

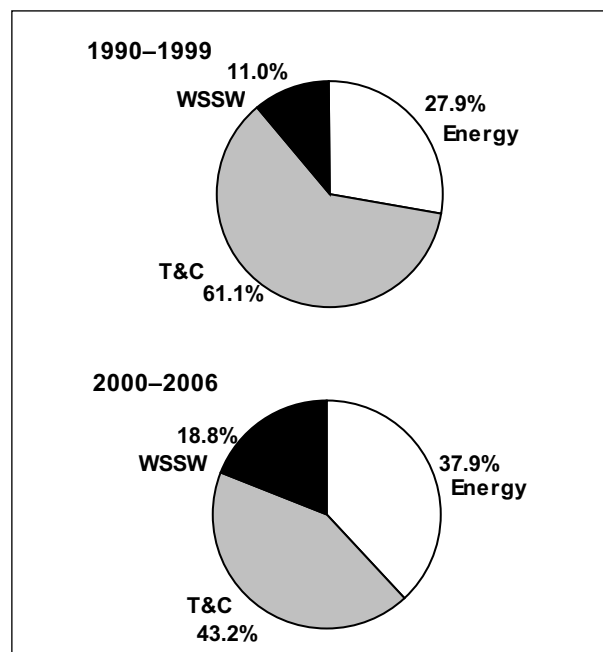
# VII

## Regional Cooperation

Reflecting increasing external openness, growing exposure to international competitiveness, and rapid economic growth in the region, momentum for subregional and regional economic integration has been building in Asia and the Pacific, although with significant variations across the region. Local enterprises have been participating in regional and global production networks and supply chains, and linkages between markets have been developing and growing across the region. Such market forces are a major driver of the demand for cross-border and regional infrastructure. The demand for cross-border infrastructure is also growing to reduce transport and logistic costs between markets and production centers, and is critical for maintaining productivity and the competitiveness of businesses in the region.

ADB's support for cross-border infrastructure development is rooted in ADB's Charter, which assigns a high priority to regional cooperation. Cross-border or regional infrastructure, particularly in transport and energy, are key elements of most ADB-supported subregional cooperation programs, including Greater Mekong Subregion (GMS) economic program, the South Asia Subregional Economic Cooperation (SASEC) program, the Central Asia Regional Economic Cooperation (CAREC) program, the Subregional Economic Cooperation in South and Central Asia (SECSCA) program, and the Pacific Plan. While regional technical assistance (TA) was the first instrument used for cross-border development, ADB's lending for regional infrastructure projects has also increased and expanded in scope and coverage.

**Figure 25:** ADB Regional Technical Assistance for Infrastructure by Sector, 1990–2006



T&C = transport and communications; WSSW = water supply, sanitation, and waste management.  
Sources: ADB internal database on Loan, TA, Grant, and Equity Approvals; Management Information Tool (MIT) as of October 2006; and Project Processing Information System (PPIS) as of 31 December 2006.

### A. ADB Operations<sup>25</sup>

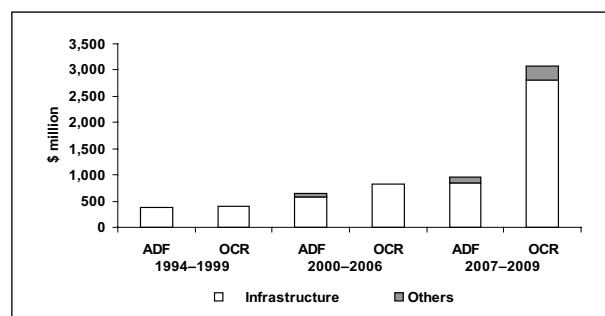
**Regional Technical Assistance.** ADB's regional TA operations for infrastructure have a long history and have undergone substantial changes. By 2006, ADB had provided a cumulative total of \$88.2 million for regional TA for infrastructure, accounting for 12.8% of the total regional TA provided (Appendix table 8.1). The amount provided for regional TA rose from an average

of \$2.6 million per annum in the 1990s to \$7.2 million during 2000–2006. Further, the sectoral composition has been changing. Transport and communications, which accounted for about 61.1% of the total amount provided for regional TAs in infrastructure sectors during the 1990s, dropped to 43.2% during 2000–2006 while energy rose from 27.9% to 37.9% and water supply, sanitation, and waste management from 11.0% to 18.8% (Figure 25). No regional TA was provided for irrigation and drainage. In energy and water supply, sanitation, and waste management, demand for a regional approach to capacity building and reforms has been growing in Asia and the Pacific.

