

# CHAPTER 1. REGIONAL SOCIO-ECONOMIC DEVELOPMENTS AND PROSPECTS

## Growth to moderate in 2008 but remain robust

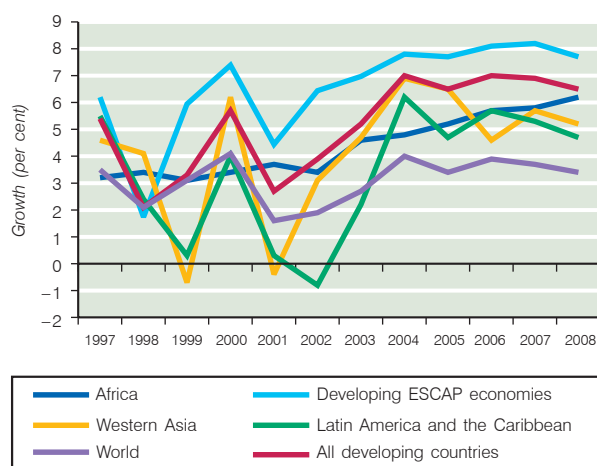
Developing economies in the Asia-Pacific region, having enjoyed their fastest growth in a decade, are expected to see it moderate to 7.7% in 2008, down from 8.2% in 2007 (figure 1.1 and table 1.1). Developed economies in the region are expected to grow at 1.6% in 2008, slipping from 2.0% in 2007. The major drags on performance are the slowdown in the United States driven by the end of the housing bubble, the unfolding credit crunch besetting the United States and Europe, and the appreciation of many of the region's currencies against the United States dollar. Nonetheless, China and India, the region's locomotives, are expected to grow at a brisk pace in 2008, boosting the rest of the region. Commodity- and energy-exporting countries, particularly the Russian Federation, are expected to add to the region's momentum.

Exports may suffer from the slower growth in industrial countries, but strong domestic demand, driven by

consumption in fast-growing countries and by fiscal accommodation, should cushion the blow. Export-dependent economies in East and South-East Asia will see exports contribute less to overall growth in 2008, but China will continue to offer opportunities. These countries will also see more domestic demand, in both consumption and investment.

North and Central Asia will continue to benefit from consumption and construction, thanks to high energy prices. South and South-West Asia, with traditionally domestic-demand-driven economies, will benefit from strong private consumption and investment – and from expansionary fiscal policy in some countries. Bangladesh, Nepal, Pakistan and Sri Lanka, however, may become more vulnerable to political uncertainty. In the Pacific, Fiji and Tonga are expected to recover from economic contractions in 2007, while Papua New Guinea will see rising consumption as the benefits of high commodity prices spill over to the rest of the economy.

Figure 1.1. Real GDP growth in developing ESCAP economies and in other regions



Sources: ESCAP, based on United Nations, *World Economic Situation and Prospects 2008* (United Nations publication, Sales No. E.08.II.C.2); and ESCAP calculations and estimates.

Note: Data for 2007 are estimates and those for 2008 are forecasts.

The region is entering a phase of heightened uncertainty in 2008. The subprime crisis in the United States is still unravelling, and a significant slowdown of the United States economy and further turmoil in financial markets cannot be ruled out. In 2007 the Asia-Pacific economies felt the effects of the global financial turmoil, largely through increased volatility in domestic equity markets and a measurable widening of the yield spreads on their external debts. But neither effect lasted long.

The region's resilience lies mainly in its healthy macro-economic fundamentals, enabling countries to adopt supportive fiscal and monetary policies amid significantly declining export growth, financial market volatility or inflationary pressures from high oil and food prices. Large foreign reserves have added to this resilience.

### Larger economies to maintain dynamism

China, beset by an inability to rein in its supercharged economy, is forecast to have GDP growth moderate to 10.7% in 2008 from 11.4% in 2007 (figure 1.2). A

Table 1.1. Economic growth and inflation, 2006-2008

	Real GDP			Inflation <sup>a</sup>		
	2006	2007 <sup>b</sup>	2008 <sup>c</sup>	2006	2007 <sup>b</sup>	2008 <sup>c</sup>
<b>Developing ESCAP economies<sup>d</sup></b>	8.1	8.2	7.7	4.4	5.1	4.6
<b>East and North-East Asia</b>	8.7	9.0	8.4	1.6	3.8	3.3
China	11.1	11.4	10.7	1.5	4.8	3.5
Hong Kong, China	6.8	6.1	5.7	2.0	1.8	3.4
Mongolia	8.4	9.0	8.0	5.1	9.0	..
Republic of Korea	5.0	5.0	4.9	2.2	2.6	3.1
Taiwan Province of China	4.7	5.5	4.7	0.6	1.8	2.4
<b>North and Central Asia</b>	7.6	8.6	7.1	9.7	9.4	8.2
Armenia	13.3	13.8	9.0	2.9	4.4	4.0
Azerbaijan	34.5	25.0	25.0	8.3	16.7	16.0
Georgia	9.4	11.0	9.0	9.2	9.2	8.0
Kazakhstan	10.6	9.0	9.0	8.6	10.8	8.0
Kyrgyzstan	2.7	8.2	7.0	5.6	10.2	5.0
Russian Federation	6.7	8.1	6.5	9.7	9.0	8.0
Tajikistan	7.0	7.8	6.5	11.9	21.5	10.0
Turkmenistan	9.0	10.0	10.0	8.2	6.5	9.0
Uzbekistan	7.3	9.0	7.0	14.2	12.2	9.8
<b>Pacific island economies</b>	3.1	2.7	4.8	2.8	2.8	3.1
Cook Islands	0.8	2.5	3.5	3.4	2.8	2.0
Fiji	3.6	-3.9	2.2	2.5	4.1	3.0
Papua New Guinea	2.6	6.2	6.6	2.3	1.8	2.9
Samoa	1.8	3.0	3.5	3.3	4.4	4.1
Solomon Islands	6.1	5.4	4.2	8.1	6.3	7.3
Tonga	1.3	-3.5	0.8	7.0	5.9	5.0
Vanuatu	5.5	4.7	4.6	2.6	2.5	2.5
<b>South and South-West Asia<sup>e</sup></b>	8.0	7.4	7.4	8.3	7.9	7.0
Bangladesh	6.7	6.5	6.5	7.2	7.2	6.5
India	9.6	9.0	9.0	6.7	5.5	5.0
Iran (Islamic Republic of)	6.2	5.8	5.0	13.6	17.0	16.0
Nepal	2.8	2.5	4.0	8.0	6.4	6.0
Pakistan	6.6	7.0	6.5	7.9	7.8	7.5
Sri Lanka	7.7	6.7	7.0	10.0	15.8	10.0
Turkey	6.1	5.0	5.5	9.6	8.6	6.8
<b>South-East Asia</b>	6.0	6.2	5.8	6.7	3.7	4.4
Cambodia	10.8	8.5	7.0	4.7	3.0	3.0
Indonesia	5.5	6.2	6.2	13.1	6.3	6.4
Lao PDR	8.3	7.4	8.1	6.8	4.0	5.0
Malaysia	5.9	5.7	5.8	3.6	2.0	2.8
Philippines	5.4	7.0	6.7	6.2	2.7	3.5
Singapore	7.9	7.5	4.9	1.0	1.8	3.0
Thailand	5.1	4.5	4.9	4.7	2.3	3.3
Viet Nam	8.2	8.4	8.2	7.7	7.9	7.7
<b>Developed ESCAP economies</b>	2.4	2.0	1.6	0.6	0.2	0.6
Australia	2.7	4.2	3.2	3.5	2.4	3.1
Japan	2.4	1.8	1.4	0.3	0.0	0.4
New Zealand	1.8	3.1	2.3	3.4	2.4	2.6

Sources: ESCAP, based on national sources; IMF, *International Financial Statistics* (CD-ROM) (Washington, D.C., 2007); ADB, *Key Indicators of Developing Asian and Pacific Countries 2007* (Manila, 2007); website of the Inter-State Statistical Committee of the Commonwealth of Independent States, <[www.cisstat.com](http://www.cisstat.com)> (3 December 2007 and 5 February 2008); and ESCAP estimates.

a Inflation refers to changes in the consumer price index.

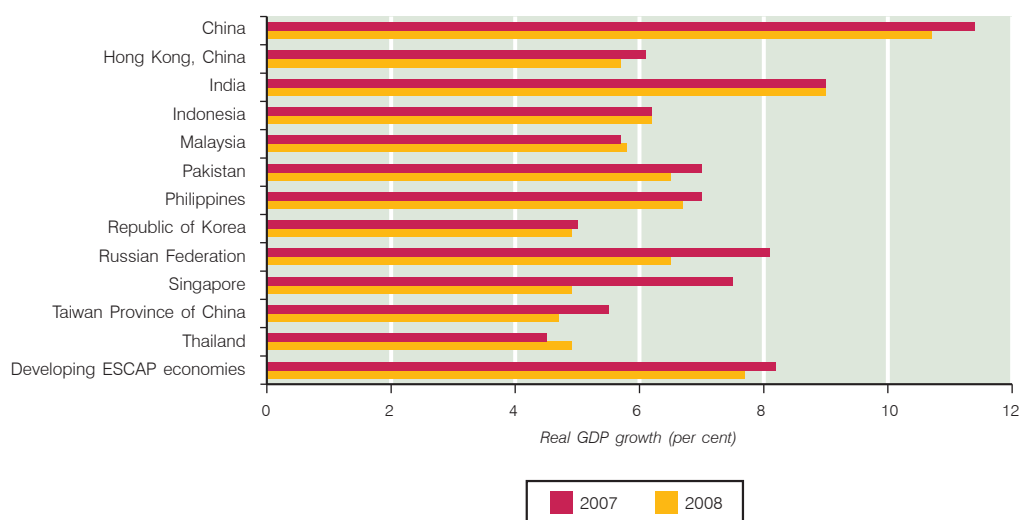
b Estimate.

c Forecast.

d Based on data for 38 developing economies representing more than 95% of the population of the region (including the Central Asian republics). GDP figures in market prices in United States dollars in 2004 (at 2000 prices) have been used as weights to calculate the regional and subregional growth rates.

e Fiscal year 2005/06 is 2005 for India and the Islamic Republic of Iran and 2006 for Bangladesh, Nepal and Pakistan.

Figure 1.2. GDP growth to slow in 2008



Source: ESCAP forecast.

Notes: There are 38 developing ESCAP economies (including the Central Asian countries). Calculations are based on the weighted average of GDP figures in United States dollars in 2004 (at 2000 prices).

slowdown in exports and the government's measures to cool the economy are the main reasons for the moderation. As government spending increases in rural areas and social sectors, domestic demand will provide more support to growth. Investment will continue to be the main demand component of GDP, as policy measures to rein in spending in overheating sectors face obstacles from buoyant liquidity. With inflation rising to a 10-year high in November 2007 and the Shanghai stock market doubling in value, the need to cool the economy has become more pressing.

*“The last few years have seen the Russian Federation emerge as an economic force in the region”*

India, largely insulated from weaknesses in the international environment, is projected to maintain growth at 9.0% in 2008 – unchanged from 2007. Investment in booming manufacturing and services will remain the main driver. Private consumption will also remain healthy. Government spending is likely to be high in 2008 because of new demands on the exchequer, including a public-sector wage increase. Going forward, the drivers of growth may be under strain.

Cheap credit may evaporate as global financial markets lose their appetite for risk. Exports of price-sensitive software and information technology services are being trimmed by an appreciating currency and a slowing United States economy. While inflation has been brought under control, underlying supply constraints may still pose challenges.

GDP growth in the Republic of Korea should remain unchanged. The slowdown in the United States will hurt exports, but China will continue to offer opportunities. In 2007, sales to China offset the slowing United States economy and an appreciating currency. Exporters will also benefit from the free trade agreement with the United States in 2008, subject to its ratification by the United States Congress. Private consumption will remain strong, having recovered from the bursting of the household credit bubble. Consumer confidence is high, with rising household incomes, a buoyant stock market and unemployment at its lowest since 1997.

Growth in the Russian Federation has exceeded 6% per year since 2003 and is set to grow at 6.5% in 2008. Having boosted its share of world output by 20% in the last 10 years, it is now the world's eighth-largest economy in purchasing power parity terms. With the high energy prices, exports will remain strong, as will consumption. Manufacturing and services will expand to feed the growing domestic demand, but appreciation of the currency from energy exports threatens other exports.

## Japan's growth spurt stutters

Japan's growth slowed in 2007 because of weak exports. Domestic demand will provide some support in 2008. Residential investment will gradually recover from the sharp drop in 2007. Capital investment, an important GDP driver at the beginning of 2007, will make a moderate contribution in 2008. Private consumption will remain muted if tight labour markets do not translate into wage growth. With weak domestic demand and slower external demand, growth in 2008 is expected to slow further to 1.4%.

## Least developed countries – largely unaffected by global turbulence

Least developed countries in Asia and the Pacific, having grown at 6.5% in 2007, are expected to have growth slow to 6.4% in 2008. Cambodia grew at 8.5% in 2007, followed by the Lao People's Democratic Republic (7.4%), Bangladesh (6.5%) and the

Solomon Islands (5.4%). High oil prices pose major challenges to oil-importing least developed countries, but they also increase demand for foreign workers in some of the oil-rich countries in Western Asia. Remittance-dependent Bangladesh and Nepal will thus benefit from remittances to sustain their economies, and non-oil commodity exporters may benefit from high commodity prices.

Asian and Pacific least developed countries have been largely unaffected by the United States subprime meltdown because they have little exposure to the global financial system. A significant slowdown in the United States, however, could be damaging, particularly for Cambodia and its apparel exports.

For some least developed countries, especially Afghanistan, peace and stability will be the keys to economic growth and development. Others need to sustain and deepen ongoing reforms – maintaining macroeconomic stability, improving the business environment and investing more in infrastructure and human capital development, all crucial to promoting private investment to kickstart their economies.

### Box 1.1. Sharing the benefits of growth

The Asia-Pacific region's unprecedented growth over the past decade has lifted about 300 million people out of extreme poverty since 1990, with China accounting for the largest share. Still, 641 million people in the region – two thirds of world's poor – live on less than \$1 a day (see figure).

Another concern is widening income inequality: the rich are becoming richer faster than the poor are becoming less poor. The Gini coefficient, a popular measure of inequality, shows that inequality has increased over the past 10 years in 15 of 21 countries with data available (ADB, 2007). So, high economic growth does not always benefit the poor proportionately (see table).

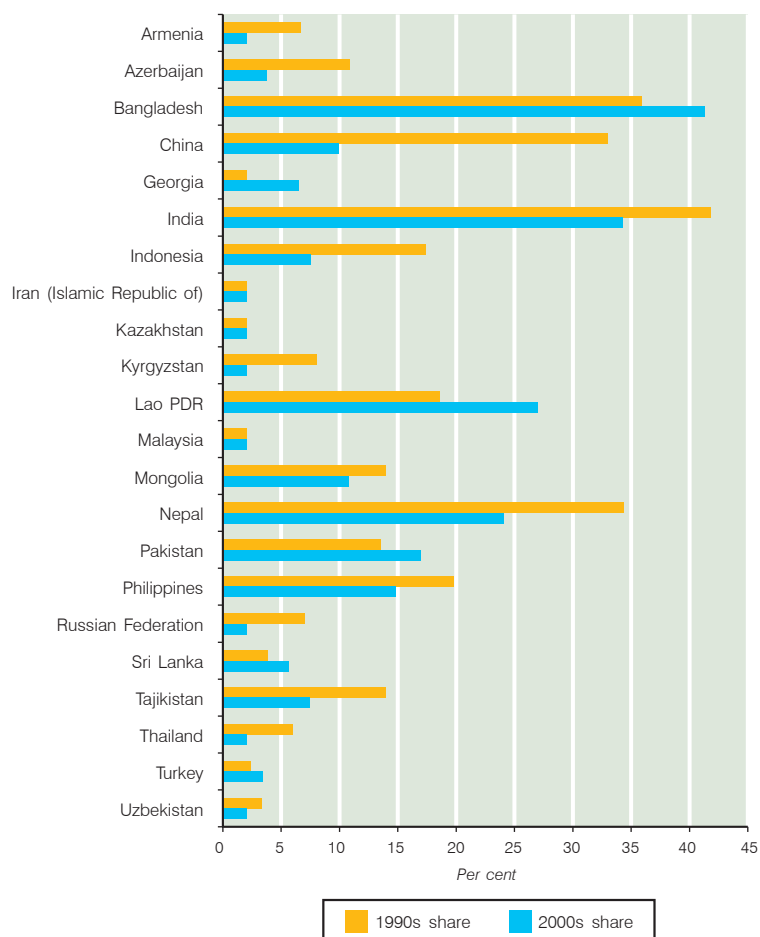
Economic growth was highly pro-poor only in the Republic of Korea, with most other countries experiencing weakly pro-poor growth. So, while the poor benefited from high growth, the non-poor benefited even more. For example, Thailand's growth of almost 10% per year in 1988-1992 did not proportionately benefit the poor. And in 1996-2000, the financial crisis was extremely detrimental to the poor. Per capita welfare declined by an annual rate of almost 1%, while poverty increased sharply from 11.4% in 1996 to 16.2% in 2000 – making the overall pro-poor growth index weakly pro-poor (Son, 2003). Those areas showing only modest growth in per capita income, such as Bangladesh and rural India, brought poverty down, as illustrated by the pro-poor growth index.

