

Supporting Provision of
Regional Public Goods
in the Asia and Pacific Region

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ABBREVIATIONS

ADB	– Asian Development Bank
ADF	– Asian Development Fund
AML/CFT	– Anti-money Laundering/Combating Terrorist Financing
ASEAN	– Association of Southeast Asian Nations
ATF	– Asian Tsunami Fund
CACILM	– Central Asian Countries Initiative for Land Management
CAREC	– Central Asia Regional Economic Cooperation
CDM	– clean development mechanism
CE	– clean energy
CEFPF	– Clean Energy Financing Partnership Facility
CMI	– Carbon Market Initiative
CO ₂	– carbon dioxide
DEAP	– Disaster and Emergency Assistance Policy
DMC	– developing member country
EE	– energy efficiency
EEI	– Energy Efficiency Initiative
EU	– European Union
GACAP	– Governance and Anticorruption Action Plan
GDP	– gross domestic product
GEF	– Global Environment Facility
GMS	– Greater Mekong Subregion
GHG	– greenhouse gas
HFA	– Hyogo Framework of Action
HIV/AIDS	– human immunodeficiency virus/acquired immune deficiency syndrome
IMF	– International Monetary Fund
JFPR	– Japan Fund for Poverty Reduction
OECD	– Organisation for Economic Co-operation and Development
PRC	– People’s Republic of China
RCI	– Regional Cooperation and Integration
RE	– renewable energy
REACH	– Renewable Energy, Energy Efficiency and Climate Change
RETA	– regional technical assistance
RPG	– regional public good
SAARC	– South Asian Association for Regional Cooperation
SARS	– severe acute respiratory syndrome
SASEC	– South Asia Subregional Economic Cooperation
TA	– technical assistance
UN	– United Nations
UNAIDS	– United Nations Programme on HIV/AIDS
UNDP	– United Nations Development Programme
UNESCAP	– United Nations Economic and Social Commission for Asia and the Pacific
US	– United States

NOTE

In this report, “\$” refers to US dollars.

Foreword

Asian Development Bank's (ADB's) Charter mandates it to play an active role in regional cooperation in the Asia and Pacific region. In 1994, ADB adopted a regional cooperation policy that articulated its approach to promoting regional cooperation. Since the early 1990s, ADB has supported various regional and subregional cooperation programs. In 2006, a new Regional Cooperation and Integration (RCI) Strategy was adopted to transform ADB's support for RCI in the region from several standalone programs to a coherent and strategically focused approach.

The purpose of the RCI strategy is to guide ADB's support for RCI in a coherent way and to facilitate new initiatives that are needed in the future. The RCI strategy has four pillars: (i) regional and subregional programs on cross-border infrastructure and related software; (ii) trade and investment; (iii) money and finance; and (iv) regional public goods (RPGs). These pillars are interrelated and are mutually reinforcing in their contribution to poverty reduction in the region. Regional and Sustainable Development Department (RSDD) is the lead department for the 4th pillar of the RCI strategy.

This study was initiated in RSDD to prepare an analytical paper and build knowledge to support ADB's activities related to RPGs. The study mainly covers the key RPG areas identified in the RCI strategy: clean energy and energy efficiency, environment, disaster management, communicable diseases, governance, and human and drug trafficking. The study takes stock of and analyzes recent activities and current programs of ADB in provision of RPGs, and makes suggestions for the future. We hope that the study will stimulate further thinking and discussion in this important area. The study is also expected to serve as a useful input for drawing up ADB action plan for supporting provisions of RPGs in the future, and for undertaking dialogue, consensus building efforts and operational activities related to RPGs.

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EXECUTIVE SUMMARY

The Context

The development performance of the Asia and Pacific region during the last quarter of a century is without precedent in the annals of the world economy. However, there are major risks facing the continuation of this trend in the future. One interesting characteristic of addressing many of the risks, such as managing global imbalances, helping lagging regions and states under stress, reducing carbon intensity of growth and checking spread of communicable diseases, is that managing them effectively requires collective regional action. The theory identifies public goods as goods and services which have the characteristic of non-excludability (i.e., non-payers cannot be excluded from their use) and non-rivalry (i.e., use by some does not reduce their supply for others). In the context of public goods, the concept of task assignment developed for various subnational governments can be applied to various transnational entities. Some public goods such as climate change may be inherently global and the domain of global institutions. There are aspects of environment such as acid rain, dust storms, forest fire haze, etc. which are largely regional in impact and may be preeminent domains of regional institutions. However, there are many activities that are concurrently in the domains of both regional and global institutions. The Regional Cooperation and Integration (RCI) strategy of the Asian Development Bank (ADB) defines regional public goods (RPGs) as public goods shared by two or more countries in the region.

ADB Support for RPGs

RPGs form the fourth pillar of the RCI strategy. The strategy identifies six key RPG areas: clean energy and energy efficiency, environment, natural disaster response, communicable diseases, governance, and human and drug trafficking. A review of past ADB lending and nonlending activities reveals that most RPGs were provided through regional technical assistance (RETA) and grants (or grant-financed projects), while lending for RPGs was limited. All RETAs approved from 1967 to 2006 were classified into the four pillars of the RCI strategy, and those falling under Pillar 4 (RPGs) were further categorized into six key RPG areas and “Other RPGs”. The latter covers knowledge building in a wide range of other areas. More than 83% of the total RETA amount supported the provision of RPGs, out of which 66% was for “Other RPGs”. Key RPG areas getting significant proportion of total RETA amount were environment (18%), communicable diseases (about 7%), governance (6%), and clean energy and energy efficiency (about 3%). As in the past, there are few loans for the support to RPGs in the 2007–2009 pipeline. Further, the bulk of RPGs is programmed to be supported through technical assistance. Notably, 74% of the total RPG RETA amount programmed for the next 3 years fall under “Other RPGs”. This highlights ADB’s continuing role in creating, capturing, and disseminating publicly available information in a wide range of areas. It is the investment projects for RPGs where ADB needs to be more focused on the above-mentioned six key areas.