**Lending.** ADB’s lending for regional infrastructure has a relatively short history, commencing in 1994, and includes subregional as well as national projects for regional cooperation. By 2006, ADB had provided a cumulative total of \$2.2 billion loan for regional infrastructure. Up to 2006, loans for regional infrastructure accounted for 96.5% of ADB’s total lending for regional cooperation (Figure 26). Of this, OCR resources accounted for 56.5% and ADF for 43.5%. Thus, the effective cost of funding provided for regional infrastructure has been lower than that for country-specific infrastructure projects.

ADB’s first loans for regional infrastructure were to the GMS regional cooperation program. CAREC and SASEC followed, adding significant momentum to ADB’s operations in this area. Thus, lending for regional infrastructure increased from an average of \$128.7 million per annum in 1994–1999 to \$201.1 million in 2000–2006 (Appendix tables 8.2 and 8.3). This was

**Figure 26:** Breakdown of ADB Regional Public Sector Loans, 1994–2009



ADF = Asian Development Fund; OCR = ordinary capital resources.  
Sources: ADB internal database on Loan, TA, Grant, and Equity Approvals; and Project Processing Information System (PPIS) as of 8 December 2006.

associated with a decrease in the proportion of ADF from almost 50% to about 41.0% of the total lending for regional infrastructure between the two periods. Up to 2006, ADB’s entire lending for regional infrastructure was confined to transport and communications, and energy. Transport and communications has been the dominant sector, accounting for more than 80% of the total lending for regional infrastructure. No such lending has been provided for WSSW management, and for irrigation and drainage.

ADB’s support to cross-border infrastructure spans diverse geographical areas. ADB has supported a number of cross-border road projects, including the Almaty–Bishkek regional road rehabilitation, Mongolia regional road project, Phnom Penh–Ho Chi Minh City highway, and GMS East–West corridor project. In 2005, ADB approved its first loan to a regional entity for establishing the Pacific aviation safety office. This was a pioneering loan to a regional entity.

### Box 3: Promoting Regional Cooperation and Private Sector Development

ADB, along with other international finance institutions, is providing assistance to the Nam Theun 2 Hydroelectric Project in the Lao People’s Democratic Republic (Lao PDR), which is a joint partnership between the Lao PDR Government and a private sector consortium—the Nam Theun 2 Power Company (NTPC). The project was developed in an environmentally and socially sustainable and transparent manner. The project will

- generate significant revenues for the Lao PDR Government from export of long-term and competitively priced electricity to Thailand,
- reduce Thailand’s dependence on natural gas and oil for its generation needs, and
- expand the availability of low cost electricity within the Lao PDR.

The project is an example of and contributes to the Greater Mekong Subregion (GMS) regional cooperation initiative. ADB’s assistance for this project comprises (1) a public sector loan of \$20 million to the Government of the Lao PDR to finance the Government’s equity participation in the Project; (2) a private sector loan to NTPC for up to \$50 million without government guarantee; and (3) a political risk guarantee of up to \$50 million, to mobilize commercial loans to NTPC for the project. The assistance addresses a range of issues, including direct funding and risk mitigation, to promote private sector participation.

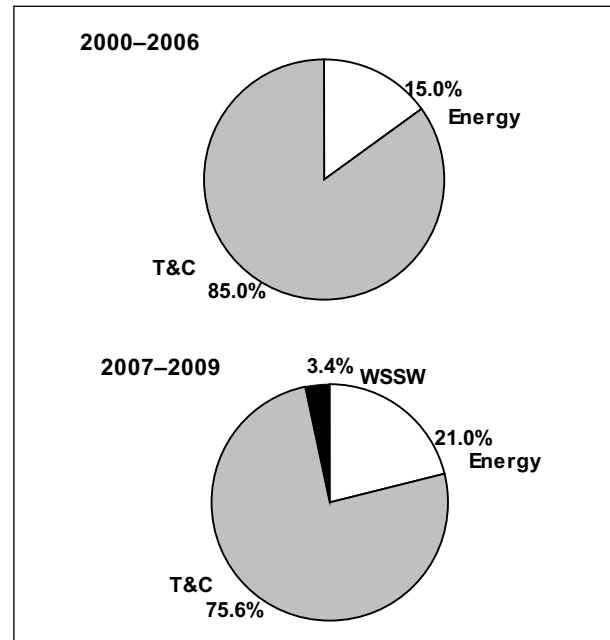
ADB should consider scaling up its lending to regional entities to other sectors and other subregions. ADB has also supported some pioneering projects in regional cooperation in energy, including the Theun Hinboun Project that involves private-public sector participation in power; GMS Power Transmission Project to construct a 220 kilovolt (kV) transmission line from Viet Nam to Cambodia; and the recently approved GMS-Nam Theun 2 Hydroelectric Project in the Lao PDR (Box 3) involving private-public sector participation to develop hydroelectric power resources for export. ADB's 2006 program includes a regional power interconnection project between Afghanistan and Tajikistan.