The overall pro-poor index is created for a country for the entire period under study. But there are some important lessons from breaking down the index into different periods. During the early 1980s, China's agriculture-led development strategy was highly pro-poor. But when it shifted to a development strategy oriented towards exports and foreign direct investment, growth became less pro-poor and poverty reduction slowed (Pasha, 2002).

*(Continued on next page)*

## Box 1.1 (continued)

Figure. People living on less than \$1 a day in the ESCAP region



Source: United Nations Statistics Division.

Note: Data for earliest and latest years refer to 1996 and 2003 for Armenia and Georgia; 1995 and 2001 for Azerbaijan; 1992 and 2000 for Bangladesh; 1990 and 2004 for China; 1993 and 2004 for India; 1993 and 2002 for Indonesia; 1990 and 1998 for the Islamic Republic of Iran; 1993 and 2003 for Kazakhstan, Kyrgyzstan and Uzbekistan; 1992 and 2002 for the Lao People's Democratic Republic and Thailand; 1992 and 1997 for Malaysia; 1995 and 2002 for Mongolia; 1996 and 2004 for Nepal; 1999 and 2002 for Pakistan; 1991 and 2003 for Philippines; 1996 and 2002 for Russian Federation; 1990 and 2002 for Sri Lanka; 1999 and 2003 for Tajikistan; and 1994 and 2003 for Turkey.

In Viet Nam, too, growth had more benefits for the extremely poor in 1992, after the government introduced reforms known as *doi moi*. These reforms dismantled collective farms, redistributed land to peasant households through long-term leases and abolished price controls on goods and services. This paved the

(Continued overleaf)

## Box 1.1 (continued)

Table. Growth not pro-poor across the board

	<i>Pro-poor growth index</i>	<i>Nature of growth</i>	<i>Period</i>
Bangladesh	0.39	Moderately pro-poor	6 observations (1983-2000)
China	0.28	Weakly pro-poor	21 observations (1981-2001)
India: rural	0.77	Pro-poor	12 observations (1977-2005)
urban	0.35	Moderately pro-poor	12 observations (1977-2005)
Indonesia	0.10	Weakly pro-poor	7 observations (1987-2002)
Lao PDR	0.21	Weakly pro-poor	6 observations (1992-1998)
Nepal	0.23	Weakly pro-poor	4 observations (1984-2003)
Republic of Korea	2.13	Highly pro-poor	13 observations (1990-2003)
Thailand	0.13	Weakly pro-poor	9 observations (1988-2006)
Viet Nam	0.15	Weakly pro-poor	4 observations (1992-2004)

*Sources:* ESCAP estimates based on the methodology developed in Kakwani and Pernia (2000) (see note 1 at the end of the chapter). For the Republic of Korea and Thailand, national data are from the Korea National Statistical Office and the National Economic and Social Development Board. All other data are from the PovcalNet database, <<http://www.worldbank.org/lsms/tools/povcal>>, retrieved October-November 2007.

*Note:* Poverty head count data from the PovcalNet database are derived by applying \$1 a day poverty line to national survey data. For Viet Nam, the data are derived applying the \$2 a day poverty line to national survey data.

way for spectacular growth in the 1990s, reducing poverty (Kakwani, Khandker and Son, 2004). But growth in 1998-2002 was less pro-poor: an increase in per capita income of 1% reduced poverty less than in 1993-1998 (World Bank, 2003).

So, it is not only the overall growth that determines how much poverty is reduced – it is also the pattern of growth. Growth has to direct resources to areas where the poor live, to sectors in which poor people work, to the factors of production they possess and to the products they consume. Because the majority of the poor live in rural areas, work in agriculture, have little education, provide unskilled labour and consume mostly basic necessities such as food, policies that address these fundamentals well are likely to be pro-poor.

Promoting agricultural development, particularly food production and generally rural development that promotes off-farm employment, can make the biggest contribution to reducing poverty in the Asia-Pacific region. As for China and Viet Nam, agricultural development has been a common feature in countries that have reduced poverty. Their agricultural development did not sacrifice growth – it drove growth. Rural prosperity spurred farm and non-farm enterprises that boosted employment and incomes, creating a virtuous cycle of growth and poverty reduction (chapter 3).

ESCAP analysis shows that some poverty-related indicators may not be responsive to economic growth (ESCAP, forthcoming). Health indicators do respond, but primary and secondary enrolments and completion rates do not. So, more targeted policy interventions and programmes may be needed. For example, mid-day meals in Bangladesh and India have improved schooling outcomes and health indicators (ADB, 2006).

Some policies to address inequalities may be politically difficult (for example, land reform) while targeted measures to address poverty may require significant fiscal resources, best initiated in a growing economy. With the region's unprecedented growth, it is time to take decisive steps to share the prosperity – and end poverty and inequality.

## Domestic demand – cushioning slower export growth

In 2008, domestic demand will continue to sustain growth as exports decline. Robust private consumption and investment growth, supported by fiscal policy accommodation, are the keys. The strong fiscal position of many countries is likely to enable accommodative policies that compensate for weak external sectors. And the accumulation of foreign reserves has curtailed a more effective use of savings in the region. Redirecting foreign reserves from low-yielding foreign assets to financing domestic infrastructure could increase productive capacity. Policymakers may want to make a conscious effort to sustain the rise in domestic demand in order to reduce their economies' dependence on the external sector, which is becoming increasingly unpredictable.

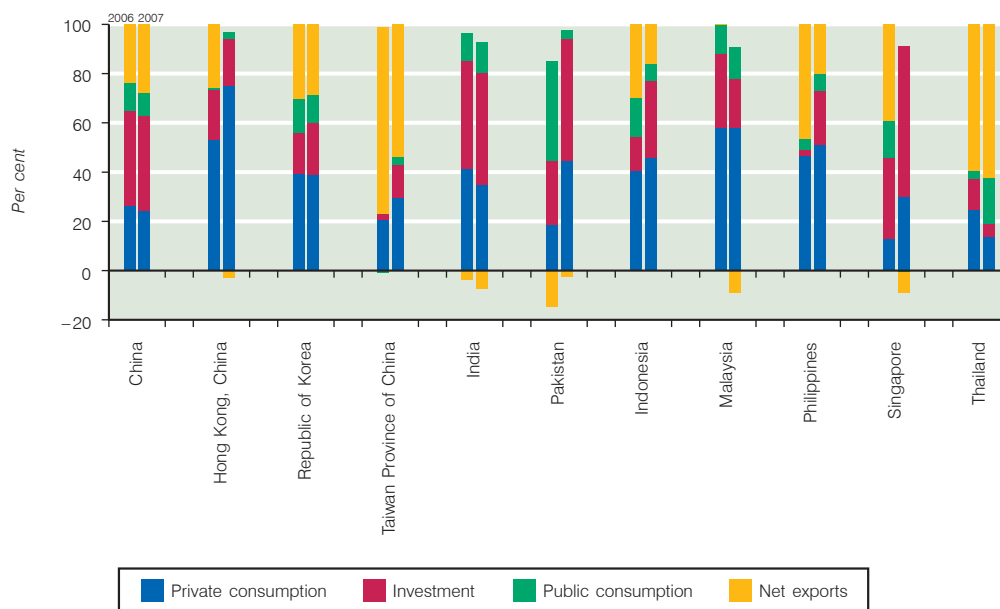
Although all economies in East and North-East Asia, except China, saw a marginal slowdown in 2007, the better than expected performance over the year was due mainly to robust domestic demand (figure 1.3). Hong Kong, China; Taiwan Province of China; and the

Republic of Korea all saw higher consumption and investment during 2007.

South Asian countries have enjoyed strong domestic demand and saw their merchandise trade deficits widening in 2007 due to increased imports of energy and consumption goods. North and Central Asia benefited from heightened activity in domestic consumption-led sectors as a consequence of the buoyant energy prices in recent years.

South-East Asia's highly export-dependent economies would be especially affected by a slowdown in the United States. Nevertheless, they will see an increased contribution from domestic demand, through both consumption and investment in 2008. Indonesia is expected to see strong investment due to lower interest rates, the new investment law, and government infrastructure spending plans. The Philippines is expected to see robust private consumption as a result of booming remittances. Consumption in Singapore is likely to remain high, with rising wages, high property prices and low unemployment. Thailand is expected to experience a significant increase in GDP growth following elections held at the end of 2007.

Figure 1.3. Strong contributions of domestic demand to GDP



Sources: Based on CEIC Data Company Ltd; and EIU, *Country Forecasts* (London, 2007), various issues.

Notes: Data for 2007 are estimates. Investment refers to gross fixed investment.

## Infrastructure and environment – holding back fast growers?

India's nearly 7% growth in the last decade is straining its ailing infrastructure, while China's 10% growth has degraded the environment.

India's growth created a large middle class with an appetite for consumer goods and services. In a fairly closed economy, its domestic manufacturing and services have strained to fill demand. Energy shortfalls have become evident in blackouts, with the peak electricity deficit rising to nearly 14% in 2007, the highest in eight years (Morgan Stanley, 2007). The power utilities suffer network losses of about 40%, and transport infrastructure is lagging. The national road building programme slowed to 500 kilometres of roads in 2006, down from 2,500 kilometres in 2005 (Financial Times, 2007). Airports struggle to cope with low-cost airlines, which increased domestic passenger numbers by more than 30% in 2006. Ports were at 93% capacity in 2006. And deficits in water supply, solid waste management and housing for low- and middle-income residents are growing.

*India and China, with their breakneck growth, see first-hand that infrastructure and environment problems could jeopardize their economic growth – a lesson for other countries*

India needs to spend \$320-\$410 billion in 2007-2012 to finance its infrastructure needs (RIS, 2007). ESCAP analysis shows that annual financing requirements in energy infrastructure alone amount to about \$25 billion for 2001-2031 (ESCAP, 2006a). Given the already stretched fiscal position, innovative private-public partnerships will have to bridge the gap. The groundwork has recently been laid with legal and regulatory changes for private-public partnerships in power, transport and urban infrastructure. Even so, government investment will remain paramount for rural roads and irrigation. As ESCAP proposes, regional cooperation mechanisms for infrastructure financing are worth exploring.

For China, the destabilizing effect of growth on the environment is becoming more apparent. Air pollution, especially in large cities, is increasing the incidence of lung diseases. Water pollution is causing growing

levels of cancer – and diarrhoea among children under 5 (World Bank, 2007a). The country has lost 8 million hectares of its arable land – 6.6% – to manufacturing and construction in the past decade (China Daily, 2007). In 2007, the country experienced one of its biggest environmental disasters, with Taihu, the third-largest freshwater lake, affected by toxic algae from the emissions of factories and farms along its shores.

The government has pledged to eliminate export tax rebates for 553 highly energy-consuming and resource-intensive products, such as cement, fertilizer and non-ferrous metals.

The rest of Asia and the Pacific faces infrastructure constraints and environmental degradation. But India and China, with their breakneck growth, see first-hand that infrastructure and environment problems could jeopardize their economic growth – a lesson for other countries.

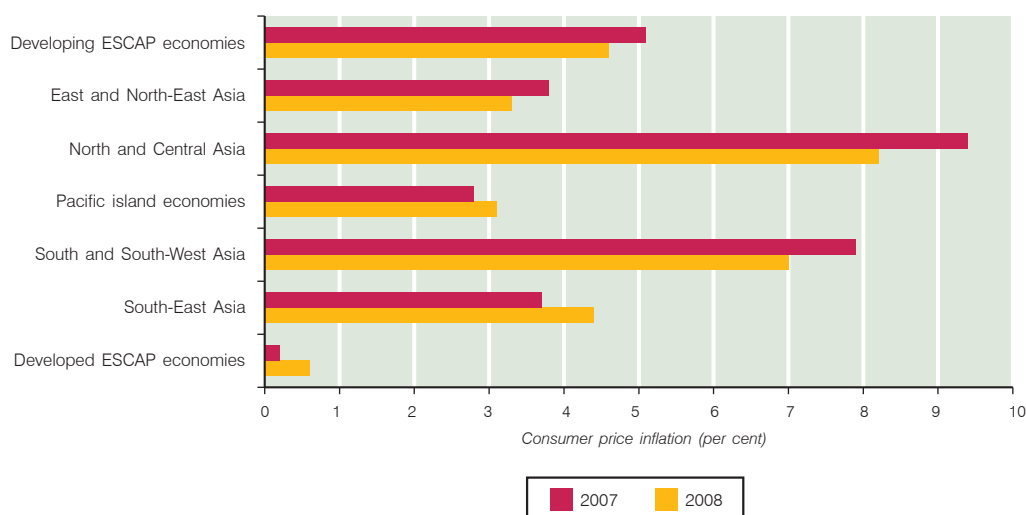
## Greater uncertainty for inflation

Inflation in the developing ESCAP economies was 5.1% in 2007, up from 4.4% the previous year. Currency appreciation in most economies moderated the impact of high international oil and food prices. With the exception of East and North-East Asia, all ESCAP subregions had lower inflation in 2007 than in 2006. Monetary policy has varied accordingly. China, India, the Republic of Korea and Taiwan Province of China tightened the monetary stance in 2007, while Malaysia kept its interest rates steady. In contrast, Indonesia, the Philippines and Thailand eased rates.

Inflation is projected at 4.6% in 2008 for the developing economies of Asia and the Pacific, with currency appreciation cushioning high oil and food prices (figures 1.4 and 1.5). Inflation is expected to edge up in 2008 in South-East Asia and the Republic of Korea. But it should moderate in China; Hong Kong, China; India; and the Russian Federation. Monetary policy in India and China is expected to remain cautious as they continue to manage the threat of overheating.

Monetary authorities face a dilemma this year. Restrictive policies may be required to counter inflationary pressures, but permissive policies may be called on to manage any significant slowdowns in GDP growth. Countries with credible monetary policies and lower inflationary expectations should ride out inflation in 2008.

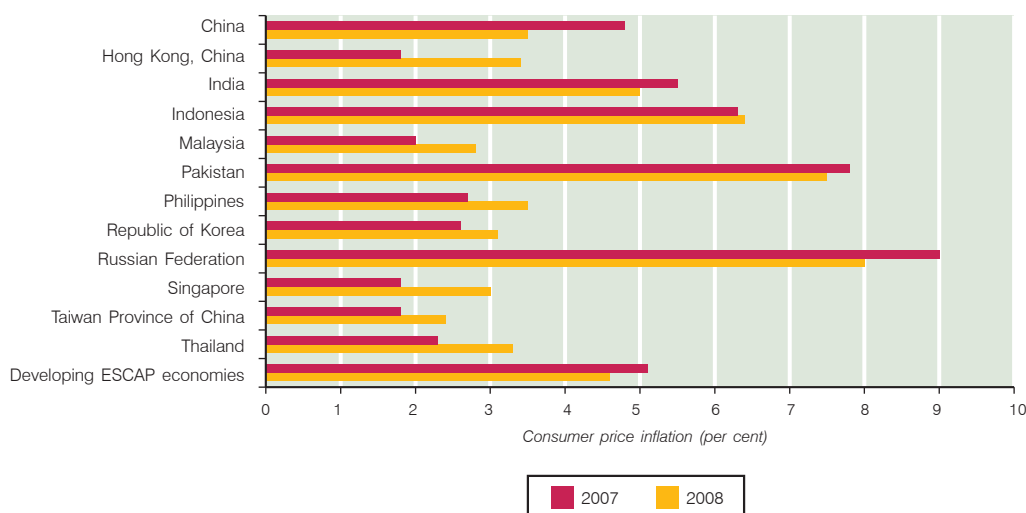
Figure 1.4. Inflation in ESCAP subregions, 2007-2008



Source: ESCAP forecast.

Notes: Data for 2007 are estimates and those for 2008 are forecasts. Inflation rates refer to changes in the consumer price index. There are 38 developing ESCAP economies (including the Central Asian countries). Calculations are based on the weighted average of GDP figures in United States dollars in 2004 (at 2000 prices).

Figure 1.5. Inflation in selected developing ESCAP economies, 2007-2008



Source: ESCAP forecast.