Clean energy and energy efficiency. Climate change is a global public good but its regional dimensions are important. It is now widely recognized that rising fossil fuel based energy use is increasing CO₂ emissions, causing global climate change. Unprecedented technology changes must occur in the future to meet the growing energy demands, particularly in Asia, while stabilizing CO₂ concentration in the atmosphere. Globally, there is a large funding gap (\$30 billion per year) for meeting the needs of energy efficiency and renewable energy to move toward low carbon economies. Further, there are large knowledge gaps about these issues and difficult challenges with regard to the post-Kyoto Protocol framework. ADB has established a comprehensive program on Clean Energy and Environment to help its developing member

countries (DMCs) achieve a low-carbon sustainable energy future. ADB can also play an important role in assisting the DMCs in negotiation for the post-Kyoto Protocol framework.

Environment. Rapid economic growth in the Asia and Pacific region is putting a strain on the local and transboundary environment. ADB has been active in coordinating environmental initiatives among national and subregional organizations; in harmonizing standards, regulations and laws; and in addressing air pollution, land degradation, and global climate change. Main environment areas calling for regional action in Asia and the Pacific include the degradation of the Aral Sea in Central Asia, desertification and dust storms in Central Asia and the People's Republic of China, forest fires and haze in Southeast Asia, biodiversity management in the Mekong subregion and in South Asia, cross-country water management in South, Central and East Asia, and marine and coastal management in the Pacific islands. These efforts will be successful only if necessary funding and political will can be mobilized at regional and global levels to supplement the national efforts—and corresponding institutional mechanisms built to handle the difficult problems of coordination in cross-border projects and programs.

Disaster Management. The Asia and Pacific region is recognized as a disaster hot spot and its vulnerability was dramatically illustrated by the events of 2004 (the Asian tsunami) and 2005 earthquake in Pakistan. These events also underline that establishment of an effective, well resourced, and capable regional disaster response system is a key RPG required for the region. With climate change under progress, the risks of natural disasters are likely to increase substantially. Currently, ADB relies mainly on project restructuring and savings for disaster relief. This process can potentially disrupt the project cycle. Consideration may have to be given for making larger funds available without restructuring ongoing projects. There is also a need for greater collaboration and coordination among various individual programs being undertaken by different regional players.

Communicable diseases. Greater connectivity and movement of people and goods across borders have increased the risk of spread of communicable diseases in the region. This calls for a coordinated regional response. Even though HIV prevalence rates are low in the Asia and Pacific region, the risks from the disease are increasing. Without immediate action, the region could witness an additional 12 million new infections between 2005 and 2010. The institutional setup for taking preventive and curative measures in the region is inadequate, and there is a significant gap in funding for AIDS. The expected AIDS funding by 2007 at \$1.6 billion will still be less than half of the \$5 billion needed in the region. Avian flu which started in Asia is now becoming a worldwide phenomenon, and poses a growing risk of a new human pandemic that could kill millions. According to the most recent World Bank estimates, the financing gap for avian flu in the Asia and Pacific region is estimated to be between \$306 and \$517 million. ADB has a role to help close this funding gap and raise awareness about these diseases. It is also important to undertake further analysis and research, organize regional consultations, promote coordinated actions, and support development of cost-effective interventions to prevent and control communicable diseases.

Governance. Good governance is a quintessential public good, and its benefits accrue to all citizens on a non-rivalry basis. The importance of collective coordinated action for good governance and control of transborder crime is becoming increasingly important as the regional economies become more integrated and interdependent. In 1995, ADB became the first multilateral development bank to adopt a comprehensive governance policy. ADB has recently approved the Second Governance and Anticorruption Action Plan. ADB's knowledge bank role for improving governance remains important for the region. To the extent advice needs to be combined with knowledge, peer pressure would be a useful tool. Further, there is a need to

create forums, where regional leaders can exchange information on the seriousness of governance problems and exchange ideas on how to improve governance within countries and across the region.

Human and drug trafficking. The problem of human trafficking is considered to be intensifying due both to “push” factors (e.g., poverty, conflicts, social and gender discrimination) and to “pull” factors (e.g., globalization, improved communication systems, improved connectivity, growing global tourism). Over the past decade, various preventive, legal/prosecution and rescue/rehabilitation measures have been taken by government and nongovernmental agencies. ADB has been contributing to these efforts along with other stakeholders, particularly on preventive interventions. ADB has also facilitated policy dialogue within and between different subregions of the Asia and Pacific region. Drug trafficking is another continuing challenge facing the region, which has led to several regional or subregional efforts to contain this menace.

The Way Forward

The RCI strategy identifies four distinct roles of ADB in supporting and promoting RCI: money bank, knowledge bank, capacity building, and honest broker. This four-pronged approach also applies to the provision of RPGs, and the discussion about the way forward is structured along these lines.

ADB as money bank. In this respect there is a need for paradigm change in two important aspects. First is about the role of regional members in providing funding. Second is about the method for raising funds for RPGs. The Asia and Pacific region now holds \$3 trillion foreign exchange reserves which are earning very low real rates of return. It is considered possible to earn additional return up to 6% per year through investments of the excess reserves in higher yielding assets. Even by investing a part of the region’s foreign exchange reserves in higher yielding securities, it should be possible for the region to generate enough additional returns to finance several RPG needs of the region. This issue needs further consultations and examination, as the People’s Republic of China and India are likely to establish their own agencies for this purpose. In addition, efforts should be made to mobilize private funding for development of RPGs. One policy measure that can help is to allow tax deduction for grants given by the private sector for this purpose. Another paradigm shift that is necessary is about the place of RPGs in relation to national public goods. Public goods form a continuum below and above the national level. In a country context, it is found useful to have a broad allocation of responsibility for public goods at national, provincial and local levels and to develop mechanisms for intergovernmental fiscal allocation. The principles of intergovernmental fiscal relationships can also be applied to provision of regional and global public goods. There could be some taxes such as carbon tax, tax on tourism, tax on short-term capital movements, etc., where a certain percentage of taxes collected by national authorities may be allocated for regional and global public goods.