**Forward plan.** In response to growing demand in the region, ADB's emphasis on cross-border infrastructure is increasing. This is reflected in the first and fourth pillars of the recently approved Regional Cooperation and Integration Strategy—the adoption of regional and subregional economic cooperation programs for cross-border infrastructure and related software, and cooperation in regional public goods. ADB's emphasis is also reflected in the robust lending pipeline for regional infrastructure of \$3.7 billion, or about \$1.2 billion per annum during 2007–2009 (Figure 27). At the same time, the proportion of ADF continues to decline, falling to about 23% of total programmed lending during this period. The share of the SASEC program will rise to about 40% of the total lending for regional infrastructure, above the GMS program with 37%. The sectoral breakdown of the pipeline reflects a slight shift with the proportion of transport and communications falling to about 76%, that of energy rising to about 21%, and water supply, sanitation, and waste management opening their account with a modest 3% of the pipeline for regional infrastructure.

## B. Issues in Regional Infrastructure Development

Progress in ADB's regional operations is hampered by barriers to regional infrastructure development. For example, several trans-border gas pipeline projects in South and Central Asia involving countries such as Afghanistan, Iran, India, Pakistan, and Tajikistan have not been initiated despite substantial discussions because of geopolitical dimensions of regional infrastructure projects. Several major projects in infrastructure (e.g., in roads, dams, and power transmission lines) have also stalled despite long periods of negotiations. These are reflected in insufficient cross-border infrastructure.

**Figure 27:** ADB Regional Public Sector Loans in Infrastructure by Sector, 2000–2009



T&C = transport and communications; WSSW = water supply, sanitation, and waste management.  
Sources: ADB internal database on Loan, TA, Grant, and Equity Approvals; and Project Processing Information System (PPIS) as of 8 December 2006.

Some of the key issues are described in the next few paragraphs.

**Asymmetric costs and benefits.** Asymmetry in the distribution of costs and benefits across the participating countries is a major stumbling block in development of regional or cross-border infrastructure. Because of asymmetries, often all parties are not equally willing to have a regional or cross-border infrastructure project, and the process tends to seek the least common denominator. Development of a proper mechanism to distribute the costs and benefits fairly among participating counties is critical for the success of such ventures. A study suggested that the economic analysis of regional projects should estimate the return on such investments at both individual participating country and subregional levels as well as the distribution of net benefits between participating countries.<sup>26</sup> The use of such methodological frameworks needs further consideration by ADB and the region.

**Role of the private sector.** Traditionally, the private sector has been the key driver of regional cooperation in Asia. The demand for cross-border infrastructure is often rooted in cross-border private sector activities, which in turn translates into government action due to the growth, employment, and poverty

reduction implications. Thus, the private sector can be a major force in catalyzing political consensus on the difficult and complex issues involved in regional cooperation, and private sector stakeholders should be involved in planning and negotiation for cross-border infrastructure.

Private sector involvement is also needed for financing and efficiency. However, regional infrastructure is riskier than domestic infrastructure due to varied regulatory arrangements among countries. Multilateral and bilateral agencies have a critical role in addressing such issues of cross-border infrastructure development. ADB has good experience in developing cross-border infrastructure projects with private sector participation, and should scale up and expand its activity.

**Related “software” and externalities.** Regional infrastructure is subject to a variety of regulations, such as immigration, customs, security, and quarantine. Variations in domestic regulations across countries on items such as vehicle weight and dimensions, emission controls, driving licenses and insurance cover can also affect cross-border movements of road traffic. In the railway sector, an

added complication may arise from different track gauges. Thus, development of related software, including legal agreements and harmonization of regulations, procedures, and standards are important to provide optimal benefits from cross-border infrastructure.

Cross-border infrastructure also generates some negative externalities including the spread of communicable diseases (e.g. HIV/AIDS, severe acute respiratory symptoms [SARS], and avian flu); cross-border security problems and crime; trafficking in women and children; and negative sociocultural impacts. Appropriate mitigation plans need to be an integral part of projects from their outset. In August 2006, ADB and several other agencies signed the Joint Initiative by Development Agencies for Infrastructure Sectors to Mitigate the Spread of HIV/AIDS, which should be helpful in addressing this continuing issue.

The opportunity costs of not developing regional infrastructure are high. Given the stiff barriers to regional infrastructure, often with frequent geopolitical dimensions, the regional development community should consider the concessionality of funds offered for regional projects, particularly those that having high public good character and positive externalities.