Notes: Data for 2007 are estimates and those for 2008 are forecasts. Inflation rates refer to changes in the consumer price index. There are 38 developing ESCAP economies (including the Central Asian countries). Calculations are based on the weighted average of GDP figures in United States dollars in 2004 (at 2000 prices).

The key challenge is to decipher how much of last year's surge in oil and food prices might continue in 2008 and beyond. The price of Brent crude hovered at \$70 a barrel for most of 2007 but surged to near \$100 in November and hit \$100 in January 2008 (figure 1.6). A weakening United States dollar and geopolitical tensions close to major oil-production areas have been, and will continue to be, factors outweighing those of demand in determining price movements.

Some pressure on oil prices may ease as the industrial economies, led by the United States, slow down. Recent oil price rises also reflect speculation. Supplies have some room to grow, especially as new fossil fuels become viable, investments in remote areas and deeper waters pay off, and oil sands, heavy crude and coal to oil conversions are developed.

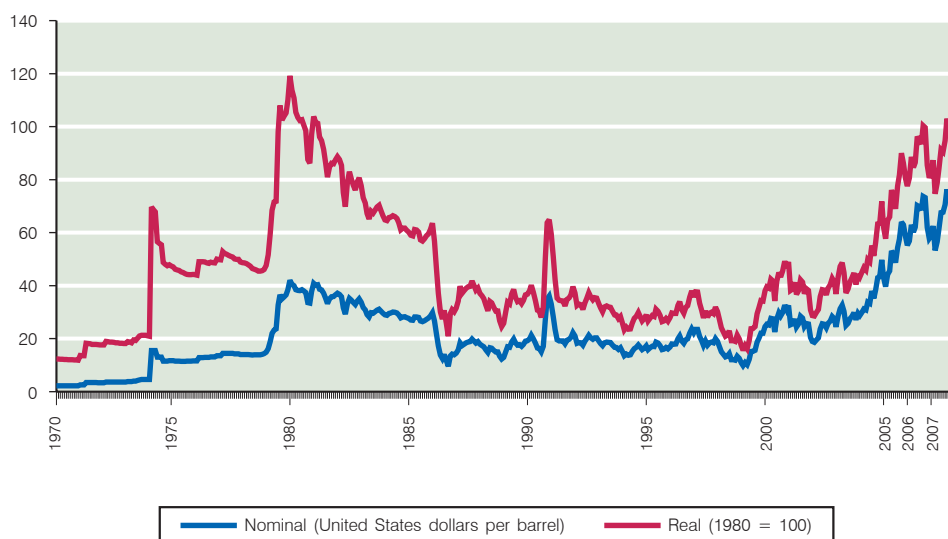
## Food inflation – the next big challenge

Food prices are likely to remain high. The rapid rise in 2007 was partly the result of drought in Australia,

flooding in China and dry weather in Europe. Added pressure came from biofuels. With grains and oil seeds the key feedstuffs for biofuels, the oil price rise exerted a strong push on agricultural commodity prices in 2007, which enjoyed their best performance for almost 30 years. As oil hit \$100 per barrel in January 2008, soybean prices jumped to a 34-year high, corn prices approached their recent 11-year high, wheat prices were just below their recent all-time high, rapeseed prices rose to record highs, and palm oil futures hit a historic high (figure 1.7). With the march towards biofuels apparently unstoppable, the region has to prepare for imported inflation through higher food prices. Governments need to carefully consider the impact of biofuels on the poor (box 1.2).

For many countries in the region, food prices are a bigger inflationary concern than oil prices. Why? Because food accounts for a far higher proportion of consumer spending. In the Philippines, food accounts for 50% of the consumer price index (CPI), far more than the 7% for energy. In India, food represents 46% of the CPI, in Indonesia 42%, and in China 33%. Food price inflation hits low-income households, so governments may need to target the poor with food stamps and cash.

Figure 1.6. Nominal and real oil prices, 1970-2007



Sources: IMF, *International Financial Statistics* (CD-ROM) (Washington, D.C., 2007); PTT Public Company Limited; CEIC Data Company Ltd.; and ESCAP calculations.

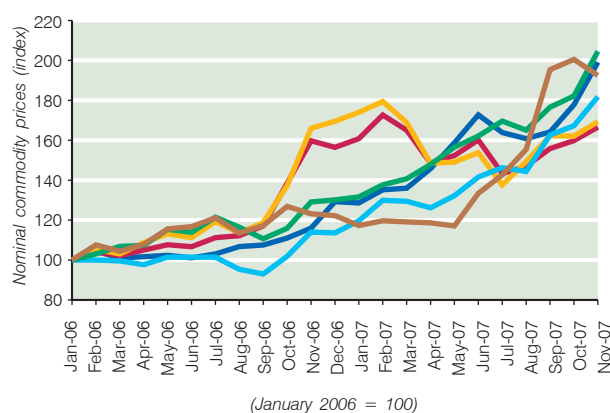
Notes: Oil prices are for Brent crude. Real oil prices are calculated to December 2007. The consumer price index (all commodities) of the United States was used as the deflator for the nominal price of Brent oil.

## Currency appreciation to continue

The currencies of the region have appreciated dramatically over the last two years on a tide of huge global liquidity. Since 2006, all major currencies in the region have risen against the dollar, a trend expected to continue in 2008, driven by the unwinding of large United States imbalances with the rest of the world and the turmoil in global financial markets. Of concern is the variation across countries. The Korean won rose by 7.3% against the dollar between 2006 and November 2007, and the Thai baht about 17%.

But currencies have not appreciated solely against the dollar. Many currencies have risen against the Japanese yen. Of particular relevance is the appreciation against the Chinese yuan, since China competes in third-country markets with the other economies of the region.

Figure 1.7. Rising food prices



Source: IMF, *International Financial Statistics* (CD-ROM) (Washington, D.C., 2007).

### Box 1.2. Biofuels: Friend or foe of the poor?

Under some projections, global demand for biofuel could rise from 10 billion gallons per year in 2005 to 25 billion gallons in 2010, or 20% per year.

The United Nations projects that biofuels will be “one of the main drivers” of projected food price hikes of 20-50% by 2016 (OECD-FAO, 2007). Higher food prices will most hurt the urban poor and the rural poor who are net food consumers, for whom food is usually the biggest expenditure item.

But biofuels do offer some potential for reducing poverty:

- Rural farmers benefit from higher demand for agricultural products. Sugarcane for ethanol has become more attractive for developing-country farmers. Many developing countries already grow or could grow other energy crops, such as soybeans, rapeseed and oil palm. Biofuels can increase the number of jobs and markets for small farmers and provide cheap renewable energy for local use.
- Biofuels can hold down oil prices. If biofuels reduce oil prices, this would provide relief for the poor and poor countries. Of the world’s 50 poorest countries, 38 are net importers of petroleum and 25 import all their petroleum. Some now spend up to six times more on fuel as on health, while others spend twice what they allocate to poverty reduction (UN-ENERGY, 2007). If the gains from lower import bills can be spent by governments on poverty reduction, the effects of higher food prices can be mitigated.
- New biofuel inputs promise to hurt the poor less and help the environment more. Palm oil and sugarcane, some of the main crops of choice in developing countries, raise environmental concerns due to deforestation. One long-term possibility is cellulosic ethanol, which uses low-value wood chips, wood

(Continued on next page)

Box 1.2 (continued)

waste; fast-growing grasses; crop residues; such as corn stover, and municipal waste. Production is currently more expensive than food-based biofuel inputs, but the extraction technology is improving. *Jatropha* is a fast-growing crop that can be planted in poor soil and extremely arid conditions without any need for irrigation and that produces high yields for biodiesel. India has been particularly active in exploring *Jatropha* for its fuel needs (Reuters India, 2007).

Much of the crop-based fuel production is now concentrated in the United States and Western Europe. By subsidizing their domestic agriculture and their biofuel industries, however, many developed countries are distorting the opportunities for biofuel production and trade by developing countries.

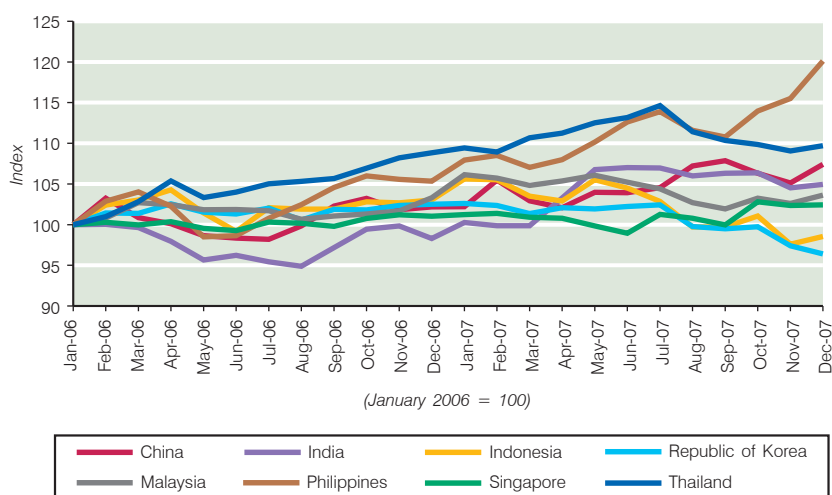
So far, poor rural farmers have not seen the benefits of biofuel production. They lack the wherewithal to extend their land and adapt to new crops. And the impetus for large-scale farming can push the poor off their land, excluding them from biofuels. For example, sugarcane requires good land and large amounts of irrigation water, difficult for poor farmers to obtain. And the poorest rural dwellers live in areas often too dry for sugarcane (ICRISAT, 2007). With the demand for biofuel seemingly unstoppable, governments need to carefully consider the impact on the poor.

The relentless currency appreciation sheltered the region's economies from high oil and food prices, but it dealt a blow to the competitiveness of exports. Movements in real effective exchange rates, the best measure to gauge competitiveness, show that all large economies except Indonesia and Republic of Korea have experienced appreciations since 2006 (figure 1.8), ranging from 2.4% for Singapore to 20% for the Philippines. So, countries have lost export competitive-

ness not only to the United States but also to their other trading partners.

Countries with the greatest appreciation in real effective terms since 2006 – especially Thailand and the Philippines – have already seen the impact on their export earnings. Thailand's export growth in dollar terms fell in the fourth quarter of 2007 (11.6% year on year) after rising in the third (11.6% year on year).

Figure 1.8. Real effective exchange rates for selected developing ESCAP economies, 2006-2007



Source: Based on online data from *Bank of International Settlements Databases* (accessed on 17 January 2008).

Export growth in the Philippines turned negative in November 2007 (2% year on year), after a rise of 10.5% the previous month.

These countries have faced intensive competition from lower cost producers, surrendering market share, especially in price-sensitive, low-technology-intensive manufacturing and sectors with a low import content, such as agriculture and commodities. In Thailand, local currency export earnings for garments, jewellery, furniture and rubber have been flat since 2006. And in the Philippines, textiles, furniture, bananas and pineapples have been most affected.

## Measures to help exporters not effective

Countries throughout the region are expected to have weak merchandise exports in 2008. The current account balances would deteriorate slightly as a result (figure 1.9). Commodity exporters will be somewhat shielded, though some prices may ease from their highs in 2007. Indonesia and the Philippines will continue to receive support from the booming remittances of their overseas workers.

Governments have reacted by introducing a host of measures. One is to offer direct assistance to exporters. India offered interest rate relief, adjustments of duty drawback rates and swifter reimbursements of past export claims. The Philippines established a \$1 billion hedging fund to protect exporters against cur-

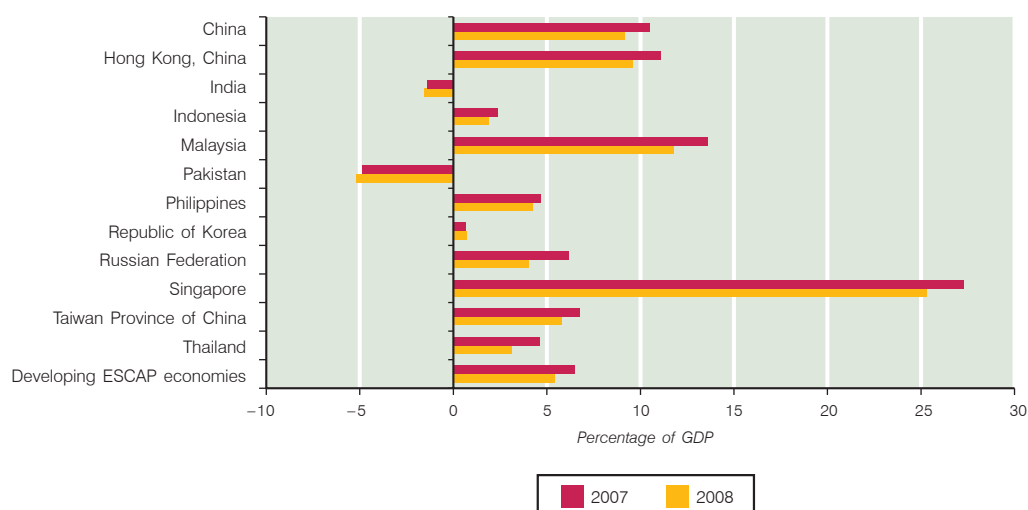
rency movements. Another is to increase local demand for dollars from individuals and enterprises to ease the pressure on domestic currencies. Thailand allowed companies to take funds abroad for investment, exporters to keep earnings in foreign currency for longer periods, companies and individuals to open foreign-currency accounts at local banks and local investment funds to invest abroad. India increased the limit on portfolio investments in foreign companies and enhanced the limit for overseas investment in joint ventures or wholly owned subsidiaries.

How effective are these measures likely to be? Direct assistance to exporters is only a short-term coping mechanism for the loss of earnings. Exporters must still maintain competitiveness in the face of rising prices in foreign currencies. So, such measures can help only if currency appreciations are temporary.

*Rising incomes and burgeoning middle classes in India, China and other fast-growing economies open enormous opportunities to diversify away from traditional trading partners*

Similarly, encouraging holdings of dollars by domestic entities may not meet the intent of policymakers. A more convertible currency for outward investment is a

Figure 1.9. Current account balance for selected developing ESCAP economies, 2007-2008



Source: ESCAP forecast.

Note: Data for 2007 are estimates, those for 2008 are forecasts.

sensible long-term measure for integrating into the global economy, but it is unlikely to have much effect in the near future. Investors will not be keen to make dollar investments when they see further dollar depreciations as likely.

In the long run, exporters will cope only by increasing the value added of their products through greater productivity and moving away from the low-value products most susceptible to price-based international competition. Trade in services is another area to focus on.

Countries should also diversify their markets. With the United States and European markets each receiving about 15% of developing Asia-Pacific exports, any severe downturn in these markets will still hurt the region. Rising incomes and burgeoning middle classes in India, China and other fast-growing economies open enormous opportunities. And other developing regions, particularly Africa, offer new trading opportunities (box 1.3). Exploring these new markets can help the region sustain exports as engines of growth while decoupling from cyclical downturns in the industrial markets.

## Reserves accumulate – at what cost?

By October 2007, developing economies in the Asia-Pacific region had accumulated \$3.4 trillion in foreign reserves, up from \$2.7 trillion at the end of 2006 (figure 1.10). While reserves have been accumulated partly as a buffer against financial crises, the rapid increase has been the result of the fight against currency appreciation. Central banks have been conducting sterilization operations to mop up excess liquidity created by the build-up of reserves. Other measures have included increases in bank reserve ratios and interest rates. But increases in money

supply aggregates over recent months indicate that liquidity continues to grow (figure 1.11).

*“While reserves have been accumulated partly as a buffer against financial crises, the rapid increase has been the result of the fight against currency appreciation.”*

Increasing liquidity has fuelled concerns about inflation. In November 2007, China witnessed its highest inflation in 10 years. India experienced a two-year high in January 2007 before aggressive tightening dampened prices. Beyond consumer price inflation, liquidity has been driving up the prices of other assets, sometimes unrealistically in view of underlying valuations. The price-earnings ratio for equities in China stands at 59 times 2007 earnings, by far the highest such ratio in Asia. In Indian urban centres, such as Bangalore and Mumbai, housing prices doubled during 2005 and 2006 (The Economist, 2007). The Republic of Korea has also seen a substantial rise in property prices in some urban areas.

Currency appreciation has also produced fiscal costs.<sup>1</sup> Foreign exchange reserves have been invested mainly in low-yielding United States government bonds. It has been estimated that India, which has comparatively high interest rates, faced a cost in fiscal year 2007 of 2% of GDP (ABN AMRO India, 2007). Another cost is the loss in the capital value of foreign reserve holdings, as the value of the dollar steadily declines. For example, China would suffer a capital loss on its reserves of around \$50 billion as a result of a 5% depreciation in the United States dollar.<sup>2</sup>

<sup>1</sup> For background on this issue, see ESCAP (2006b), pp. 24-26.

