately, migrant workers are vulnerable to exploitation and abuse, and there is a pressing need for cooperation to ensure that they are better protected. Irregular migrants, who tend to be poor and low-skilled, are particularly at risk. Even when they migrate legally, women are especially vulnerable; illegal trafficking in women is another major issue.

Several international conventions—notably, those of the International Labor Organization (ILO)—and regional declarations, such as ASEAN's declaration on the protection and promotion of the rights of migrant workers, seek to promote the welfare and uphold the human dignity of migrant workers. But unless these conventions are enshrined in domestic law and are then enforced, their impact is necessarily limited. Bilateral arrangements also exist, but these are generally both too slow and too limited in scope, dealing only with legal migrants and not covering access to services in host countries.

Concerted regional action and peer pressure could help rally support for countries to adopt these international conventions. Documenting and sharing best practices on the protection of migrant workers among sending and receiving countries is another fruitful area for regional cooperation. Ensuring the portability of social protection measures across national boundaries would also be helpful.

Regional agreements could help ease labor market surpluses and shortages in integrating economies by helping to match workers to jobs. In particular, younger, poorer countries could export health care workers to older, richer societies. A well-managed regional system could help quell fears about job losses in receiving countries and a brain drain in sending ones. Such a system ought to cover low-skilled workers as well as skilled ones, not just because they are in great demand in older, richer economies, but also because allowing them to migrate temporarily is particularly useful in reducing poverty.

The management of migration flows, remittances, and social protection systems for migrant workers should also be improved.

Since migration and remittances are mostly handled by the private sector, governments' main role is in enacting regulation and enforcing rules. Innovative financial instruments for small savers and assistance in identifying investment opportunities would help make the most of remittances.

Reviewing social protection legislation in countries with many migrants, designing better systems, and highlighting best practices is also important. Providing social protection to families left behind also needs to be considered, as does the reintegration of returning migrant workers. Finally, cooperation to curb trafficking in women and other illegal forced migration is essential. Eventually, migration could lead to a more integrated regional labor market.

Environmental issues

The severity of Asia's environmental challenges calls for urgent national and regional action. At a national level, governments need to set and enforce tougher emission standards on polluting companies, align domestic energy prices with international prices by removing subsidies on fossil fuel use, increase energy efficiency, encourage the use of clean energy, integrate environmental policies with economic and sectoral ones, and engage the private sector to achieve environmental goals.

Many solutions to Asia's environmental problems can also be found through regional cooperation (ADB 2006c). Countries and subregional organizations need to harmonize environmental standards, regulations, and laws. They should act together to reduce air pollution, land degradation, and global climate change. Particular attention needs to be paid to the poor who are generally worst hit and least able to adapt.

There is considerable scope for cooperation in curbing cross-border air pollution. ASEAN countries have taken a lead in seeking to reduce haze and improve air quality in cities through agreements to prevent land and forest fires, and to control emissions. Other affected countries ought to join such efforts, and similar agreements are needed to deal with the Asian brown cloud and dust and sand storms.

National efforts alone cannot mitigate and combat the effects of climate change. Poorer countries cannot single-handedly cope with the increased frequency and intensity of natural disasters such as

The ASEAN Agreement on Transboundary Haze Pollution and ASEAN Framework for Environmentally Sustainable Cities are examples.

tropical storms. Regional cooperation is needed for developing early-warning systems and bolstering disaster relief. Fiscal constraints inevitably hamper public efforts at disaster management. Market instruments such as catastrophe bonds and flood insurance may need therefore to be explored. Regional cooperation is also needed to help poorer countries take stock of the impact of climate change on the vulnerable, and develop alternative livelihoods for those likely to be affected. Regional efforts could also contribute to reducing greenhouse gas emissions through the transfer of technology and good practices as well as by supporting the adoption of clean technologies.

Regional bodies such as regional UN institutions and multilateral agencies could play an important role in promoting cooperation on environmental issues and providing much-needed technical advice and financial support.

Regional cooperation could also be instrumental in helping preserve Asia's natural resources. Subregional initiatives provide a good model for other countries in the region (Box 6.3).