ADB as knowledge bank. RETA has been the principal vehicle for ADB support for different subpillars of RPGs. With the initiation of the RCI strategy, there is now a need for some basic rethinking on how to make RETA more effective. High quality experts may have to be mobilized on a long-term basis (e.g., 3 years or more) to improve ADB’s capacity in such complex items, and to ensure continuity of work. Further, with high quality knowledge product coming out of it, ADB could become more aggressive in disseminating its findings through seminars and publications in DMCs as well as in regional and international forums. There is also a need to establish greater knowledge and awareness of RPGs at the highest political levels within the

region, which requires creating efficient channels for disseminating information. The recent proposal to establish an RCI financing partnership facility is a good example of ADB's increasing attention to such issues in this region.

ADB as capacity builder. In the past, ADB has provided assistance to regional organizations and institutions that provide capacity building and technical training, which can be scaled up. Close collaboration with existing regional and subregional institutions to build capacity through knowledge building and training, and implementation of specific activities and programs will also be important. As discussed earlier, for many RPGs, the principal player will be the national authority and ADB can best assist the provision of these public goods by helping to strengthen the national capacity. ADB can also try to replicate examples of involvement of political and entertainment leaders at the global level for building consensus for provision of RPGs. This may be particularly relevant for handling taboos and social sensitivities associated with some communicable diseases such as HIV/AIDS.

ADB as honest broker. Lastly, in the provision of RPGs, ADB role is that of a catalyst and coordinator. Often the benefits and costs of RPGs are not symmetrical across countries. Moreover, all participating countries are not equally endowed with financial and human resources. By providing resources, both human and financial, in a differentiated manner to meet the varying needs of the DMCs, ADB can help in negotiating and implementing regional programs in a consistent and coherent manner.

I. THE CONTEXT: HIGH SPEED GROWTH IN THE ASIA AND PACIFIC REGION AND SOME ASSOCIATED RISKS

1. The development performance of the Asia and Pacific region during the last quarter of a century (1980–2005) is without precedent in the annals of world economy. The present-day developed countries (with nearly 1 billion people) achieved an increase in their per capita income over 1820–1998 period at about 1.5% per year, i.e., doubling of per capita income in about 50 years or about two generations. The per capita income in the region (with over 3 billion people) on the other hand has been growing during 1980–2005 at about 4.5% per year, i.e., roughly tripling in one generation. Within this overall picture there are of course variations in performance among the developing Asian countries. Moreover, the two largest economies—the People’s Republic of China (PRC) and India—with about 2.4 billion people have been growing at 6% and 9% per year, respectively, and they seem to be set for continued rapid growth over the next few decades. Recent forecasts by Goldman Sachs¹ and PricewaterhouseCoopers² suggest a much stronger economic position for Asia in the world by the year 2050. According to Goldman Sachs’ forecasts, by 2050, two Asian economies—the PRC and India—will be the largest economies in the world.

2. The continuation of current growth trends in Asia cannot, however, be taken for granted. There are major risks facing these economies that can threaten the growth process itself. In addition, there are many factors that are not fully reflected in the gross domestic product (GDP) calculations but influence the “quality of growth”. Interestingly some of these risks are adverse side effects of factors such as cross-border mobility and globalization that are helping these countries to achieve rapid growth in the first place. Thus, the challenge before the development community in Asia is to maintain rapid growth while minimizing its adverse side effects. The list of these adverse side effects is long. They include economic, social, political, and environmental effects at both macro and micro levels. Some of the micro level effects may not be large in aggregative terms but are nevertheless matters of concern at individual levels. While only a few of the major macro risks are noted below, where quantification is relatively easier, these do not reduce the need for action on other not-so-quantifiable adverse side effects, prominent among which are loss of biodiversity, increasing corruption and terrorism, and increasing trafficking in human beings.

A. Global Imbalances

3. At the beginning of the 21st century, international capital flows have taken a new form. Instead of surplus savings flowing from the richer to the poorer countries, they are flowing in the reverse direction. Over recent years, the subject of global imbalances has received much international attention. The International Monetary Fund (IMF),³ in particular, has highlighted the risks of disorderly correction of these imbalances which can cause major disruptions in the world economy including those of Asia. Further, the IMF has emphasized exchange rate flexibility in East Asia, structural reforms in Japan and the European Union (EU) for reflating these economies, and fiscal consolidation in the United States (US). More recently, increased investment expenditure in the oil economies of West Asia is also considered important. While noting the various possibilities of orderly correction of these imbalances, the IMF also notes the consequences of a disorderly correction. These consequences include sharp depreciation of the

¹ Goldman Sachs. 2007. *Brazil, Russia, India and the PRC-- A Road in 2050*.

² PriceWaterhouseCoopers. 2007. *The World in 2050: How Big will the Emerging Market Economies Get and How Can the OECD Compete?*

³ IMF. 2006. *World Economic Outlook*. September.

US dollar, severe recession and financial dislocation across the world. There could be a rise in protectionism, which could hurt severely the export dependent economies of Asia. It is in the nature of financial corrections that, when they come under pressure, they tend to overshoot and compound the problem.

B. Lagging Regions and States under Stress

4. In the classical analysis of growth and income distribution, Kuznets noted the inverted U-shape curve relating inequality to income. In the early phase of growth inequality tends to increase, although with increase of per capita income and consolidation of the growth process, the degree of inequality tends to decline. Going through this hump along with the associated pains during the transition period seems unavoidable in the process of development. At the same time, special measures must be taken proactively to protect the poor and vulnerable from bearing the burden of this transition disproportionately. In the context of East Asia, in particular Japan; Taipei,China; Indonesia; Thailand and even Republic of Korea, it seemed that rapid growth could be combined with reasonable equity. However, more recent experience in Asia seems to suggest a different picture. Increasing inequalities in income distribution at interpersonal, interregional, and interstate levels associated with growth in Asia is calling for renewed efforts to minimize the burden of transition on the poor and the vulnerable. Further, there are several countries, many of which are either land-locked (as in South and Central Asia) or sea-locked (as in the Pacific region), where GDP growth rates are even lower than in Sub-Saharan Africa, and youth unemployment is rising at an alarming rate. Left unattended these developments can threaten the smooth rise of Asia.