<sup>2</sup> Calculation based on foreign exchange reserves of \$1.4 trillion in October 2007, with roughly 70% held in United States dollars, according to estimates.

### Box 1.3. Fast-growing trade between Asia and Africa

Between 2000 and 2006, exports from developing Asia-Pacific countries to Africa rose by an annual rate of more than 23%, from \$17.7 billion in 2000 to \$57.9 billion in 2006. Africa's exports to Asia more than tripled to \$50.2 billion.

Among developing Asia-Pacific countries, China is the largest exporter to Africa, accounting for more than a third of the group's exports, or \$26.4 billion in 2006. The Republic of Korea, Turkey, Thailand and Singapore follow. Together, these five countries accounted for 77% of exports during 2001-2006. Major exports are industrial and manufactured goods, except rice, which is the second-largest export item to Africa. The top exports are ships and boats; rice; cotton and man-made fabrics and knitted outerwear; telecommunication equipment; passenger motor vehicles, cycles and scooters and motor vehicle parts; vegetable oils; footwear; and electrical machinery and apparatus.

Africa's exports to developing Asia-Pacific countries are mainly petroleum and minerals, concentrated in Angola, South Africa, the Libyan Arab Jamahiriya, Algeria and Morocco. These five countries accounted for 75% of the total. Crude petroleum and natural gas, the largest export items, made up half the total in 2001-2006, followed by cotton; iron ore and base metals; pearls and semi-precious stones; wood; gold; copper; silver; aluminium; and cocoa. Again, China is the largest trading partner, receiving 45% of exports from Africa to developing Asia-Pacific countries, followed by Turkey, the Republic of Korea, Indonesia and Thailand. These five countries received 84% of Africa's exports to the developing Asia-Pacific region.

Stronger ties between Asia and Africa can benefit both regions. For Asia, stronger ties mean diversified markets and less reliance on the United States and Europe. For Africa based on current trading volumes, ESCAP analysis finds that a percentage point increase in the GDP of developing Asia and the Pacific will increase African exports by 0.5 percentage points. The impact will be greater if the rapid growth of trade between the two regions is taken into account.

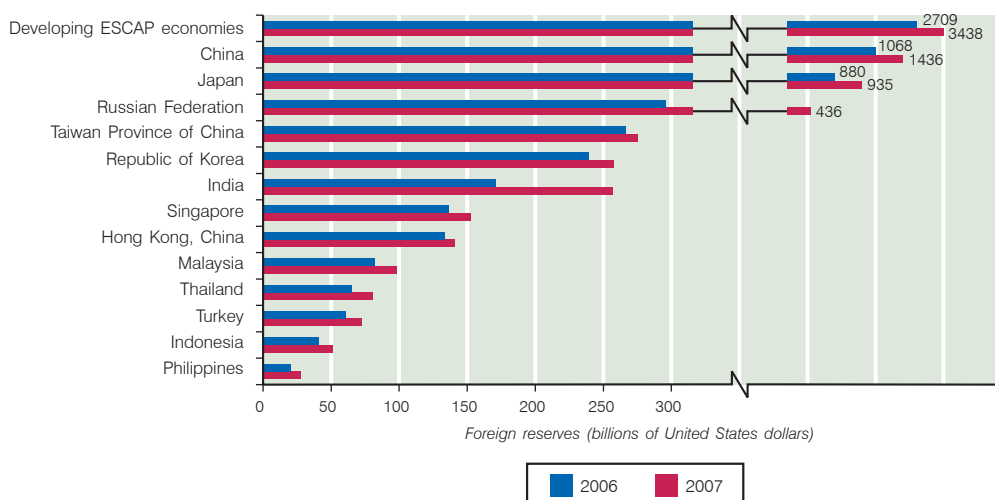
So far, the increased demand for primary commodities and the net trade deficit for Asia in copper, iron ore, nickel and crude petroleum have favoured Africa with improvements in terms of trade. These exports are predicted to grow. The expected growth in per capita income in Asia will lead to higher demand for food products with high income elasticity – meat, fish and beverages – that will create further opportunities for African entrepreneurs.

There is concern that cheap goods from Asia will displace domestic producers in African economies. Jenkins and Edwards (2005) find that increased imports from China came at the expense of other exporters, with very little impact on domestic producers in Africa. Reisen (2006) notes, however, that Africa exporting primary commodities to Asia in return for manufactured goods could delay efforts by African producers to diversify away from traditional exports.

On whether Asia is a threat to Africa in third-country markets, Jenkins and Edwards (2006) find little similarity between exports from China and India and those from sub-Saharan Africa. Botswana's diamonds could face competition from India, and Lesotho's tobacco could face competition from China. But India exports cut and worked diamonds while Botswana exports raw diamonds. And Lesotho's and India's tobacco exports may go to different markets, with potentially little competition between them. The net effects are thus inconclusive.

Of greater concern are trends in textiles. There have been reports of job losses as textile plants closed across Africa after the 10-year phase-out of import quotas under the Multi-Fibre Arrangement. Kaplinsky and Morris (2006) show that African exports to the American market have declined substantially while those of China have increased. That decline went hand in hand with falling employment in southern Africa. Eichengreen and Tong (2005) note that the current threat from Chinese labour-intensive manufacturing exports may be but a taste of things to come. On the positive side, China becoming the centre of a rapidly growing global supply chain could attract FDI to countries that export raw materials to China.

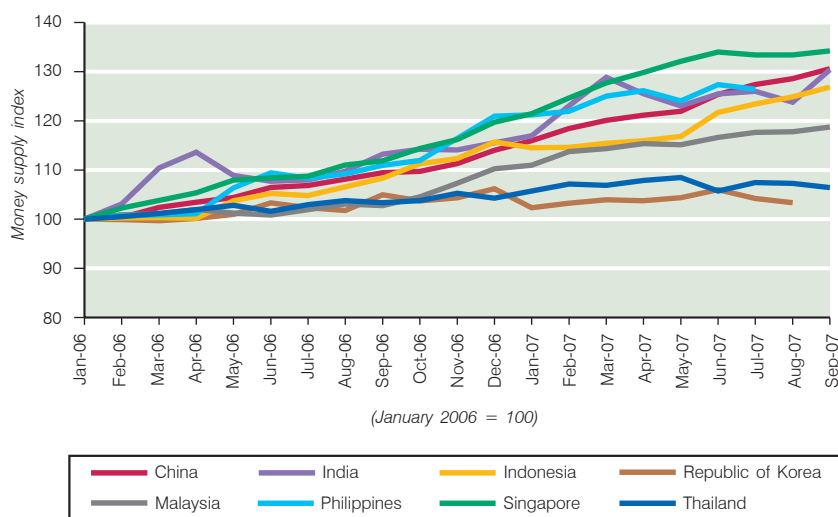
Figure 1.10. Record foreign reserves in the Asian and Pacific region, 2006-2007



Source: IMF, *International Financial Statistics* (CD-ROM) (Washington, D.C., 2007).

Note: Foreign reserves exclude gold. Data for 2007 refer to October or the latest available month.

Figure 1.11. Growing liquidity in 2006-2007



Sources: IMF, *International Financial Statistics* (CD-ROM) (Washington, D.C., 2007); and CEIC Data Company Ltd.

## Downside risks to the 2008 outlook – navigating the subprime crisis

The major downside risk to the 2008 outlook comes from outside the region, from possible spillovers resulting from the downturn in the United States housing market. The fallout from the subprime crisis did not, however, have a significant impact on the region in 2007. The main effects were increased volatility in domestic equity markets and widening yield spreads on external debt. But stock markets recovered rapidly, ending the year with gains (figure 1.12).

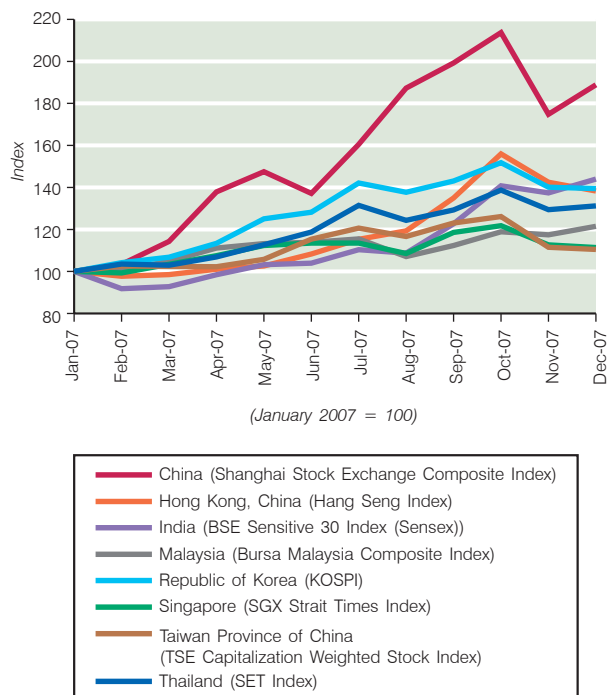
But the broader impact of the subprime crisis on the United States is yet to be seen. Europe, where financial institutions were heavily invested in subprime-related products in the United States, has also been hit hard. Banks in the United States and Europe have accounted for some of the decline in their subprime investments, resulting in record losses for some. Even so, the spectre of further markdowns remains. The resulting credit crunch has raised borrowing rates and increased mortgage defaults. Finding it difficult to raise capital in the interbank market and to absorb losses in subprime investments, financial institutions have tightened lending conditions.

The collapse in the United States housing market has deflated its credit-led consumption boom, cutting growth projections for 2008. Europe faces a similar liquidity crunch. Looming contagion has forced central banks in the United States and Europe to step in as lenders of last resort. In December 2007, the United States Federal Reserve Bank made \$20 billion available to commercial banks, the European Central Bank \$500 billion, and the Bank of England GBP 10 billion. The United States has also moved to cut interest rates aggressively to ensure continued lending and consumption, with a reduction of 2.25 percentage points since September 2007. The subprime crisis now threatens to pull the United States into a severe downturn.

### Hit to Asia-Pacific exports

The main impact on the region will come through its exports. The United States is likely to cut interest rates aggressively, fuelling further depreciation of the dollar. Countries in the region will face twin blows: lower demand and loss of competitiveness.

Figure 1.12. Stock markets higher in 2007, but volatile



Source: CEIC Data Company Ltd.

The sizes of the slowdown and of the decline in the dollar will shape the effects on Asia-Pacific economies. Intraregional exports have increased, but many such exports are inputs to final goods for developed-country markets. Exports to Europe are also up, with European Union countries, as a group, accounting for the same share of exports (16%) from Asian countries (except Japan) as does the United States. But the United States remains the largest single export market for nearly all countries in the region.

In a worst-case scenario – where the United States economy goes into a recession – the impact on much of the region will be deep, its size varying with the importance of exports for different countries (box 1.4). Due to its blistering pace, China's growth will be resilient but will slow. Some easing in exports will aid the Government's efforts to cool the economy. Other

### Box 1.4. The impact of a United States recession on Asian economies – a pessimistic scenario

Using the assumptions of the pessimistic scenario in *World Economic Situation and Prospects 2008*, ESCAP has assessed the impact on the Asian economies of a hard landing in the United States. The report assumes virtually zero growth in the United States and its consumption sector, further depreciation of the dollar by 20%, and a fall in private investment due to the plunge in residential investment of 30%.

Recession in the United States and sharp depreciation of the dollar would curtail the country's import demand and hurt the export performance of Asia and the Pacific, where exports have driven growth. The reduction in United States import demand would be more pronounced for high-end products and capital goods, such as electronic products, high-value household goods, vehicles and machinery. Market volatility spurred by the sharp depreciation of the dollar would precipitate substantial losses for assets denominated in dollars and for investments in the United States. At the end of 2006, direct investment in the United States from Asia and the Pacific stood at an estimated \$260 billion. Falling profitability and dim corporate earnings prospects for companies from the region would aggravate the turmoil. Through a negative wealth effect and pessimistic sentiment, the losses would depress consumption in the region. The subprime lending crisis would also choke off liquidity in the market, increasing interest rates in the region through higher risk premiums. Asia and the Pacific, which attracted capital on the back of low risk ratings, might face reversals as investors retreat to safe assets, such as United States Treasury bonds. The withdrawals would further jeopardize liquidity and hinder investment.

The impact would not be uniform (see table). Taiwan Province of China, Singapore and the Republic of Korea would feel the biggest effects, owing to their strong export orientations. Singapore's exports are almost 250% of GDP, and the countries' export mix is highly vulnerable to a sluggish United States. In the 2001 slowdown, when the economy weakened to 0.8% growth, United States import demand for consumer durables and their associated inputs, machinery and equipment contracted significantly. These goods are among the major exports of the three economies. More than a third of the exports of Taiwan Province of China are electrical machinery and equipment and parts of audiovisual appliances. Electrical machinery, apparatus and appliances represent about 30% of the exports of Singapore. Electrical machinery, road vehicles and

**Table. Impact of a United States recession on Asian economies in a pessimistic scenario**

<b>Economy</b>	<b>Decline from baseline forecast (percentage point)</b>
China	-3.3
Hong Kong, China	-1.7
India	-1.2
Indonesia	-4.0
Malaysia	-2.2
Philippines	-2.5
Republic of Korea	-6.6
Singapore	-5.2
Taiwan Province of China	-7.4
Thailand	-3.0

Source: ESCAP calculations.

(Continued on next page)

**Box 1.4** *(continued)*

telecommunication equipment constitute almost 40% of the exports of the Republic of Korea. In the 2001 downturn, import demand for goods from Singapore and Taiwan Province of China fell by almost 20%, and those from the Republic of Korea by 13%. The blow to exports would reverberate into other sectors. Financial losses from investments in the United States would further reduce income. Consumption would contract. Possible capital reversals would batter the equity markets and exacerbate the situation.

A sharp downturn in the United States would also hit exports from Indonesia, Thailand, the Philippines and Malaysia, though less. The major exports of Indonesia are petroleum and fuels, which are expected, based on the 2001 experience, to be less sensitive to falling demand in the United States. For Thailand, the Philippines and Malaysia, the impact on consumption would be relatively light because the countries have lower exposure to global markets.

The GDP growth of China would fall significantly under the pessimistic scenario, but it would remain high in absolute terms. Strong domestic demand should cushion a portion of the external shock. The government is also expected to use macroeconomic policy to mitigate the crisis.

Hong Kong, China, would also be less affected because of its tight economic relationship with the mainland. And because of the linked exchange rate with the dollar, depreciation would enhance its competitiveness overseas. So, though consumption may fall, exports sector growth should ease the effects.

A relatively closed economy with an export-to-GDP ratio of only 13%, India would be resilient to a global downturn caused by a United States recession. Robust domestic demand and booming investment in manufacturing and services sectors would help contain shocks.

countries expanding at a slower pace will find the downward pressure more challenging, with the most risk for the more open and higher-end technology trading economies – Singapore, the Republic of Korea and Taiwan Province of China. The effects will come from lower demand for final goods from the United States and for intermediate goods from China. The smallest impact is likely to be in economies led largely by domestic demand, such as India.

## The threat of financial sector turmoil

At present, Asia-Pacific economies remain relatively immune to the credit crunch in the United States and the European Union. The corporate sector is generally cash-rich and not highly leveraged. Companies, learning the lessons of the 1997 Asian crisis, have been conservative in their borrowing. Central banks are also well armed to supply liquidity to the financial sector, as has already been required in the United States and the European Union.

The region has, so far, had little exposure to subprime or other vulnerable debt. Banks in Japan, Singapore and China have revealed some losses, though the

size is dwarfed by their capital bases. Some concerns remain, however, about the transparency of risky holdings by institutions in the region. Any unexpected disclosures would hamper interbank lending.

The region is feeling some tremors from the upheaval in the international financial sector. As of end January 2008, the Morgan Stanley Emerging Markets Asia index was down 14% for the year. Debt markets have also recently shown a spike in credit spreads in view of fears about the resilience of Asia-Pacific countries. The benchmark Markit iTraxx Asia Ex-Japan Series 8 Index of 70 borrowers rose to a record high of 205 basis points in January 2008 (Bloomberg News, 2008). If losses by large international financial institutions mount to substantial levels, investments in the region could be called in to rebalance portfolios and to mitigate the effect on trading profits. Countries that have received large short-term capital inflows in recent years are the most susceptible.

Policymakers also have to grapple with higher volatility in the carry trade, including periods of rapid and large reversals in inflows to economies in the region over the past few months. Investors' uncertainty about global interest rates and growth has spurred exits from popular carry-trade target countries, reflected in the appreciation of the Japanese yen, up more than 4%

on the dollar in 2008.<sup>3</sup> Large outflows from the region are possible as carry trades unwind.