Education and knowledge exchange

Education and cultural exchanges enrich the lives of participants and can foster a sense of regional community. Europe's Erasmus program is a good model. The program involves more than 2,000 higher educational institutions (some 90% of the total) in 31 countries, and includes student and teacher exchanges, the joint development of study programs, networking among departments and faculties, and a credit transfer system. Since the program started in 1987, about 1.5 million students have benefited from it.

The ASEAN University Network, established in 1995, has a similar aim. The network involves 20 leading universities. Its activities also include quality assurance in education and a youth cultural forum. The network also has joint programs with the PRC, India, Republic of Korea, and Japan. So far, the network has benefited only a few hundred students and teachers—it ought to be greatly expanded.

¹⁰¹ Further information on the Erasmus program is available at http://ec.europa.eu/education/programmes/llp/erasmus/erasmus_en.html.

Box 6.3. BIMP-EAGA: a model of subregional environmental cooperation

he Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA) was established in March 1994 to address the social and economic development of the poorer and more remote territories of the four participating countries. It hosts some of the world's richest repositories of land and marine life and a plan has been developed to protect the environment and its unique biodiversity. Priorities include conserving the equatorial rainforests of the Heart of Borneo and the Sulu-Sulawesi marine eco-region.

Borneo's biodiversity

The forests of the Heart of Borneo are among the most biologically diverse habitats on earth. Many indigenous peoples depend on the forest for a variety of resources, including edible and medicinal plants, fish, meat, construction materials, and water, yet it is threatened by land conversion, illegal logging, poor forest management, and forest fires.

Many of Borneo's rivers flow into the Sulu-Sulawesi Sea. This contains nearly two-thirds of the world's reef building corals, over 1,200 species of reef fish, and complex systems of habitats: estuaries, lagoons, sea grasses, sand cays, fringing and barrier reefs, atolls, submerged volcanoes, seamounts, and deep interisland passages and oceanic channels. It is also one of the most important spawning grounds for fish and other marine life in the Asia-Pacific region. Fisheries productivity is high. With average annual harvests reaching nearly \$1 billion, this

has provided food and security for millions of coastal peoples. Yet the Sulu-Sulawesi region is now threatened by reef destruction, over-fishing, and unsustainable fishing practices.

Initiatives for cooperation

The four BIMP-EAGA governments recognize that environmental protection and managing the long-term sustainability of these important natural resources requires effective subregional, multisector cooperation. With the Asian Development Bank (ADB) as their regional development adviser and through the BIMP-EAGA Business Council, they are collaborating on scientific research to create detailed profiles of these eco-regions, assess the policies and institutions needed to manage natural resources sustainability, and formulate a long-term environmental protection program.

The Sulu-Sulawesi marine ecoregion was the focus of BIMP-EAGA's first major environmental cooperation program, which initially focused on developing national conservation plans. Several conservation projects have since been started, and an intergovernmental body, the Tri-national Committee, has been established to take ownership and leadership of such projects.

In February 2007, Brunei Darussalam, Indonesia, and Malaysia signed a declaration of support in Bali for the Heart of Borneo project. Forest management plans are being prepared and completed in 2008. The national plans will form the basis of the cooperative framework for managing shared forest resources.

6.4. A social and environmental agenda

Asian regionalism cannot fulfill its immense potential unless it also addresses disparities within countries and among them. Left to market forces, Asian regional integration will bypass many people and support for it will be eroded. Governments increasingly recognize this; their vision of shared regional prosperity requires corrective action.

Regional cooperation is not only useful for addressing critical social and environmental issues directly; it could also help make a strong case for action—as the MDGs have done globally—and help mobilize national, regional, and global support. Deeper networks among policy makers, research institutions, and nongovernment organizations could improve the design and implementation of policy. By acting together, the region could ensure that the impact of social and environmental policies on the competitiveness of particular industries and subregions is recognized and, if necessary, addressed through complementary policies.

The priorities are as follows.

• First, connecting the poor to the thriving regional economy. Policies will vary across countries, but they should aim to eliminate regulatory, social, and geographical barriers in labor markets; prioritize development strategies with a strong impact on reducing poverty; invest in education and training to make workers more productive; and build infrastructure to connect disadvantaged regions with economic centers.