C. Unsustainable Carbon-Intensive Growth

5. The *Stern Review of Climate Change* published by the British Government in 2006 paints a grim picture of the consequences of climate change for the world, including Asia and the Pacific. The Review calls climate change the biggest market failure in history. Global warming will lead to melting glaciers, ocean acidification, and rising sea levels that will threaten at least 4 million square kilometers of land, which is home to 5% of the world population today. Heavier floods and more intense droughts are also likely. There may be sudden shifts in regional weather patterns like monsoons or El Niño. Rising temperatures will spread the range of vector-borne diseases such as malaria and dengue fever. Altogether the Review estimates that costs of climate change could be equivalent to an average reduction in global per capita income of 5–20%. These losses would be similar in scale to those due to the two World Wars and Great Depression in the last century. A disproportionate share of these losses will occur in the poorest developing countries and impact the poor, who are least equipped to cope with these losses. Growth in the Asia and Pacific region has been carbon-intensive and the demand for energy is rising rapidly. By 2030 the region is expected to consume around 30% of the total world energy consumption, from 13% in 1973. While addressing the climate change issues comprehensively will require coordinated global efforts, the Asia and Pacific region has become an important player in these efforts.

D. Communicable Diseases

6. The remarkable economic development of Asia and the Pacific is also due to cross-border trade and communication facilitated by the development of physical infrastructure and the formation of various subregional political and economic groups such as Association of Southeast Asian Nations (ASEAN), ASEAN+3, Greater Mekong Subregion (GMS), Central Asia Regional Economic Cooperation (CAREC), South Asia Subregional Economic Cooperation

(SASEC), and others. However, increased mobility of population also facilitates the spread of communicable diseases carried by humans, animals (e.g., birds, and poultry), or goods (e.g., eggs, fruits and vegetables, and wood, where bugs carrying diseases hide). The threat of spreading communicable diseases, either directly through travelers carrying diseases or indirectly through mosquitoes or infected goods (processed meat, chickens), or infected animals (e.g., wild birds for avian flu; pets and wild animals for rabies), demands a carefully coordinated response among neighboring countries. Increased mobility of populations and goods requires new cross-border mechanisms of surveillance and response to communicable diseases that have not yet been developed.

7. Thus, there are serious risks in the region emanating from communicable diseases such as HIV/AIDS and avian flu. The spread of HIV/AIDS⁴ in Sub-Saharan Africa has demonstrated what this disease can do to the population and to economies in terms of human death and morbidity, and decrease in GDP. Even though the overall incidence rate is low in Asia, there are already pockets of severe infection of HIV/AIDS. A United Nations Programme on HIV/AIDS (UNAIDS) study projects that a total of 10 million adults and children will be infected between 2004 and 2010 with annual death toll rising from 0.50 million in 2001 to 0.75 million in 2010 and economic losses amounting to \$17.50 billion, more than double the losses in 2001.

8. The Asian Development Bank (ADB) has estimated that the economic loss due to severe acute respiratory syndrome (SARS) was around \$16 billion in East Asia or around 0.6% of GDP.⁵ The risks from avian flu are much greater. Subject to the usual uncertainties of such estimates, ADB⁶ has estimated that the economic costs of avian flu of a relatively mild variety with an attack rate of 20.0% and case fatality rate of 0.5% could be between 2.6% and 6.8% of GDP in Asia. Such a pandemic could cost the lives of around 3 million Asians and have significant impact on market confidence in the region and future investment. In the case of communicable diseases appearing in the form of outbreaks (e.g., bird flu, dengue fever, chikungunia, etc.), the impact will be a slow-down (sometimes a complete halt) of trade and travel, as was seen during SARS. If the area remains affected—with no more outbreaks but with the disease becoming endemic—trade will probably start again but at a lower level, investors will be more hesitant, and places relying on tourism will certainly be significantly affected.

9. These risks, particularly if more than one occurs at the same time, can thus easily reduce GDP significantly and derail the growth trajectory of Asia. History reminds us that good performance in the past is no guarantee of future performance. Thus, Asia must take these risks seriously and design in earnest programs to manage these risks.

10. One interesting characteristic of the risks noted above is that any one country alone cannot manage them effectively. Instead they require collective action, regional and/or global. For example, global imbalances can only be corrected if Asian countries work jointly with the rest of the world, particularly the United States (US). Further, if Asian countries could work together, surplus savings of Asia can be invested in Asia itself with the double benefit of accelerating the Asian growth and saving the world from major imbalances. Further, many of the lagging regions and states under stress border on the two major economies of Asia—the PRC and India—and a cooperation program in Asia can help in tackling these problems. In the same way, climate change can be managed only with collective action. Increase in greenhouse gases

⁴ Human immunodeficiency virus/acquired immune deficiency syndrome

⁵ Fan, Emma. 2003. *SARS: Economic Impact and Implications*. Manila: ADB.

⁶ Bloom, Erik, Vincent de Wit, and Mary Jane Carangal-San Jose. 2005. *Potential Economic Impact of an Avian Flu Pandemic on Asia*. ERD Policy Brief Series No. 42. November. Manila: ADB.

(GHGs) in any part of the world affects every other part and mitigation in GHGs in any part benefits every other part. A similar externality principle applies to most other risks mentioned above such as the spread of communicable diseases, where cross-border transmission can be a serious problem. Market mechanisms, which have contributed so effectively to increasing growth in Asia and elsewhere, cannot by themselves cope with these externalities. There is now more than ever a need to explore the options for collective action by governmental and intergovernmental organizations that can maintain rapid growth in Asia while managing the risks and mitigate their adverse effects.

11. In the above context, the purpose of this paper is to take stock of recent activities and current programs of ADB in the provision of regional public goods (RPGs) and make suggestions for the future. This paper could serve as an input for drawing up ADB action plan for supporting provisions of RPGs in the future, and for undertaking consensus building efforts within the region and with its development partners.