Large capital inflows in the last few years have also contributed to significant increases in asset values in some countries – notably in equity and property markets – which may not be justified by underlying valuations. Global financial volatility threatens these values.

As of end January 2008, China and India have seen rises (year-on-year) in their main equity markets of 57% and 25%, respectively. Property prices in China have surged, with housing prices in 70 cities jumping by 10.5% in December 2007 compared with a year earlier. Major urban centres of India such as Bangalore and Mumbai saw a doubling of housing prices between 2005 and 2006. Viet Nam has recently witnessed dramatic increases in equity and property prices. The Republic of Korea has also seen a substantial rise in property prices in some urban areas.

These economies are resilient enough to withstand the spillover of a sharp fall in asset values. But such declines would be difficult for the burgeoning middle-class investors and for the companies that have cashed in on the boom. And declines in China and India, regarded by investors as markers for the region, would raise the spectre of contagion in other economies of the region. That danger was evident in the capital outflows from exchanges across the region in February 2007 after a sharp drop in the Shanghai stock exchange.

**Figure 1.13. Booming outward investment, 2005-2007**



Source: EIU, *Country Forecasts* (London, 2008), various issues.

Note: Data for 2007 are estimates.

<sup>3</sup> As of 31 January 2008.

The subprime crisis may bring new opportunities for the region. There may be increased interest in Asia-Pacific's assets due to the region's relatively strong growth projections. If investors regard markets in the region as having decoupled, at least partly, from the United States – through growth in exports to the European Union and Asia and stronger domestic demand – these markets may become attractive. Hope comes from the performance of Asia-Pacific markets over the past 12 months. As of end January 2008 while the S&P 500 witnessed a loss of 4.2% and the Dow Jones EURO STOXX 50 Index fell by 9.2%, the Morgan Stanley Asian Emerging Market Index gained 21%.

## Asia-Pacific investors to the rescue

Asia-Pacific investors are playing a key role in supporting developed countries through the recent turmoil. Sovereign wealth funds and State investment institutions from the region have bolstered weakened banking sectors in the United States and Europe. Financial institutions have sought equity investment from investors in Asia and the Pacific to shore up their depleted capital bases. Notable purchases include equity stakes for the Government of Singapore Investment Corporation in Citigroup and UBS, for Korea Investment Corporation and Singapore's Temasek Holdings in Merrill Lynch, for the China Investment Corporation in Morgan Stanley and for Temasek Holdings in Barclays.

*“Asia-Pacific investors are playing a key role in supporting developed countries through the recent turmoil”*

The shifting balance of financial power is also clear in the dramatic rise in the overseas investment of the Asia-Pacific corporate sector. Companies from the region, both private and State-owned, have benefited from blistering growth in their home markets and are using their wealth to acquire major enterprises in developed countries and in other developing regions. From 2005 to 2007, outward direct investments from India more than quadrupled, those from China more than doubled, and there were large increases in those from other major countries in the region (figure 1.13). Prominent Chinese acquisitions in 2007 included the China Development Bank's investment in Barclays Bank and the Industrial and Commercial Bank of China's purchase of a 20% stake in South Africa's Standard Bank. Recent deals by Indian enterprises included Tata's purchase of Anglo-Dutch Corus, Hindalco's purchase of Canada's Novelis and United Breweries purchase of the United Kingdom's Whyte and McKay.

Rising outward investment by State-owned institutions and private companies has generated controversy, provoking concerns about lack of transparency in strategies and portfolio composition. Regulators in target countries have been less than enthusiastic about foreign governments controlling national enterprises. In the United States and the European Union, calls arose in 2007 to mandate greater regulatory oversight of sovereign wealth funds.

To make target countries more welcoming of investments and to prevent a protectionist backlash, economies in the region with sovereign wealth funds can take proactive measures to foster disclosure and transparency:

- *Take the initiative to be more forthcoming about investment strategies.* Disclosure should include information on how the funds are incorporated into the overall investment strategy of the government, what types of assets are included in portfolios, how the assets are managed, where the responsibilities for their management lie, what investment and risk-management strategies are followed and how these elements can be changed.
- *Increase transparency through regular reporting on holdings and performance.* A good example is Norway's Government Pension Fund-Global, which provides the public with extensive information on its investment strategy and results on a quarterly basis, including month-by-month returns, and annually provides information on its holdings of the bonds and equities of individual countries and corporations.

## Asia and the Pacific well prepared to navigate global instability

Asia-Pacific countries have made great progress since the Asian crisis of 1997 in reviving their economies. As a result, the region is equipped with strong fundamentals to navigate the global financial and economic instability.

- The region's GDP has doubled since 1997, with per capita incomes now significantly above their pre-crisis values.
- Countries have moved explicitly towards targeting inflation, rather than exchange rates. China and Malaysia widened their exchange rate bands in 2005, with significant currency appreciation since. The Republic of Korea, the Philippines and Thailand also saw large appreciations. Removing explicit exchange rate targets reduces the risk of

currency mismatches and encourages investors to hedge their currency exposure.

- Government budget deficits have gradually declined and, in some countries, have turned to surpluses. Concern for exploding public debts is thus limited, with public debt at its lowest since 2000 for most countries (figure 1.14).
- There have been no signs of excessive current account deficits, as in the prelude to 1997. Indeed, post-crisis East Asia now exports capital to the rest of the world. In 2007, current account surpluses in emerging Asian economies stood at 6.5% of GDP (figure 1.15).
- The ratio of foreign exchange reserves to short-term debt is high in all countries. Foreign exchange reserves in developing ESCAP member countries have increased sixfold since 1997, to \$3.4 trillion as of October 2007. These reserves can smooth any sudden stop in capital inflows.
- There has been no excessive build-up of private domestic credit as a share of GDP, and the ratio of non-performing loans to total loans has declined significantly from the early 2000s. Banks' capital adequacy ratios are well above the international standard of 8%.
- Countries have reduced their dependence on bank financing. A positive development is nascent local-currency bond markets. Changes in perceived risk are reflected automatically through these markets, causing less systemic risk than foreign-currency-denominated loans.

## The need to build defences against subprime fallout – now

With increasingly open capital markets, economies in the region are intimately linked to global financial flows. Investor sentiments are fickle and it is not possible to predict when and how financial sector turmoil will attack markets in the region. So, there is little countries can do to stop external financial sector shocks. Even so, countries can ensure that their economies are strong and flexible enough to weather shocks and adapt. Efforts to mitigate the financial shocks are critical because they exact a heavy toll on the poor (box 1.5). Because the poor are the least prepared to cope, they suffer the most from any income shock.

An effective defence includes macroeconomic measures to build resilience to shocks and socio-economic measures to reduce the impact on the poor:

Figure 1.14. Budget balances have improved...

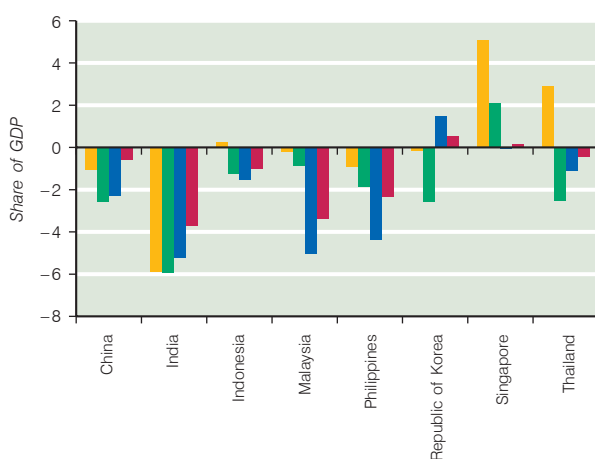
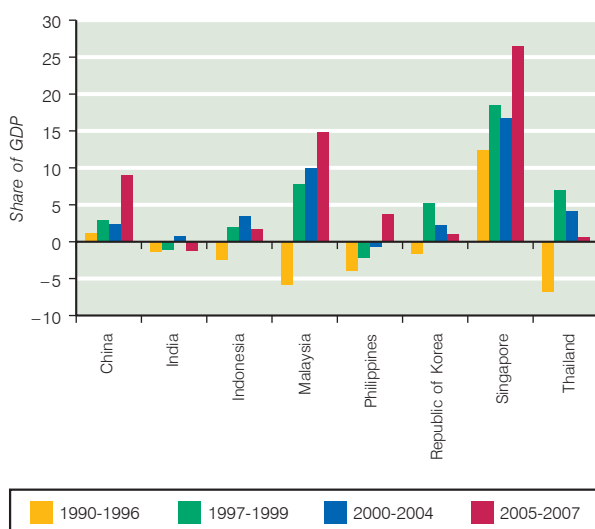


Figure 1.15. ...as have external balances



Sources: IMF, *International Financial Statistics* (CD-ROM) (Washington, D.C., 2007); ADB, *Key Indicators of Developing Asian and Pacific Countries 2007* (Manila, 2007); and ESCAP estimates.

Note: Data for 2007 are estimates.

- Countries must ensure solid macroeconomic fundamentals to maintain investor confidence and sustain economic growth. Key elements are moderate and stable inflation; sound fiscal policies that ensure low deficits and sustainable debt burdens; and more flexible exchange rates regimes that can absorb external shocks and reduce currency mismatches in borrowing.
- Countries must develop healthy financial sectors to build confidence and benefit from capital inflows. This requires well developed regulatory structures to prevent bad debt. Also necessary are independence and a competitive environment for banks to ensure efficient credit allocation and pricing. Authorities must keep pace with the great diversity of complex new products in financial markets in the region. Knowledge and risk management systems should be updated to ensure early warning of any adverse flows. Financial markets should be deepened by developing domestic and regional bond markets. These provide an avenue for investors, in times of uncertainty, to move away from equity and other domestic markets into another local-currency market – and thus reduce the risk of sudden capital flight. Local bond markets also create opportunities to keep regional savings close to home.
- Countries must have robust microeconomic foundations to ensure an efficient economic system. A basic requirement is clear property rights, overseen by a strong judiciary, that allow companies and institutions to operate effectively and transparently. The labour market should be robust enough to adjust to economic downturns through government provision of training and retraining and measures to safeguard vulnerable segments of the working population.

“Social safety nets have to be improved to prevent people falling into hardship”

- Social safety nets have to be improved to prevent people falling into hardship. The interest in social safety nets just after the Asian crisis slowly diminished with the recovery, so adequate social protection mechanisms are lacking in most of the region. Most countries have some social protection system, but these programmes are ineffective due to limited coverage, insufficient funds, inadequate instruments and administrative bottlenecks. The systems cover only a portion of the formal

### Box 1.5. How economic shocks impact the poor

The poor are hit the hardest by financial shocks that lead to economic downturns, clear in previous episodes within and outside the region.

Achievements in poverty reduction remain fragile in many developing countries, with many “near poor” living just above the poverty line and vulnerable to economic shocks. During the 1997 Asian crisis, 19 million Indonesians and 1.1 million Thais fell below the poverty line as real earnings slumped and jobs disappeared (World Bank, 2007b). The 2001-2002 financial crisis in Argentina increased the national poverty rate by 15 percentage points (Cruces and Wodon, 2003), and the 1998-1999 crisis in Ecuador increased poverty by 13 percentage points (Hall and Patrinos, 2005). Poverty rates rose among formal-sector workers through lower wages and job losses. And poverty deepens when workers switched from the formal sector to the informal, depressing the wages of those already in the informal economy.

Financial crises also have a strong impact on inequality. Poorer people are impacted more by a crisis than the rich because they have fewer buffers, and because the range and effectiveness of their buffers are inadequate. The poor lack assets, such as bank deposits and land, and have only restricted or expensive access to credit. Within the poor, the groups at greatest risk are marginal workers. In the last Asian crisis, these were youths, women and the less experienced and less educated. Lacking education and skills, the poor tend to be less mobile across sectors and regions than better educated workers, often leaving them unable to switch jobs and access other opportunities.

And the poor take much longer to recover from a reversal. Recovery in real wages and employment takes much longer than recovery in GDP. Many districts of Indonesia suffered from persistent poverty effects five years after the 1997 Asian crisis and three years after the country’s rapid recovery in GDP (Lokshin and Ravallion, 2005). A review of financial crises in 80 countries over the past few decades finds that real wages take an average of three years to pick up again. Employment growth does not regain pre-crisis levels for several years after that (UNDP, 1999). Poor households facing rising vulnerability and insecurity are forced to respond with measures that keep them poor: reducing the number and quality of meals, postponing health-related expenditure and withdrawing children from school. These actions lead to lower future income-earning potential for current and future generations, resulting in persistent poverty. When the capacity of vulnerable households to protect themselves is very low, chronic poverty can result even from small, one-off shocks.

sector, often the wealthiest, and the instruments, often adapted from developed countries, may not be appropriate for the needs of developing countries. Because these systems are difficult to set up during crises, renewed and urgent actions are needed now. An effective safety net should be targeted towards the poor but should be large enough to provide broad-based social protection. Key areas to address are unemployment insurance, health care and pensions. Benefits should be ensured for the most vulnerable workers – youths, women and the less educated and less experienced. Because the poor often work in the informal sector, policies targeting this group should be different from those aimed at helping vulnerable groups in the formal sector. Social safety nets should be flexible so that they can adjust to changes in poverty.

- *Countries must improve regional cooperation to prevent and react to crises.* There have already been positive moves, such as the recent agreement by the ASEAN+3 countries to strengthen the Chiang Mai initiative by pooling some of their foreign exchange reserves to respond to crises. Converting the system of bilateral currency swaps to a multilateral pool will increase the speed and ease of response. The funds to be made available will be key because current resources are not a sufficient primary means to combat a crisis. It is also important to extend the country coverage of this new agreement to protect more Asia-Pacific countries. Much of the value of the initiative lies in its less heralded objectives. The ASEAN+3 economies are striving to share information about portfolio flows and collaborating in regulatory activities. More needs to be done in these areas across the

region to provide an early warning system for potentially disruptive flows – and thus prevent the onset of crises.

## A global call to action to regulate new financial actors

The subprime crisis has opened eyes to the failure of the international financial architecture to address the risks of new financial instruments. The old “buy and hold” model of bank lending has evolved into “originate to distribute”. In the subprime crisis, banks in the United States originated loans and then repackaged and sold them to international investors, distributing risks throughout sectors and across the globe. Under this mechanism, banks have less incentive to monitor borrowers. They have switched from relying on soft information and long-term relationships with borrowers to model-based pricing. Another aspect is the unsatisfactory performance of ratings firms in evaluating new financial instruments without market values for illiquid products. Moving the loans off the books of banks to other financial investors transferred activity from regulated to unregulated investors, especially to international hedge funds and banks’ off-balance-sheet special investment vehicles and conduits. These investors are not transparent and are sometimes highly leveraged. Some 9,000 hedge funds manage assets of about \$1.6 trillion (Roth, 2007). Bank-sponsored conduits are estimated to hold assets worth about \$1.4 trillion.

Action to regulate the new models of international finance must be global. Investment decisions in devel-

oped countries threaten financial disruption in developing countries, both in Asia and the Pacific and in other regions. Measures by developing countries to increase transparency are ineffective when the executing institutions are in other jurisdictions. And measures by developed countries acting independently are also often powerless when investments cross borders. The new pools of global capital are structured to avoid the scrutiny required of firms and financial institutions at the national level. Key measures are required through global cooperation among national supervisory institutions:

- Regulators need aggregate information on structured-finance-instrument holdings of financial institutions and on the concentration of risk to assist in the regulatory process.
- Major central banks must cooperate more closely in dealing with liquidity shocks, because the evaporation of liquidity may quickly cross borders.
- Banks should be required to explain the complex structured products they design to investors in sufficient detail, including information on underlying assets and their risk profiles.
- Regulators should standardize the valuation and risk-assessment methodologies used by credit rating agencies and clarify conflict-of-interest issues.
- Originators and arrangers might keep a certain portion of the underlying assets and the structured products, as incentives to examine and monitor more carefully the quality of the credits and the securitized products.

## Medium-term policy issues on the watch list

The region's prospects, in both the short term and the long term, are shaped by many forces. Considered here are three issues for action in the medium term:

- Benefiting from trade in services
- Addressing the social dimensions of international migration
- Managing climate change

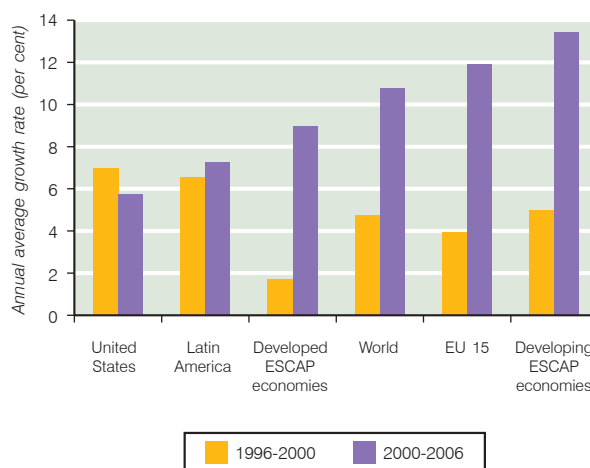
### Benefiting from trade in services – the next frontier

Services, the fastest growing sector in the global economy, account for two-thirds of global output, one-third of global employment and nearly one-fifth of global trade. And since 1990, exports of services from developing countries have grown at an annual average of 8%, compared with 6% for developed countries (UNCTAD, 2007). World service exports accelerated from an annual average of 4.7% in 1995-2000 to 10.8% in 2000-2006. For ESCAP developing economies, service exports rose from 5% in 1995-2000, below Latin America and the United States, to 13.4% in 2000-2006, faster than in any other region (figure 1.16).