Aid for trade (Box 6.4), a recent WTO initiative, can be helpful for addressing the policy, capacity, and supply-side constraints that prevent poorer countries from benefiting from new trade opportunities, is particularly important.¹⁰²

Second, developing cost-effective social protection systems.
 With family and community mechanisms of social protection declining, low-income and middle-income countries also need

The WTO website defines aid for trade as "aid that finances trade-related technical assistance, trade-related infrastructure and aid to develop productive capacity." See Prowse (2005) for a full discussion of importance of looking at aid for trade as an integral component of a country's overall development strategy utilizing the integrated framework mechanism (UNCTAD 2005) and Stiglitz and Charlton (2006) for a discussion of the paucity of compensation as the basis for aid for trade. Available: http://www.wto.org/english/tratop_e/devel_e/a4t_e/aid4trade_e.htm).

Box 6.4. Aid for trade

id for trade is a multidonor initiative launched by the World Trade Organization (WTO) in December 2005 that aims to promote the economic development of the world's least-developed countries by stimulating the trade component of projects financed by regional and global financial institutions. Aid for Trade seeks to channel financing for traderelated technical assistance and infrastructure, as well as aid to develop new productive capacity. Such capacity building is expected to help the countries reap the full economic and social potential of international trade.

Aid for trade projects are meant to (1) build the infrastructure needed to transport goods and establish new, viable, and competitive exports; (2) promote exports and finance trade; (3) fund training for customs officials as well as trade negotiators; and (4) help in implementing the required market-oriented reforms and building the social safety nets needed for people to adapt to economic change. As of March 2008, contributions of about \$15 billion had been pledged to kickstart programs worldwide through 2010.

Implications for Asia

Integrating Asia's successful experience of outward-oriented development can be replicated in Asia-Pacific's least-developed countries, which together are home to 7% of the world population

but account for a mere 0.8% of global output and trade.¹ Aid for trade projects are expected to help reduce the gap between advanced and less advanced subregions of Asia—the so-called "two faces of Asia."

Ingredients for successful aid for trade programs

The Asian Development Bank's experience in trade-related development programs shows that successful technical assistance needs to encompass (1) the development of trade-related transport and communication infrastructure; (2) the enhancement of productive capacity and inclusion in production chains and supply networks; (3) the implementation of marketoriented reforms, development of social safety nets, and retraining of workers to ease industrial transition; (4) the development of export-promotion and trade-finance facilities; and (5) trade-related capacity building, notably enhanced training for customs officials and government officials to negotiate and implement trade agreements.

Afghanistan, Armenia, Azerbaijan, Bangladesh, Bhutan, Cook Islands, Fiji Islands, Georgia, Kazakhstan, Kiribati, Kyrgyz Republic, Maldives, Marshall Islands, Federated States of Micronesia, Mongolia, Nauru, Nepal, Pakistan, Republic of Palau, Papua New Guinea, Samoa, Solomon Islands, Sri Lanka, Tajikistan, Timor-Leste, Tonga, Turkmenistan, Tuvalu, Uzbekistan, and Vanuatu.

adequate social protection systems. Recent experiments are expanding the range of cost-effective solutions, in part with innovations that exploit technology and microfinance strategies.

- Third, facilitating and managing labor migration. National and international migration can improve the lives of migrants, their families, and the citizens of host economies. Crossborder labor migration should be encouraged, both to harness complementarities in labor markets and to make regional integration more inclusive. The challenge is to permit migration to grow within socially acceptable levels and to ensure that migrants have basic rights and protections, and are treated with dignity.
- Fourth, protecting regional health and safety. Densely populated and closely integrated Asia needs world-class systems to monitor; prevent; and, if necessary, contain epidemics. Providing the "public goods" of disease prevention and controlling outbreaks is a top regional priority.
- Fifth, making development sustainable. Asia's rapid development is posing an increasing strain on the environment. Cooperation is required to set environmental standards, design interventions, and monitor results. Regional cooperation could be useful in mobilizing Asian and non-Asian resources and technologies. It is essential for addressing cross-border issues.

Sharing such regional goals will help to build a genuine Asian community. By understanding each others' successes and failures, people and countries will develop stronger foundations for cooperation. A common, inclusive vision will also help to mobilize popular support, an essential requirement for realizing the promise of Asian regionalism.