II. INSIGHTS FROM THEORIES OF PUBLIC GOODS AND INTERGOVERNMENTAL FISCAL RELATIONS

A. Conceptual Framework

12. The theory of public goods developed by R. Musgrave and P. Samuelson in the 1950s provides a useful framework for thinking through the role that regional banks such as ADB can play in managing the risks mentioned above. This theory identifies public goods as goods and services that have the characteristics of non-excludability (i.e., once provided they are available to all, and non-payers cannot be excluded for their use) and non-rivalry (i.e., use of these by some does not reduce their supply for others). For provision of “pure” public goods such as defense, law and order, flood protection, and control of epidemic, the government, rather than the market and private sector, has to play the dominant role. These goods have to be financed by government through the instruments of tax, tax expenditures, and seigniorage. As at national level, so at regional level, charitable institutions and philanthropic individuals also contribute resources for meeting RPGs.

13. Public goods have a spatial dimension and they are not equally available for all locations in the country. Even classical public goods such as flood control or a lighthouse do not benefit all people equally within a country; some localities derive greater benefit than others. For this reason, the functions of the government often have to be subdivided between different levels—central, provincial, and local. In large countries with a federal structure of government, these functions are assigned to different levels of government by the constitution and an elaborate system of intergovernmental fiscal relationship is developed to transfer funds from the central government to subnational levels to finance public goods at different levels. In practice, it is not easy to define precisely which public good is local, provincial, or central government responsibility. There is often a list of concurrent items where both the center and provinces have responsibility. Even for goods typically allocated to lower levels such as health and education, many central authorities retain some responsibility.

14. It is interesting to note that the classical theories of public goods paid no attention to transnational dimensions of these goods. As pointed out by Vitto Tanzi,⁷ until 1990 textbooks on public finance were written as if there was no outside world. This was so despite the fact that

⁷ Tanzi, Vito. 2005. The Production and Financing of Regional Public Goods. Inter-American Development Bank Occasional Paper SITI, 8 June.

international trade, and movement of capital and labor have been a strong feature of the world economy for centuries. However, at a conceptual level, this omission is being rapidly corrected. There is now a growing literature on transnational public goods on both the theory and its application. One such example is provided by Todd Sandler (2003).⁸ In his framework, there are four categories of RPGs.

- i Pure public goods with the twin characteristics of non-rivalry and non-excludability.
- ii Partially impure public goods when one country's use of the good reduces the benefits available to others (partially rival), or where benefits of the good can be limited, at an exclusion cost, to those that pay for it (partially excludable). An example of the former could be vigilance for disease outbreak directed to one area reduces vigilance elsewhere, and an example of the latter could be treatment of patients, who may be subject to crowding and exclusion.
- iii "Club" goods where exclusion is relatively costless and use can be readily tracked and exclusion done by pricing, e.g., the number of visits to a transnational park.
- iv Joint products where a single activity gives rise to several outputs with varying degree of publicness. For example, the preservation of rainforest fosters biodiversity (a global public good), maintains watershed (an impure regional public good), influences microclimates (a pure regional public good), and provides for ecotourism (a regional club good).

15. As in the case of allocation of public goods to different levels within a country, it is not possible to strictly allocate public goods to national, regional and global levels. All global public goods have regional and national dimensions and all RPGs have national dimensions. As noted below in the recently formulated Regional Cooperation and Integration (RCI) strategy, ADB has rightly followed a practical approach and has focused on RPGs, where regional support could play an important role.

B. Implementation Framework

16. The provision of public goods at regional and global levels will have important implications for regional and global governance. Just as provision of national public goods required national governments (which evolved through centuries from local lords to nation states with many ups and downs in the process), provision of transnational public goods will require transnational governments with power to provide a regulatory framework, raise resources and spend them in a supervised manner across the globe. Such an evolution will take time but several proxies for transnational governments have already been developed in the form of United Nations (UN) agencies, multilateral development banks (MDBs), World Trade Organization (WTO), and various international protocols and financial regulations. As the demand increases, these institutions will have to be strengthened to facilitate the provision of transnational public goods.

17. Increasingly, the concept of task assignment developed for various levels of national governments can be applied to various transnational entities, i.e., global and regional. Some public goods such as climate change may be inherently global in nature (i.e., not restricted to any region) and come in the domain of global institutions although due to rapidly growing energy

⁸ Estevadeordal, Antoni, Brian Frantz, and Tam Robert Nguyen, eds. 2004. *Regional Public Goods: From Theory to Practice*. Washington, D.C.: Inter-American Development Bank.

use in Asia and the Pacific, this region has a special role in it. Then there are environmental issues such as acid rain, dust storms, forest fire, haze, etc., which are largely regional in impact and may be the preeminent domains of regional institutions. However, as in the case of national governments, the allocation of responsibilities for different levels will not be a clearcut issue. There will be many activities on the “concurrent list” with either regional or global institutions playing a leadership role.

18. The principles of intergovernmental fiscal relationships could be applied to provision of transnational public goods. Taxes, tax expenditure, and seigniorage may all have their transnational counterparts. Among the taxes most suitable for consideration could be taxes imposed on transnational movement of goods, capital and labor, and on negative global externalities created, among others, by GHG emissions. These taxes could be collected at national levels but reallocated, on some agreed basis, to global and regional institutions. Similarly, tax expenditures in the form of tax exemptions for activities that generate public goods can also have their transnational counterparts. For example, charitable contributions for regional and global charities could be given some exemption in national tax laws. Lastly, the seigniorage created by international and regional financial transactions and creation of a regional or global currency could be a source of funding for transnational public goods.

19. There is now a diversity of opinion on whether regional or global institutions have comparative advantage in delivering transnational public goods. Some such as Marco Ferroni⁹ argue that the problems of consensus building and coordination increase with the number of players involved and these processes may be easier to achieve at regional levels with a smaller number of players involved with shared history and culture. The success of the EU is an example of the validity of this line. Others such as Todd Sandler [2003] argue that for most of the other regions, local rivalries and inadequate capacity prevent regional activism and the current reality is one of leadership provided by major global players. In some cases, there are also economies of scale, which point in favor of global institutions serving a larger community.