The ESCAP member country with the most spectacular growth in the services trade is India, whose average annual growth accelerated from 19% in 1995-2000 to 29% in 2000-2006. It quadrupled its share among ESCAP member countries between 1995 and 2006 to become the region's second-largest service exporter after China. China's growth in service exports has also been very fast, averaging 16% over 1995-2006. And service exports from the Russian Federation rebounded from an annual average decline of 6.5% in 1995-2000 to an increase of 21% in 2000-2006 (figure 1.17).

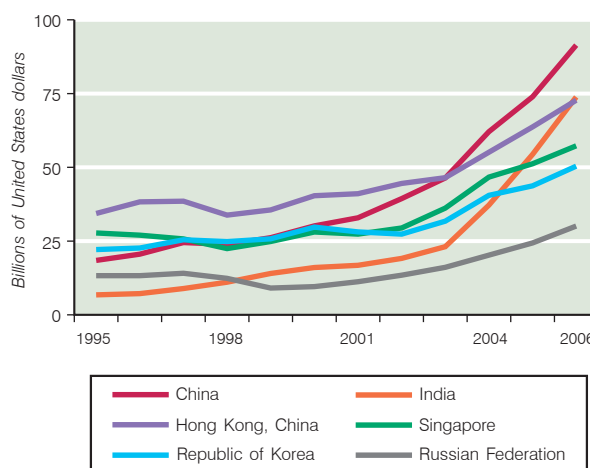
There are three main categories of services for which statistics are compiled: transportation, travel and other commercial. For 2006, the world exports of these categories were valued, respectively, at \$630 billion, \$745 billion and \$1,380 billion. Over 2000-2006, the share of transport services remained stable at about 23%. Travel services fell from 32% to 27%. Other commercial services rose from 45% to 50% (WTO, 2007).

Figure 1.16. Strong service exports for ESCAP developing economies in 2000-2006



Source: ESCAP, based on data from WTO, *International Trade Statistics 2006* (Geneva, 2006), and *International Trade Statistics 2007* (Geneva, 2007).

Figure 1.17. India and China leading service exports in the region



Source: ESCAP, based on data from WTO, *International Trade Statistics 2006* (Geneva, 2006), and *International Trade Statistics 2007* (Geneva, 2007).

In 2006, the top five exporters of transport services in the ESCAP region – the Republic of Korea; Hong Kong, China; Singapore; and the Russian Federation – were among the global top 10. Their exports that year amounted to \$99 billion, or 16% of the world total. Of the top five exporters in the region, China had the best performance, growing at 34% per year over 2000-2006, faster than the world average of 10%. The Russian Federation and India, starting from lower bases, increased their exports of transport services at 19% and 26%, respectively. For travel services, China, Turkey and Thailand were ranked between third and eighth in 2006, with exports of \$63 billion.

*For ESCAP developing economies, service exports rose from 5% in 1995-2000 to 13.4% in 2000-2006, faster than in any other region*

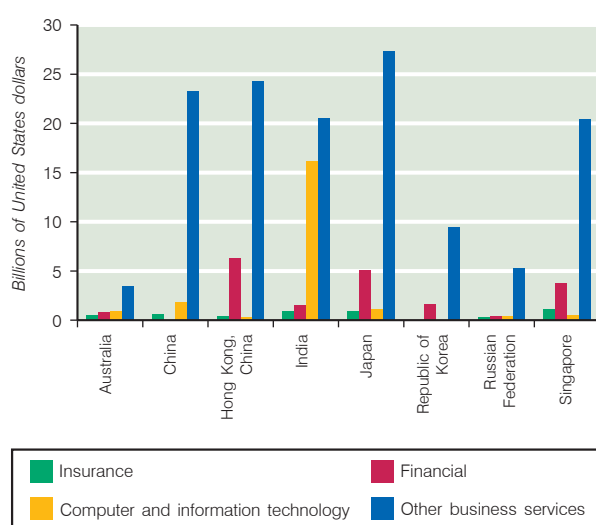
Exports of other commercial services, the most dynamic category, grew at an annual average of 13% between 2000 and 2006. India; Hong Kong, China; China; Singapore; and the Republic of Korea, were among the top 10 in 2006, exporting \$184 billion that year (figure 1.18). The exports of the Republic of

Korea and Hong Kong, China, grew at or slightly below the world average in 2000-2006, but those of China and Singapore grew above it, at 24% and 19% respectively.<sup>4</sup> The Russian Federation was the 13th largest exporter of other commercial services in 2006, with its exports growing at 31% per year over 2000-2006.

With \$16 billion in earnings, India was the second-largest exporter of computer and information services in 2005, after the European Union. But other countries are emerging as competitors. The main one is China. With 12,000 software development companies employing nearly a million people, China had its exports increase at an annual rate of 40% after 2003, reaching \$3 billion in 2006, when it became Japan's largest outsourcing location for computer and information services. Malaysia, now considered the third-most attractive site for outsourcing low-cost IT services after India and China, has been promoting the sector since 1996. With more than 1,100 international companies, Malaysia more than doubled its computer services exports in three years. The Russian Federation, now a base for outsourcing computer services for several European companies, increased its exports by 60% per year after 2003 (WTO, 2007).

ESCAP developing members are also becoming a prime location for offshoring services, with six countries ranked among the top 10 in 2007 (table 1.2).

Figure 1.18. Exports of other commercial services in 2005, selected countries



Source: ESCAP, based on data from WTO, *International Trade statistics 2007* (Geneva, 2007).

*The primary challenge in liberalizing services is balancing competition with such welfare objectives as universal access to health services*

Removing obstacles to market entry for domestic and foreign firms will create a more competitive environment, which in turn will foster domestic service firms able to compete in the international market (Findlay and Sidorenko, 2005). Reforms should emphasize a pro-competitive environment rather than changes in ownership: in other words, competition first and privatization second.

<sup>4</sup> WTO (2007) does not report India's annual average growth rate of exports of other commercial services for 2000-2006, but it does report that India's growth rate for 2006 was 39%.

Table 1.2. Global services location index, 2007

Rank 2006 (rank 2005)	Country	Financial attractiveness	People and skills availability	Business environment	Total score
1 (1)	India	3.22	2.34	1.44	7.00
2 (2)	China	2.93	2.25	1.38	6.56
3 (3)	Malaysia	2.84	1.26	2.02	6.12
4 (6)	Thailand	3.19	1.21	1.62	6.02
5 (10)	Brazil	2.64	1.78	1.47	5.89
6 (13)	Indonesia	3.29	1.47	1.06	5.82
7 (8)	Chile	2.65	1.18	1.93	5.76
8 (4)	Philippines	3.26	1.23	1.26	5.75
9 (15)	Bulgaria	3.16	1.04	1.56	5.75
10 (17)	Mexico	2.63	1.49	1.61	5.73
11 (5)	Singapore	1.65	1.51	2.53	5.68

Source: A.T. Kearney, *Offshoring for Long Term Advantage: The 2007 A.T. Kearney Global Services Location Index*, <[http://www.atkearney.com/res/shared/pdf/GSLI\\_2007.pdf](http://www.atkearney.com/res/shared/pdf/GSLI_2007.pdf)> (accessed 18 January 2008).

The primary challenge in liberalizing services is balancing competition from improved market access for foreign providers with such welfare objectives as universal access to health services. Setting up an effective regulatory regime is essential for remedying problems of asymmetric information and market power where natural monopolies flourish, such as in energy and transport. But controlling market power and unseating large incumbents presents huge political challenges. Extensive evidence shows the huge political costs of mismanaging these elements of reform.

## Addressing the social dimensions of international migration

There were 58 million international migrants in the Asian and Pacific region as of 2005, 53 million of them in Asia and 5 million in the Pacific (United Nations, 2006). The past few decades brought a marked increase in the cross-national mobility of the region's people. This trend continues unabated. Demographic imbalances and widening intercountry disparities in income and opportunities propel people to move in order to improve opportunities for themselves and their families. Technological transformations and economic links create new demand for skills and labour – demand often met by migrant workers. With more countries involved in migration streams, international migration has become a structural reality in the region.

Much of the migration debate centres around economics, especially capital inflows channelled through remittances. Recorded remittances to ESCAP developing

countries – the largest sources of external income in many poor countries – are estimated at \$106 billion in 2007, 11% higher than in 2006. If unrecorded flows are taken into account, the size would be even larger. The region's five largest recipients of remittances in 2007 were India, China, the Philippines, Bangladesh and Pakistan, with remittances totalling \$82 billion in 2007 (figure 1.19). Remittances are particularly important for smaller countries; in such countries as Armenia, Kyrgyzstan, Nepal and the Philippines, remittances contribute over 10% of GDP.

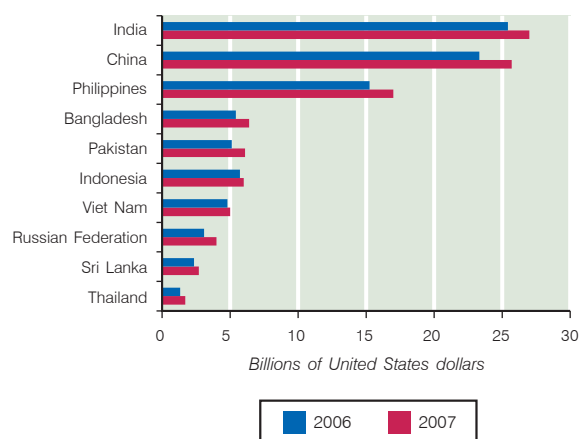
*“Much of the migration debate centres around economics, but migration is much more than flows of remittances”*

International migration is about more than flows of labour and remittances, however. Migration affects the lives of those involved and the broader community – impacting marriages, families and governance. These dimensions often receive too little focus.

## Changing patterns of labour migration in Asia and the Pacific

While the region continues to see outflows of people to the countries that traditionally admit migrants for permanent settlement – Australia, Canada, New Zealand and the United States – the mobility of people seeking temporary employment within the region has become more important.

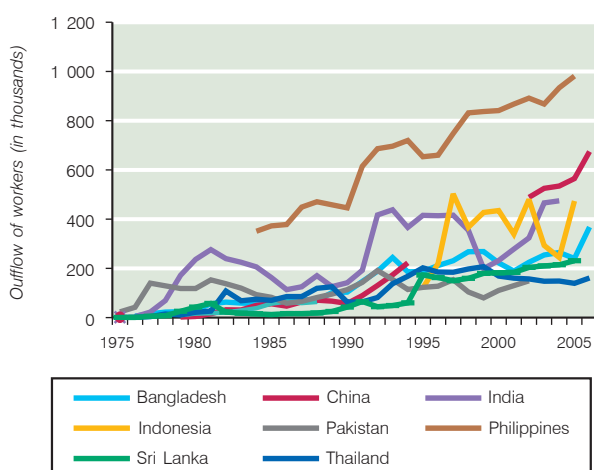
**Figure 1.19. Rising remittances in Asia and the Pacific, 2006-2007**



Source: World Bank website <<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPPECTS/0,,contentMDK:21122856~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>> (12 February 2008).

Note: Data for 2007 are estimates.

**Figure 1.20. New migrant source countries emerging**



Source: ESCAP, Emerging Social Issues Division, *Database on International Migration*.

Two patterns have emerged. First, since the early 1970s, the oil – producing countries of Western Asia – Kuwait, Oman, Saudi Arabia and the United Arab Emirates – have attracted a large number of Asian workers. Second, since the 1980s, the newly industrialized economies of East and South-East Asia have become hubs for temporary migration. These include Japan, Brunei Darussalam, Malaysia, the Republic of Korea, Singapore and Thailand, as well as Hong Kong, China, and Taiwan Province of China. Their sustained growth, coupled with a limited supply of national workers resulting from low fertility, compelled these economies to seek manpower from neighbouring low-income, labour-surplus countries.

Meanwhile, new suppliers of workers have emerged, some of them officially promoting labour deployment. India, Pakistan and the Philippines have long histories of sending many workers abroad. By the mid-1990s, countries such as Bangladesh, China, Indonesia and Sri Lanka joined the group of migrant source countries, the shift evident in their official records (figure 1.20). The outflow of migrant workers abroad is likely greater, because unknown number of workers move without registering with national authorities.

As more women cross borders, feminization is also reshaping migration patterns. Women constitute a large majority of migrant workers from Indonesia, the Philippines and Sri Lanka (table 1.3). Migrant women in the region are engaged in a wide range of activities, predominantly in domestic work but also in health and entertainment. Demand for female migrants has been persistent in relatively affluent economies where local women are drawn into the labour force or the need for elderly care is on the rise due to ageing populations.

### Challenges for family left behind

Temporary labour migration usually does not allow migrants to bring family members to the country of employment. Although migration can benefit families, there are concerns about potential costs to family cohesion, marital stability and children left behind.

Extended separation forces the family left behind to reshuffle an increased workload, to reallocate decision-making responsibilities and to fill the psychological emptiness generated by the absence. Extended families often fill the void and provide continuity in family-based care (Asis, 2008). Cheaper and faster communication has narrowed the distance between family members. Even so, marital instability and the break-up of the family unit are often mentioned as consequences of prolonged absence (Hugo, 2002).

Table 1.3. The gender composition of migration outflows varies widely

		Number of migrant workers deployed, annual average (in thousands)		Female share (per cent)
		Total	Female	
Indonesia	2000-2003	387	306	79.2
Philippines	2000-2002	266	188	70.5
Republic of Korea	2000-2002	226	80	35.5
Sri Lanka	2000-2003	195	129	66.1
Thailand	2000-2003	165	28	16.8

Source: ESCAP, Emerging Social Issues Division, *Database on International Migration*.

Note: Data for the Philippines refer to newly hired workers for overseas employment.

An estimated 3-6 million children have been left behind by Filipino parents working overseas, along with 1 million in Indonesia and half a million in Thailand (Bryant, 2005). The social cost to children left behind includes poor performance in school, violent behaviour, delinquency and psychological problems. The evidence in the Philippines and Sri Lanka, sources of large numbers of women migrants, suggests that families face more adjustments when mothers migrate than when fathers do so (Asis, 2008). When fathers migrate, mothers are likely to embrace their tasks and functions, but when mothers migrate, child care tends to be left to other female relatives.

*“The social cost to children left behind includes poor performance in school, violent behaviour, delinquency and psychological problems”*

The potential consequences notwithstanding, migration does bestow benefits on families left behind. Families with migrant members tend to have better housing and higher ownership of consumer durables. Some families have adopted more modern ways of living, strengthening the family by using remittances to build houses or educate children.

### “Marriage migration” on the rise

Migration to marry a foreign partner, known as “marriage migration”, is on the rise in the region. Japan, the Republic of Korea and Taiwan Province of China have experienced a dramatic increase in international marriages, mostly involving foreign women and local men.

In the Republic of Korea, 14% of all new marriages in 2005 were between a Korean and a foreign spouse (Douglass, 2006). Foreign brides come to those countries mainly from neighbouring developing countries – China, the Philippines, Thailand and Viet Nam.

One factor behind this trend is the continuing urbanization in high-income economies, coupled with impending depopulation due to low fertility and ageing populations. In those societies, many men obligated to take charge of family farms are unable to find brides because local women prefer urban work and lifestyles (Douglass, 2006). Foreign brides are often sought through advertising services. In Japan and the Republic of Korea, some local governments have joined with farmers to sponsor searches for overseas brides in nearby countries.

For women, international marriage can be a chance for economic security and social mobility. Humbeck (1996) finds that Thai women who migrated to marry foreign men did so to escape poverty in rural Thailand, to help their families and to seek better jobs. Obtaining secure and legal residence, including status for work, in the host country was an important factor in international marriages between Japanese men and women from the Philippines, the Republic of Korea and Thailand (Piper, 1999).

The complexities are myriad. Brokers and agencies fostering marriage migration have raised concerns over fraudulent marriages and the trafficking of women. Facing restrictive policies, aspiring migrants may use marriage to gain residence in another country. Employers may also use marriage as a recruitment strategy. For receiving societies, foreign spouses and the children of internationally married couples raise questions about settlement, integration and the future of multiculturalism.

### *Migrant children more vulnerable*

Although immigrant children may be with their parents, they confront serious institutional, social and psychological barriers, especially when parents occupy marginal positions in the destination country.

Legal identity, a problem faced by all migrants, is particularly difficult for children. Children born in Thailand to foreign parents, for example, generally do not qualify for Thai citizenship (Bryant, forthcoming). Children without identification documents are usually excluded from formal schooling, and it may be difficult for them to socialize and to create social networks because of language and cultural barriers.

In addition, migration puts unique stresses on children – from leaving a familiar social context and extended family network; from entering a new place, culture, and language; or from harsh conditions endured before or during the transition. The stress can be even more intense for adolescents. Migrant children who do not connect in some meaningful way with their peers, family or school are at an increased risk of suicide, substance abuse, school failure, drop-out, health problems and criminal activity (UNICEF, 2007).

### *Migrants more vulnerable to disease*

The spread of HIV/AIDS and, more recently, the outbreak of SARS in East and South-East Asia have demonstrated the potential repercussions of human mobility and international migration for public health – and for the economy, international relations and tourism.

There is a close association between population mobility and the spread of HIV/AIDS. Migrants often become vulnerable to HIV during transit and after arrival, driven by such conditions as exploitation, separation from spouse and family and socio-cultural norms that guide behaviour. Migrants may have problems dealing with social and sexual norms in new environments and may not know how to protect themselves against sexual risks.

Migrants are also likely to have different risks for some illnesses than the host community. They may face higher risks because of differences in disease prevalence and the psychological and physical stress of moving to a new environment. Due to language, cultural and procedural barriers, migrants may have difficulties in accessing health services, or they may underutilize services, especially preventive services, such as prenatal care, dental care, immunizations and regular health examinations.

Both regular- and irregular-status migrants are at high risk of communicable diseases; those in irregular status may be more vulnerable. Irregular migrants may be reluctant to seek medical attention for fear of apprehension by the authorities. Migrants who have been trafficked and others in exploitative situations may have less access to curative and preventive health care. Migrant women in general – and those trafficked for sexual exploitation in particular – face risks of unwanted pregnancies, abortion, sexually transmitted diseases and HIV/AIDS, as well as mental and emotional disorders.

### *Protecting the rights of migrants – a policy priority*

If governments are to formulate well balanced policies, the social implications of family separation, marriage migration, and the effects of migration on public health merit attention alongside the economic benefits of migration.

One key is protecting the rights of migrants by ensuring that they are treated equally under the law in the receiving country. Respect for these human rights is one of the most basic determinants of migrant's well-being – and essential to achieving greater social and economic development. Part of that is ensuring that migrants of all ages have access to affordable basic social and health services.

*“Less-skilled migrant workers are likely to face deception, discrimination, exploitation and abuse, so protecting the rights of migrants is crucial”*

Many migrants enjoy positive experiences at their destination, but a significant number face hardships that erode their gains from migration. Informal work arrangements often disadvantage migrant workers through low wages, poor working conditions and lack of social protection and workers' rights. Less-skilled migrant workers are likely to face deception, discrimination, exploitation and abuse. Xenophobic sentiments and negative perceptions of migration are part of the explanation. Another part is the lack of enforcement of labour standards in host countries.

Despite the growth of international migration in Asia and the Pacific, protecting the rights of migrants remains on the fringes of discussion (Asis, 2008). A notable short-

coming in policy debates has been the rights of migrant workers. While there are bilateral agreements between some sending and receiving countries in the region, mostly through memoranda of understanding, these primarily regulate the movement of workers and have little impact on the treatment that migrant workers receive in the country of employment.

It is the sovereign right of States to regulate the entry of aliens and the terms and conditions of their stay. Even so, international human rights instruments call on States to abide by international principles when designing regulations and policies that affect the welfare of migrants. The countries in the region have made a significant step towards this objective by ratifying international conventions on the protection of migrants (table 1.4). The Protocol to Prevent, Suppress and Punish Trafficking in Persons and the Protocol against Smuggling, both adopted in 2000, have been ratified quickly, indicating the strong commitment of governments to combating such crimes. The pace of ratification of the 1990 Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families has, however, been relatively slow in the region, enjoying support mostly from countries of migrant workers.

## Managing climate change – how Asia and the Pacific can take the lead in mitigation and adaptation

At the Bali conference on climate change, Member States agreed on a road map of key issues to be negotiated by the end of 2009. These include adapting to the negative consequences of climate change, such as drought and floods; reducing greenhouse gas emissions; and widely deploying climate-friendly technologies and financing both adaptation and mitigation. With the Asia-Pacific region expected to be severely affected by climate change, it is imperative that the region contribute to these negotiations. The region

does not have to wait for a global consensus, however; it can contribute to managing climate change in its own way.

The impact of climate change on the Asia-Pacific region could be immense. Rising temperatures could result in sea-level rise, melting of glaciers, water stress, land erosion, forest fires and diseases with devastating effects, particularly on the poor.

### *A regional framework for managing climate change*

Almost 90% of global greenhouse gas (GHG) emissions come from five sources: energy (25.9%), industry (19.4%), forestry (17.4%), agriculture (13.5%) and transport (13.1%). Extensive use of fossil fuel, deforestation, agricultural practices, waste and other energy sources are responsible for much of global warming. The emission pattern of GHGs in the Asia-Pacific region is quite similar to that found at the global level, except that emissions from land use are much higher than the average and those from transport and industry are somewhat lower (World Resources Institute, 2007; Stern, 2006). Mitigating global warming requires targeting those sources.

*“Asking developing countries to cut their emissions and sacrifice growth is not equitable, but not including them in mitigating climate change will render the effort ineffective”*

Climate change is a global threat. This means that both developed and developing countries should be involved in controlling GHG emissions. Left out of the

**Table 1.4. Governments in the ESCAP region that have adopted key United Nations legal instruments on international migration, as of November 2007**

<i>Instrument</i>	<i>Year adopted</i>	<i>Entry into force</i>	<i>Number of countries ratified</i>
Convention relating to the Status of Refugees	1951	1954	24
Protocol relating to the Status of Refugees	1967	1967	24
Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families	1990	2003	7
Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children	2000	2003	15
Protocol against the Smuggling of Migrants by Land, Sea and Air	2000	2004	15

Kyoto Protocol, developing countries should be included in climate change discussions and initiatives. While developing countries are low emitters, their growth will increase emissions. Asking these countries to cut their emissions and sacrifice growth is not equitable, but not including them in mitigating climate change will render the effort ineffective. The solution is to invest in carbon-reducing technologies. The Bali road map is only the beginning, and the task ahead in reaching an implementable agreement is huge.

Because the severest impacts of climate change will come in Asia and the Pacific, countries of the region need to take the lead in mitigation and adaptation. The measures needed will incur costs and will require the transfer of resources and technologies from developed to developing countries. Even so, governments in Asia and the Pacific can undertake several measures to mitigate the impact of climate change and prepare their countries for it – while spurring economic and social development.

To fully address climate change, governments need to better integrate their macroeconomic, social and environmental policies. Doing so includes measures to integrate economic and fiscal policies with industrial development, pollution control, energy use, urban planning and development, agricultural and water management, health and sanitation, and forestry and natural resource management.

A regional framework for managing climate change is depicted in figure 1.21. Creating a regional framework for managing climate change includes measures on several axes:

- Promote eco-efficiency
- Go carbon neutral
- Expand carbon trading
- Support technology transfers
- Green the land
- Manage waste efficiently
- Implement adaptation measures

The countries of the region, whatever measures they undertake, need to develop policies that reduce greenhouse gas emissions, encourage wide deployment of climate-friendly technologies and prepare the region for adaptation to the negative impacts of climate change.

**Promote eco-efficiency.** The core of “green growth” is to improve the eco-efficiency of rapid economic growth, so that it can be compatible with the limited carrying capacity of the region. Action to improve energy efficiency and promote a low-carbon economy is an important component. Oil prices have tripled from less than \$30 per barrel in early 2004 to around \$100 in early 2008, making investment in better energy efficiency more urgent and more economically feasible. Improving energy efficiency could have a triple dividend: enhanced energy security, a better local environment and less GHG emissions (box 1.6). This green growth approach was endorsed by the Fifth Ministerial Conference on Environment and Development in Asia and the Pacific in March 2005.

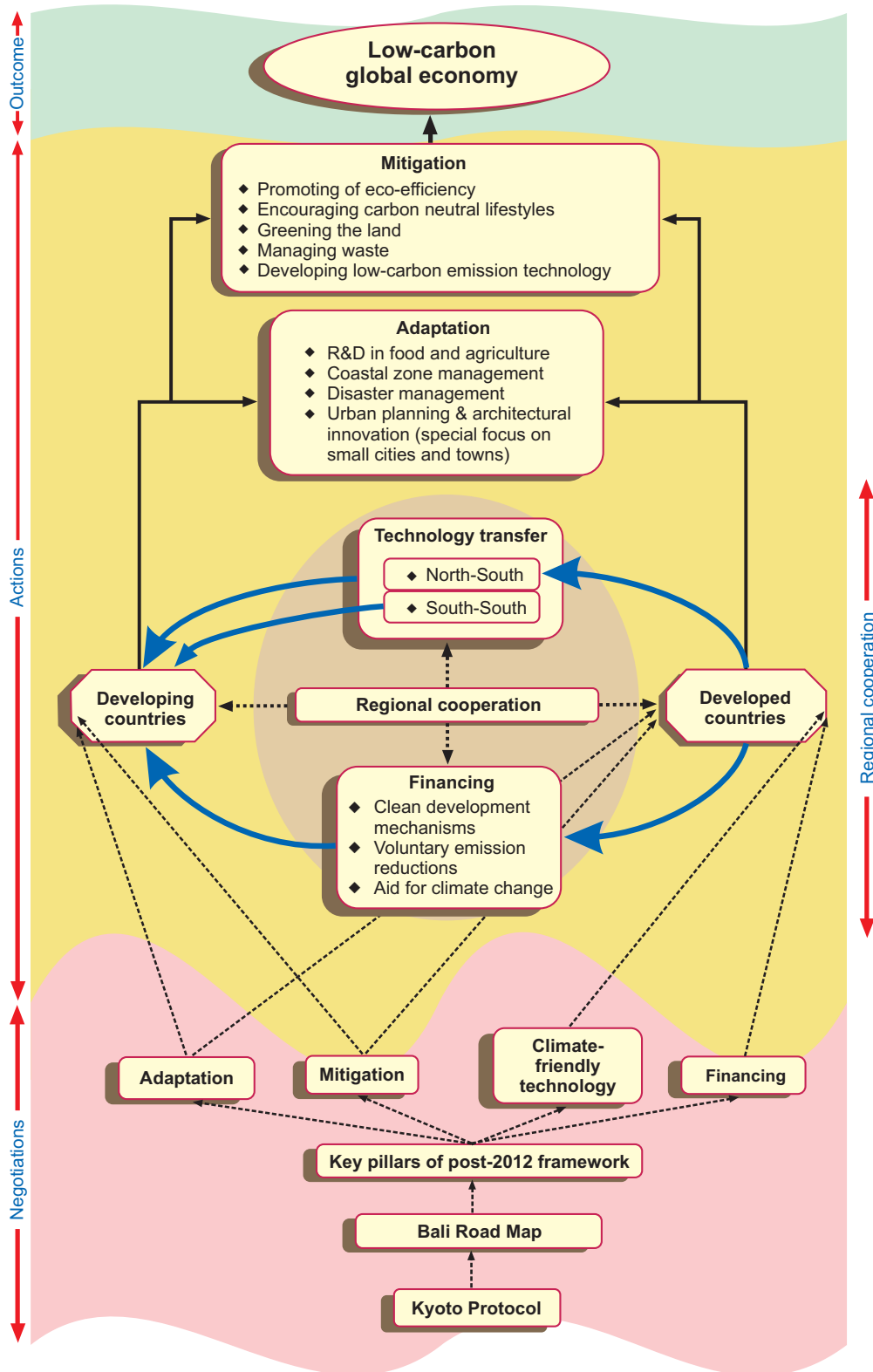
*“Governments can promote lifestyle and consumption changes by encouraging civil society organizations to take a more prominent role in advocating environmental sustainability”*

Specific measures for green growth could include taxing older, less efficient vehicles; offering tax incentives to companies that invest in newer and cleaner technologies; lowering the taxes on low-energy consumption lights; and introducing more graded user charges on electricity. Governments can also promote lifestyle and consumption changes by encouraging civil society organizations to take a more prominent role in advocating environmental sustainability.

**Go carbon neutral.** In developed countries, more and more consumers are buying products and services from only those companies that purchase carbon offsets, and companies have started promoting their products as carbon neutral. A similar movement can be encouraged in Asia and the Pacific, particularly among the growing, globally connected and environmentally aware middle classes. This can be done through a partnership between governments and civil society organizations, particularly international environmental organizations, such as Greenpeace and the World Wildlife Fund. These partnerships could encourage producers in developed countries that sell products in Asia and the Pacific to go carbon neutral and induce demand for clean development mechanism (CDM) projects in the region.

Governments can encourage export-oriented firms to go carbon neutral and capture shares in this growing market by improving their efficiency and investing in

Figure 1.21. Framework for managing climate change



### Box 1.6. Cash for wind – how clean energy can become a big business

Tulsi Tanti started by using wind power for his family textile business in Gujarat, India, in 1994 as a way to cut energy costs. Seeing the inadequate power supply and growing demand in India, Mr. Tanti perceived an opportunity. He founded Suzlon Energy, buying 10 turbines from Sudwind, a small German company, and setting up his first 3.5-megawatt wind farm for Indian Petrochemicals Corporation Ltd. When Sudwind went bankrupt in 1997, Suzlon hired its engineers and created an R&D centre in Germany, giving the company the technological capacity to produce its own turbines. The company also acquired a manufacturer of rotor blades in the Netherlands.

The company has grown exponentially. In the third quarter of 2007, it reported consolidated revenues of \$916 million, 74% above the previous year. Today, Suzlon is ranked among the top five wind energy companies in the world, with a market share of close to 8%. Suzlon started selling in the United States in 2003 when it landed a contract with DanMar & Associates, a Minnesota development firm. Since then, the United States has become the firm's main export market, though China, Europe and Australia are also customers.

The company's success is due to its entrepreneurial, technological and managerial capacity, but its story also shows the profitability of investing in clean energies – and the role for policy. Indian investors in wind power have received an accelerated depreciation of 80% starting in the first year. Fostering these capabilities will go a long way towards mitigating climate change and supporting economic growth and development in the region.

Sources: Karmali (2006); Newindpress.com (2007); and Suzlon (2008).

carbon offsets locally. Such initiatives could be supported by removing distortional national energy subsidies, valued at around \$250 billion per year globally, a sizeable share of that in Asia and the Pacific. Removing energy subsidies could reduce primary energy consumption and CO<sub>2</sub> emissions by a significant margin. Such a move could have short-term implications for inflation and growth, but it would ease the fiscal burden on governments, promote innovation in energy efficiency and help internalize the environmental costs of greenhouse gases. It would also promote growth and stability in the medium to long term.

An easy source of local carbon offsets are sanitation and urban solid waste management. This approach would induce demand for CDM projects in the region that trade in certified emission reductions (CERs) and in less stringent voluntary emission reductions (VERs). In 2006, the global CDM trading market was worth about \$30 billion; the VER market, about \$100 million. Both are growing rapidly.

**Expand carbon trading.** The CDM is designed to help industrialized countries reduce the costs of meeting their emissions targets under the Kyoto Protocol by achieving reductions at lower cost elsewhere. The mechanism allows developing countries to pursue carbon trading and reduces global emissions.

China and India dominate, with market shares of 61% and 12% respectively. Only a few other countries host CDM projects. Lack of awareness and capacity to develop CDM projects, and the relatively small size of the projects, prevents most developing countries from benefiting. Building awareness and improving national capacity could help. Clustering small projects and so avoiding high transaction costs could make smaller CDM projects more commercially attractive. Governments and regional institutions could assist countries in developing project-specific methodologies for carbon trading following the standard methodologies approved by UNFCCC.

As a precursor, developing countries could promote VERs. These reductions have a direct impact on GHGs and provide business opportunities to take advantage of the increasing VER demand that results from cost-effectiveness, less rigorous standards, speculative trading opportunities and marketing strategies linked to corporate social responsibility. Subregional and regional intergovernmental organizations, such as ASEAN, SAARC and ESCAP, can develop and promote regional or subregional over-the-counter markets for CERs and VERs. The region also need to strengthen the role of CDM by expanding the coverage (currently a few countries dominate CDM projects), scale and scope of projects and make it a major channel for coordinating action between

developing and developed countries. CDM has significant potential as an incentive mechanism for non-Annex I parties to participate in GHG emission reductions by functioning as an efficient channel for financial resources and technology to developing countries. It is also necessary to make CDM projects a key instrument for bringing net reductions in global GHG emissions. Meeting such goals requires new operational rules, such as discounting CERs in accordance with the types and geographical locations of CDM projects. Any such approaches would need to be preceded by a comprehensive study on feasibility.