20. While both arguments have theoretical validity, the real life outcome depends on a variety of factors. Until now, the reality has been one of dominance of global institutions for provision of aid, trade, finance, and other public goods. However, over time, there is a change, which is clearly in the direction of increased role of regional institutions. Some argue that both the capacity and interest of global players for delivering transnational public goods are diminishing, while those of regional players are increasing.¹⁰

III. THE NEW REGIONAL COOPERATION AND INTEGRATION STRATEGY OF ADB

21. ADB's Charter mandates it to play an active role in regional cooperation in Asia and the Pacific. ADB adopted a regional cooperation policy in 1994 that, for the first time, articulated ADB's approach to promoting regional cooperation. Since the early 1990s, ADB has supported various regional and subregional cooperation programs, including the GMS Economic Cooperation program, the SASEC program, the CAREC program, the Subregional Economic

⁹ Ferroni, Marco. 2001. Regional Public Goods in Official Development Assistance. Occasional Paper 11. Washington, D.C.: Inter-American Development Bank.

¹⁰ See Ravi Kanbur, Regional versus International Financial Institutions in Antoni Esteveordal et al. (2003) and Raghuram Rajan, The Ebbing Spirit of Internationalism and the International Monetary Fund: The 2006 Krasnoff Lecture at the Stern School, New York University, 8 March 2006. See also Vitto Tanzi who notes that in recent years, within some major countries unilateralist forces have reaffirmed themselves and reduced the support for multilateral actions. However, regional arrangements have been less affected by these considerations than global arrangements.

Cooperation in South and Central Asia (SECSCA) program, and the Pacific Plan. More recently, ADB has been active in supporting two other subregional programs, the Brunei-Indonesia-Malaysia-Philippines – East ASEAN Growth Area (BIMP-EAGA) and Indonesia-Malaysia-Thailand Growth Triangle. In the aftermath of the Asian financial crisis of 1997–1998, ADB was asked by the ASEAN and ASEAN+3 to support their initiatives on regional monetary and financial cooperation. ADB has also started or supported a number of regional initiatives on prevention of communicable and infectious diseases (such as avian flu, HIV/AIDS, SARS, and tuberculosis), energy efficiency (EE), environmental management, and governance. ADB has used both loans and regional technical assistance (RETA) in its regional operations.

22. However, changing circumstances have highlighted several limitations of ADB's earlier support for regional cooperation and integration (RCI), such as fragmented efforts across departments and offices, varied quality of lending and nonlending services for RCI because of the absence of a coherent strategy, and limited support for trade and investment integration, especially in view of the recent proliferation of free trade agreements in the region. Given the emerging trends and the future vision of RCI in Asia and the Pacific, it was considered appropriate for ADB to take a fresh look at its RCI activities from a strategic perspective, with a view to overcoming previous limitations. A new RCI strategy was adopted in 2006 to transform ADB's support for RCI in the Asia and Pacific region from several standalone programs to a coherent and strategically focused approach.

23. The main purpose of the RCI strategy is to guide ADB's support for the ongoing process of RCI in the Asia and Pacific region in a coherent way and to facilitate new forms of RCI initiatives that are needed in the future. The RCI strategy will support poverty reduction in the region through regional collective action that leads to greater physical connectivity; trade and investment expansion; financial market development and regional macroeconomic and financial stability; and improved environmental, health, and social conditions. These will be achieved through four separate, but interrelated activities (four RCI pillars): (i) regional and subregional programs on cross-border infrastructure and related software, (ii) trade and investment, (iii) money and finance, and (iv) RPGs such as prevention of communicable diseases and environmental degradation.

24. The four pillars are mutually reinforcing so they can contribute to achieving ADB's overarching goal of poverty reduction. However, individual pillars are assigned different weights in the RCI strategy. Pillar 1 has so far been the core component of many ADB-supported RCI activities, followed by pillars 3 and 4. Pillar 2 will be given less weight compared with the other pillars. Accordingly, prioritization of the four pillars and selection of priorities within each pillar have to be in line with the priority classifications of the ADB's Medium-Term Strategy II and with the specific conditions prevailing in each region or subregion. The four pillars are interdependent and they all require an overall framework for regional cooperation as provided by regional cooperation mechanisms such as ASEAN, South Asian Association for Regional Cooperation (SAARC), Shanghai Cooperation Organization (SCO), etc.

25. ADB can play four distinct roles in supporting and promoting RCI: (i) providing financial resources for RCI projects, programs, and related technical assistance (TA) and/or helping developing member countries (DMCs) mobilize funding and TA (i.e., acting as a money bank); (ii) creating, consolidating, and disseminating knowledge and information on RCI to the DMCs (i.e., acting as a knowledge bank); (iii) helping DMCs and regional and/or subregional bodies build institutional capacity to manage RCI (i.e., acting as a capacity builder); and (iv) serving as catalyst and coordinator of RCI for the DMCs (i.e., acting as an honest broker). These four

functions cut across the four pillars of the RCI Strategy. They are also mutually supportive and reinforcing, enabling ADB to serve as a facilitator in supporting and promoting RCI.

26. The RCI strategy takes a pragmatic view in defining RPG. An RPG is defined as a public good shared by two or more countries in a region. RPGs can be provided by (i) coordinated actions to supply RPGs such as clean air, environmental protection, control of communicable diseases, and management of natural disasters; and (ii) dissemination of analysis and research findings in the public domain through publications, workshops, and shared standards.

27. The RCI strategy identifies some key areas for ADB's support to RPGs in Asia and the Pacific. A negative side effect of higher flows of goods, traffic, and people across borders is the spread of communicable diseases (e.g., HIV/AIDS, SARS, and avian flu). Accordingly, managing avian flu, HIV/AIDS, and other communicable diseases was factored into the RCI strategy. Second, rapid economic growth has brought unprecedented benefits to Asia, but there is also rising concern over its adverse environmental consequences. Coordinating the cross-border dimensions of the environment is a key area of ADB's support for providing RPGs. Third, a major portion of the environmental problems faced by the region, particularly the deteriorating air quality and increasing GHG emissions, have their origin in the energy sector. In terms of RPGs, ADB's contribution in this area includes systematically studying and addressing implementation barriers to clean energy (CE) and EE across countries. Fourth, the recent tsunami in Asia highlighted the cross-border impact of natural disaster, and underlined the need to create appropriate RPGs to address such problems collectively. Fifth, the governance related challenges including transnational corruption and money laundering facing Asia and the Pacific are expected to intensify as the economies become more developed, complex and integrated. This requires strong regional mechanisms for close communication and coordination to address this challenge. Sixth, Asia and the Pacific region accounted for about half of the total global human trafficking-related prosecutions. Most of these need to be addressed both at country and regional levels. The current approach of the donor community includes regional research, minimizing and mitigating the vulnerabilities of women and children in donor-funded projects, and policy dialogue with concerned governments. ADB has also facilitated policy dialogue about human trafficking within or between different subregions of Asia and the Pacific.¹¹

28. It is worth noting that under the RCI strategy, ADB's support for providing RPGs will focus not so much on funding investment but on (i) supporting regional and subregional policy dialogue and initiatives to protect the environment, control communicable diseases (e.g., avian flu, HIV/AIDS, and SARS), manage the impact of natural disasters, promote CE and EE, improve governance, and prevent human and drug trafficking; (ii) conducting research on these cross-border issues; (iii) supporting capacity building and institutional strengthening of DMCs to respond to cross-border issues; and (iv) supporting regional partnership building through various regional forums and exchange programs. In other words, it is TA resources rather than investment resources that will be needed for implementation of the current RCI strategy on RPGs. As argued below, moving ahead ADB needs to play an increasingly active role in providing or mobilizing resources for investments in RPGs.

¹¹ It is worth emphasizing that this is not an exhaustive or static list of RPGs. Knowledge, both of technology and of development policy, is an important public good and as noted ahead in this paper, this has been the focus of the major share of ADB expenditures on RETA. This and other issues such as regional standards for food safety, road safety, labor and capital movements, and development of border towns on a regional basis could well become in future a part of ADB's focal activities for provision of RPGs.

IV. ADB SUPPORT FOR RPGS: PAST ACTIVITIES AND FUTURE PROGRAMS

A. Past ADB Activities on RPGs

29. A review of past regional lending and nonlending activities was conducted to analyze ADB's support for RPGs. The review revealed that most RPGs were provided through RETA and grants (or grant-financed projects),¹² while lending for RPGs has been limited.

1. Loans

30. A total of 38 projects were classified as regional loans from 1994 to 2006, which are mostly on roads and highways. Only three of these, amounting to \$132 million or 6.5% of total regional loans, dealt with one of the six key RPG areas. All these three loans are hydropower projects in the Lao People's Democratic Republic (Lao PDR) under the GMS program (see list of regional loans in Table A1.1, Appendix 1).

2. Grants

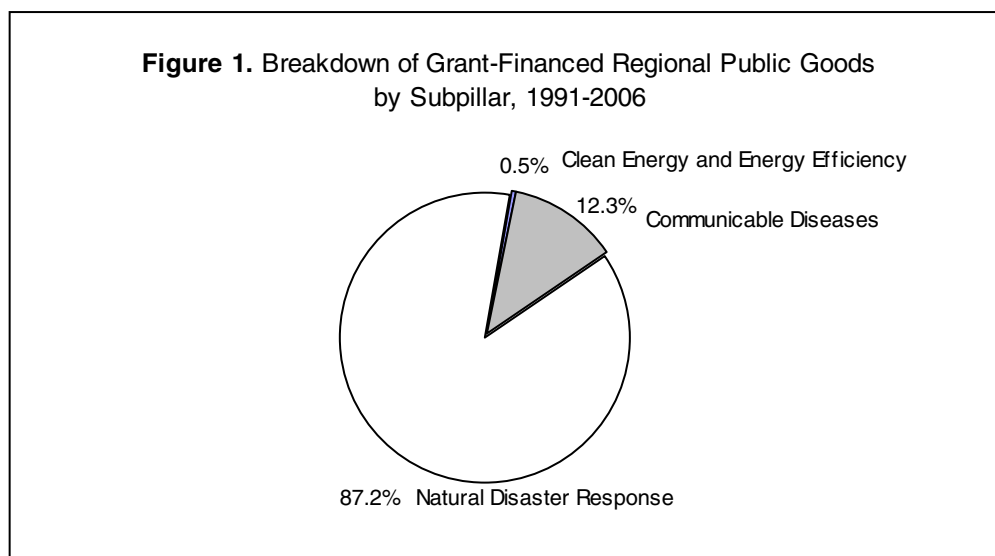
31. From 1991 to 2006, ADB has administered and funded a total of 202 grants amounting to \$2.4 billion. Of these, 33 projects were for RPGs accounting for \$917.6 million or 38% of all grant financing. However, only three of the six key RPG areas (environment, CE and EE, communicable diseases, natural disaster response, governance, and human and drug trafficking) were covered by these grants. Bulk of the grants was used for natural disaster response (87%), most of which were dedicated to rehabilitation and construction activities in response to the December 2004 Asian tsunami and the Pakistan earthquake. The rest of the grants for RPGs were used for communicable diseases (12%), and CE and EE (0.49%) (Table 1 and Figure 1).

Table 1. Grant-Financed Regional Public Goods by Subpillar, 1991-2006

Subpillar	No. of Grants	Total Amount (\$ million)	% by Amount
Clean Energy and Energy Efficiency	2	4.5	0.5
Communicable Diseases	10	113.0	12.3
Natural Disaster Response	21	800.1	87.2
Total	33	917.6	100.0

Source: ADB internal database on Loan, TA, Grant and Equity Approvals as of 30 September 2006.

¹² Although, like grants, no repayment is expected from RETAs, in this context, we distinguish between these two instruments. While RETAs are *advisory or project preparatory* in nature, "grants" refer to grant-financed projects that are similar in nature to loan projects, involving some fixed investment components.



Source: ADB internal database on Loan, TA, Grant, and Equity Approvals as of 30 September 2006.