*China and India could help other developing countries develop more practical and affordable climate-friendly technologies in energy efficiency, renewable energy and carbon capture and storage*

#### **Foster South-South cooperation in technology transfer.**

A major barrier to developing countries addressing climate change is the lack of technology for domestic climate change monitoring, mitigation and adaptation. The most advanced and efficient technologies are in the private sector, mainly in developed countries. CDM is meant to assist the transfer of cleaner technologies to developing countries, but there is also a need to promote South-South cooperation within and across regions. China and India (and Brazil from outside the region) could help other developing countries develop more practical and affordable climate-friendly technologies in energy efficiency, renewable energy and carbon capture and storage.

**Green the land.** The region needs to take concrete measures for reducing emissions from deforestation and degradation as a key approach to mitigating carbon emissions in the post-2012 framework, including through strengthening and supporting ongoing efforts on a voluntary basis. Countries could do so by supporting capacity-building and undertaking efforts, including demonstration activities, to address the drivers of deforestation. This is important to address the needs of local and indigenous communities who depend on forests for their livelihoods.

Land-use emissions, driven mainly by deforestation, account for 17% of global GHG emissions. South and South-East Asia are losing over 28,000 square kilometres of land every year due to deforestation. If these

trends continue, land-use emissions are likely to increase until 2050; much damage will already have been done by the time they start to recede. Reversing deforestation is thus critical. Moreover, this area requires minimal technology. Political will is needed to enact and implement regulations to stop illegal logging and deforestation, particularly in rain forests. Countries in the region should also implement afforestation programmes by planting trees and greening 28,000 square kilometres of land every year to regain the green land lost in the past several decades. Afforestation will contribute to adaptation as well by reducing the impact of soil erosion and drought, protecting against floods, capturing and retaining groundwater, and increasing biodiversity and thus food security. Restoring coastal mangrove forests would help preserve the coastal environment, protect against typhoons and reduce the intrusion of seawater into coastal groundwater tables.

*Reversing deforestation is critical and requires minimal technology*

**Manage waste efficiently.** Urban solid and liquid wastes emit methane, 21 times more potent as a GHG than CO<sub>2</sub>. Converting urban solid wastes into compost and organic fertilizer not only reduces methane emissions but increases soil productivity and reduces the use of chemical fertilizers, keys for adaptation and mitigation (box 1.7). Methane from landfills and dumpsites can be captured and used as a fuel to generate electricity. The Peoples Committee of Ho Chi Minh City has entered into a partnership with a Korean company to generate 3 megawatts of electricity from the city's dump. The government of Andhra Pradesh, India, is providing 40-50% financing for projects that turn urban wastewater, particularly from slaughterhouses, into electricity. It also guarantees that the Andhra Pradesh State Electricity Board will purchase electricity generated from such plants at a set price (Nedcap.org, 2008). These revenues can be supplemented by selling CERs and VERs from the projects.

**Implement adaptation measures.** Adaptation is particularly important in poorer countries and poorer regions within countries due to their resource constraints. The adverse impacts of climate change on agriculture and food security reaffirm the importance of investing in research and development to create drought-resistant and heat-resistant seed varieties (see chapter 3 for details). Increased water stress necessitates changing farm practices to suit the changing environment. Behavioural changes will also make a

### Box 1.7. Cash from trash – financing mitigation and adaptation through decentralized solid waste management

Under a business-as-usual scenario, by 2020 GHG emissions due to urban garbage will increase by at least 25%, even as municipal governments find it more difficult to collect and dispose of solid wastes. At present, most local governments use end-of-pipe solutions, focusing on collecting and disposing of wastes once they have been generated. These are capital- and technology-intensive – and thus costly. Solving the problem of solid wastes requires a new approach that minimizes methane emissions, treats both organic and inorganic wastes as resources, minimizes transportation of waste and provides regular incomes and better working conditions for waste pickers.

ESCAP identified such an approach, initiated by Waste Concern, an NGO in Bangladesh, and adapted and tested it in Matale, Sri Lanka, and Quy Nhon, Viet Nam. Under this approach, decentralized treatment plants, covering 1,000-1,500 households and treating 3-4 tons of wastes per day, are built in the neighbourhoods they serve. Waste is collected daily using hand carts and motorcycle-powered carts. Households are trained to separate wastes at source. Waste is then brought to the treatment plant, where it is sorted again. Recyclable materials (10-20% of the waste) are sold to junk dealers, organic wastes (70-80%) are composted, and rejects (5-10%) are collected and taken to the dump every one or two weeks. Strict quality control ensures optimum quality of compost. At present, raw compost is sold, but in the future some compost will be enriched with nitrogen, phosphorous and potassium to make designer organic fertilizer tailored to the requirement of local farmers. Each plant is designed as a profit-making public-private partnership with three main streams of income: collection fees from the users, sale of recyclables and sale of designer organic fertilizer.

An aerobic process that does not produce methane, composting considerably reduces GHGs. Because this approach uses motorcycle carts and hand carts and treats solid wastes within the neighbourhood, it minimizes transportation-related GHGs and fuel costs for the local government. ESCAP estimates that up-scaling could eliminate 7.5 million tons of CO<sub>2</sub> (equivalent) per year.

The approach also contributes to adaptation. Organic designer fertilizer is more cost-effective and beneficial for farmers than chemical fertilizer. Unlike chemical fertilizer, organic fertilizer returns organic matter to the soil, replenishing it, increasing its fertility and reducing the chemical fertilizer needed. Organic fertilizer also enables the soil to better retain water, conserving water. Increasing soil fertility and conserving water are key adaptation strategies for Asia and the Pacific recommended by IPCC (2007).

This approach works best in small and medium-size towns (populations 50,000-100,000) that are surrounded by agricultural areas and where the opportunity cost of land is relatively low. Scaling-up can be financed by selling VERs and CERs. Combining the sale of VERs and CERs with the revenues from user charges, sale of recyclables and sale of organic designer fertilizer can bring in potential revenues of up to \$37 billion per year. Instead of spending resources on waste, local governments can make cash from trash.

difference, particularly in choices of food, transport and recreation. Sea level rise and the resulting climatic hazards will require greater efforts in early warning, sea defence construction and architectural innovation. Public policy should be redesigned to suit changing needs in health, water resources, disaster management, coastal zone management and agriculture and food security.

Natural disasters will be a particular challenge for smaller towns and cities, which have concentrated populations and poor urban planning. Lacking basic environmental and disaster-management infrastructure and services, these places have much laxer enforce-

ment of building control measures than do larger cities. Almost 50% of the region's urban population lives in such towns and cities. The need is not for additional resources but for improved governance structures and institutions. Governments, for example, could work with local NGOs and community-based organizations to develop local disaster management plans. Lessons from Bangladesh could be useful for other countries of the region.

Governments in Asia and the Pacific are likely to face eco-refugees from their own countries and elsewhere in the region, seeking shelter against short-term and

long-term environmental catastrophes. These refugees are likely to head to cities and towns, so governments need to plan for this influx both in the short term, by providing emergency assistance, and in the long term, by accommodating those who have lost their livelihoods in rural areas.

A regional food bank is one measure that countries can adopt for mutual assistance. Greater emphasis will also need to go to housing the poor in cities and towns. The Baan Mangkong Programme of Thailand and the Khuda-ki-basti approach in Pakistan may provide useful lessons.

## NOTE

1. Following Kakwani and Pernia (2000), the pro-poor growth index was calculated by decomposing the total change in poverty into (i) The impact of growth when the distribution of income does not change ( $\eta_g$ : growth [income elasticity of poverty]); and (ii) The effect of income redistribution when total income does not change ( $\eta_i$ : inequality elasticity of poverty).

Suppose  $\eta$  is the proportional change in poverty when there is a positive growth rate of 1%, where  $\eta = \eta_g + \eta_i$ ,  $\eta_g$  is the pure growth effect (always negative), and  $\eta_i$  is the inequality effect (negative or positive).

Then the degree of pro-poor growth can be measured by an index:  $\phi = \frac{\eta}{\eta_g}$ .

Growth will be pro-poor when  $\phi > 1$ , meaning that the poor benefit proportionally more than non-poor. When  $0 < \phi < 1$ , growth is not strictly pro-poor (trickle-down growth). If  $\phi < 0$ , economic growth increases poverty.

## References

- ABN AMRO India (2007). "Does sterilization cost affect monetary instrument choice?", *The Knowledge Series* (New Delhi).
- Asian Development Bank (2006). "Measuring policy effectiveness in health and education", in *Key Indicators 2006* (Manila, ADB).
- (2007). *Key Indicators 2007*, vol. 38 (Manila, ADB).
- Asis, M. (2008). "Looking into Pandora's Box: The social implications of international migration in Asia", *Asian Population and Social Studies Series* (Bangkok, UNESCAP).
- Bloomberg News (2008). "Asia-Pacific bond risk increases to a record on Citigroup loss", 16 January 2008.
- Bryant, J. (2005). "Children of international migration in Indonesia, the Philippines and Thailand: a review of evidence and policies", Innocenti Working Paper No. 2005-05 (Florence, UNICEF, Innocenti Research Centre).
- (forthcoming). "Children and international migration", *Situation Report on International Migration in East and Southeast Asia*, report prepared by the UN Regional Thematic Working Group on International Migration, Bangkok.
- China Daily, (2007). "Measures taken to increase arable land", 8 August 2007.
- Cruces, G. and T. Wodon (2003). "Transient and chronic poverty in turbulent times: Argentina 1995-2002", *Economics Bulletin*, vol. 9, No. 3, pp. 1-12.
- Douglass, M. (2006). "Global householding – the missing dimensions of transnational migration research and policy in Pacific Asia", paper presented at the Ritsumeikan Asia Pacific Conference, "Global Movements in the Asia Pacific", Beppu, Japan, 17-18 November.
- Eichengreen, B. and H. Tong (2005). *Is China's FDI Coming at the Expense of other Countries?*, National Bureau of Economic Research Working Paper 11335 (Cambridge, Mass., NBER).
- ESCAP (2006a). *Enhancing Regional Cooperation in Infrastructure Development Including that Related to Disaster Management* (United Nations publication, Sales No. E.06.II.F.13).
- (2006b). *Key Economic Developments and Prospects in the Asia-Pacific Region 2006* (United Nations publication, Sales No. E.06.II.F.3).
- (forthcoming). *Future within Reach* (Bangkok, ESCAP).
- Financial Times (2007). "India infrastructure: A tether that keeps potential in check", 8 May 2007.
- Findlay, C. and A. Sidorenko (2005). "Services: Importance of further liberalization for business and economic development in the region", presented at the Conference on Delivering on the WTO Round: A High-Level Government-Business Dialogue, Macao, China, October 2005.
- Hall, G. and H. Patrinos (2005). *Indigenous Peoples, Poverty and Human Development in Latin America: 1994-2004* (New York, World Bank).
- Hill, D. (2007). "Brazil, China, India, Russia, and Taiwan lead S&E article output of non-OECD countries", *Science Resources Statistics InfoBrief*, National Science Foundation, September.
- Hugo, G. (2002). "Effects of international migration on the family in Indonesia", *Asian and Pacific Migration Journal*, vol. 11, No. 1, pp. 13-46.
- Humbeck, E. (1996). "The politics of cultural identity: Thai women in Germany", in M. García-Ramon and J. Monk (eds.), *Women of the European Union: The Politics of Work and Daily Life* (London, Routledge).
- ICRISAT (International Crops Research Institute for the Semi-arid Tropics) (2007). *Pro-Poor Biofuels Outlook for Asia and Africa: ICRISAT's Perspective Working Paper*.
- Intergovernmental Panel on Climate Change (IPCC) (2007). "Climate Change 2007: Mitigation", contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental

- Panel on Climate Change, <<http://www.ipcc.ch/pdf/assessment-report/ar4/wg3/ar4-wg3-frontmatter.pdf>>.
- Jenkins, R. and C. Edwards (2005). *The Effect of China and India's Growth and Trade Liberalisation on Poverty in Africa* (London, Department for International Development, DCP 70, DFID).
- (2006). "The economic impacts of China and India on sub-Saharan Africa: Trends and prospects", *Journal of Asian Economics*, vol. 17, pp. 207-225.
- Kakwani, N. and E. Pernia (2000). "What is pro-poor growth", *Asian Development Review*, vol. 18, No. 1.
- Kakwani, N., S. Khandker and H. Son (2004). "Pro-poor growth: Concepts and measurement with country case studies" (International Poverty Centre, UNDP).
- Kaplinsky, R. and M. Morris (2006). "The Asian drivers and SSA: MFA quota removal and the portents for African industrialization", paper presented for the Conference on Asian and Other Drivers, St. Petersburg, 18-19 January.
- Karmali, N. (2006). "India's 'wind man' is blowing strong", *Forbes.com*, 14 June.
- Kox, H. and H. K. Nordas (2007). "Services trade and domestic regulation", OECD Trade Policy Working Paper No. 49, TD/TC/WP(2006)20/Final.
- Morgan Stanley Global Economic Forum (2007). "Supply response: new hurdles are emerging", 2 April 2007.
- Lokshin, M. and M. Ravallion (2005). "Lasting local impacts of an economy-wide crisis" (Washington, D.C., World Bank).
- Nedcap.org (2008). "Tariff structure", <[http://www.nedcap.org/index\\_files/Page2490.htm](http://www.nedcap.org/index_files/Page2490.htm)>.
- Newindpress.com (2007). "The year of the billionaire", 29 December.
- OECD-FAO (2007). *Agricultural Outlook 2007-2016*.
- Pasha, H. (2002). "Pro-poor policies" (United Nations).
- Piper, N. (1999). "Labor migration, trafficking and international marriage: Female cross-border movements into Japan", *Asian Journal of Women's Studies*, vol. 5, No. 2, pp. 69-99.
- Reisen, H. (2006). "China and India: What's in it for Africa?", paper presented for the Conference on Asian and Other Drivers, St. Petersburg, 18-19 January.
- Research and Information System for Developing Countries (RIS)(2007). *Regional Cooperation for Infrastructure Development in Asia: Towards a Regional Special Purpose Vehicle for Public-Private Partnership* (New Delhi).
- Reuters India (2007). "India pins biofuel hope on jatropha, output to rise", 30 August 2007.
- Roth, J.-P. (2007). "Highly leveraged institutions and financial stability: A case for regulation?", Speech to the Swiss National Bank, 29 June.
- Son, H. (2003). "A note on pro-poor growth" (Washington, D.C., World Bank).
- Stern, N. (2006). "The economics of climate change", HM Treasury, Government of the United Kingdom.
- Suzlon Energy (2008). *Suzlon Energy website*, <<http://www.suzlon.com>>, accessed 9 January.
- The Economist (2007). "Home truths", 5 July 2007.
- UNCTAD (2007). "Globalization for development: opportunities and challenges", report of the Secretary-General of UNCTAD (TD/413), 4 July.
- UNDP (1999). *Human Development Report 1999* (New York, Oxford University Press).
- UN-ENERGY (2007). *Sustainable Bioenergy: A Framework for Decision Makers* (United Nations).
- United Nations Children's Fund (2007). *Children and Migration* (UNICEF), <<http://www.gfmd-fmmd.org/en/system/files/CHILDREN+AND+MIGRATION.pdf>>.
- United Nations, Department of Economic and Social Affairs (2006). *Trends in Total Migrant Stock: The 2005 Revision* (New York, United Nations), <[http://www.un.org/esa/population/publications/migration/UN\\_Migrant\\_Stock\\_Documentation\\_2005.pdf](http://www.un.org/esa/population/publications/migration/UN_Migrant_Stock_Documentation_2005.pdf)>.
- World Bank (2003). *Viet Nam Development Report 2004*, World Bank Poverty Reduction and Economic Management Unit East Asia and Pacific Region Report No. 27130.

- \_\_\_\_\_ (2007a). *The Cost of Pollution in China* (Washington, D.C., World Bank).
- \_\_\_\_\_ (2007b). *East Asia & Pacific Update – 10 Years after the Crisis* (Washington, D.C., World Bank).
- World Resource Institute (2007). *Climate Analysis Indicators Tool*, <<http://cait.wri.org/cait.php?page=gases>> (Washington, D.C., World Resources Institute).
- WTO (2006). *International Trade Statistics 2006* (Geneva, WTO).
- \_\_\_\_\_ (2007). *International Trade Statistics 2007* (Geneva, WTO).