32. Most of the early grants for RPGs were funded from external sources.¹³ The earliest one was provided in 1994 by the Netherlands in support of EE in India.¹⁴ In 2001, the JFPR provided a grant for HIV/AIDS.¹⁵ In 2004, \$1 million from JFPR was provided to reduce vulnerability of the poor in the Kyrgyz Republic to natural disasters¹⁶ and \$1.5 million from the same fund was mobilized to support a renewable energy (RE) project in the Philippines.¹⁷

33. It was only in 2005 that ADB started to use its own resources in financing grants for RPGs. Recognizing the need for collective action at the regional/global level and weak demand from individual countries to borrow for their own HIV/AIDS prevention programs, ADB allocated 10% of the Asian Development Fund IX (ADF IX) Grants Program for regional and subregional activities to fight HIV/AIDS and other infectious diseases. A total of \$98 million for seven projects was provided by ADB for this key area in 2005 and 2006. The governments of Australia and New Zealand also contributed \$3.5 million each for HIV/AIDS projects in Papua New Guinea in 2006. In 2005, in response to the devastation brought about by the December 2004 tsunami, ADB set up the Asian Tsunami Fund (ATF), which is a dedicated source of grant financing to support rehabilitation and reconstruction efforts in affected countries. The ATF amounts to \$570 million, comprising 61.7% of all grants for RPGs. External grant financing for rehabilitation projects in tsunami affected countries came from the European Commission (\$53.2 million), and the Netherlands (\$12.2 million) and Japan (\$16 million from JFPR). For the earthquake in Pakistan, in 2005, ADB established the Pakistan Earthquake Fund amounting to \$80 million. Subsequent funding of \$5 million was mobilized in 2005 from JFPR. Additional grant of \$35 million was provided by the European Commission. For the flood in Bangladesh, again in the same year, the Netherlands and Sweden contributed \$13 million and \$14.7 million, respectively (Table A1.2, Appendix 1).

¹³ External sources are funds from other donors fully or partially administered by ADB such as the Japan Fund for Poverty Reduction (JFPR), Japan Fund for Information and Communications Technology (JFICT), and other multilateral and bilateral contributions.

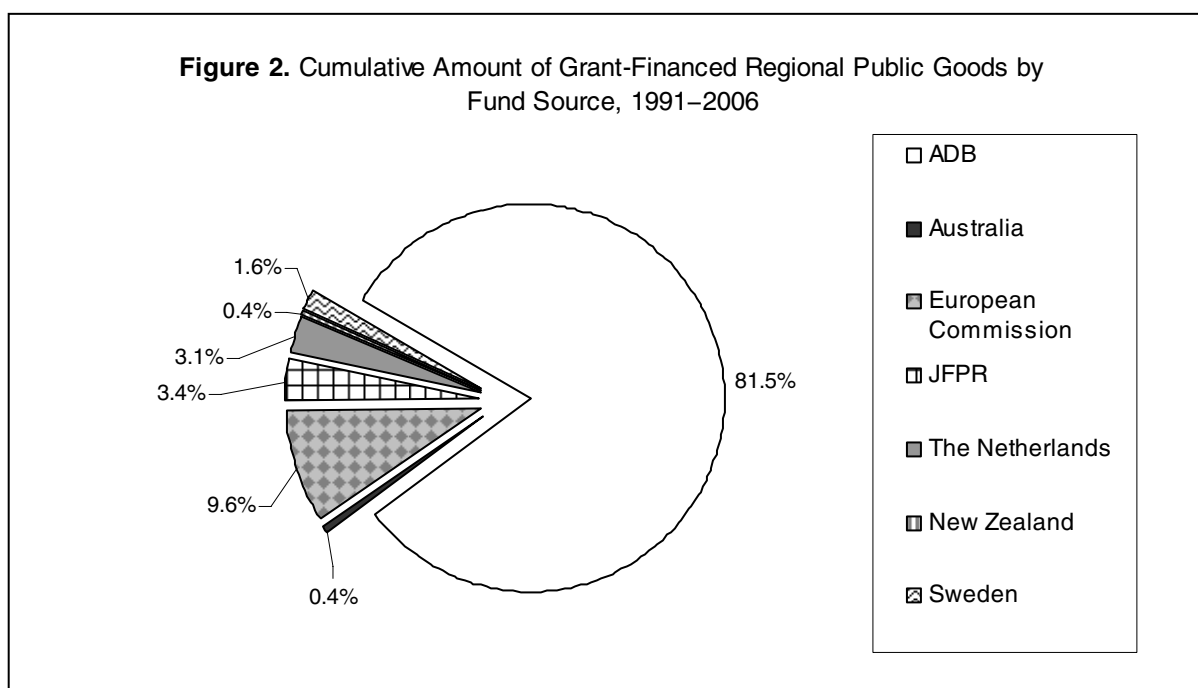
¹⁴ ADB. 1994. 2193 (L). Energy Efficiency Support. Manila.

¹⁵ Grant 9006. Community Action for Preventing HIV/AIDS. Approved in 2001.

¹⁶ Grant 9055. Reducing Vulnerability of the Poor to Natural Disasters. Approved in 2004.

¹⁷ Grant 9042. Renewable Energy and Livelihood Development Project for the Poor in Negros Occidental. Approved in 2004.

34. In terms of contribution by source, grant financing for RPGs is largely provided by ADB's special funds (81.5% of the total), particularly ADF IX, ATF and Pakistan Earthquake Fund. ATF comprises the lion's share (76.2%) of total ADB financing. The rest of the grants are provided by external contributors. Among external contributors, the European Commission contributed the largest share of 9.6%, amounting to \$88.2 million, for the rehabilitation needs of the tsunami affected countries and Pakistan. Japan is the next largest external source with a contribution of 3.4% through the JFPR, followed by the Netherlands, contributing 3.1%. Other significant sources are Sweden and New Zealand. Figure 2 depicts the shares by fund source (Table A1.3, Appendix 1).



ADB = Asian Development Bank, GEF = Global Environment Facility, and JFPR = Japan Fund for Poverty Reduction. Source: ADB internal database on Loan, TA, Grant, and Equity Approvals as of 30 September 2006.

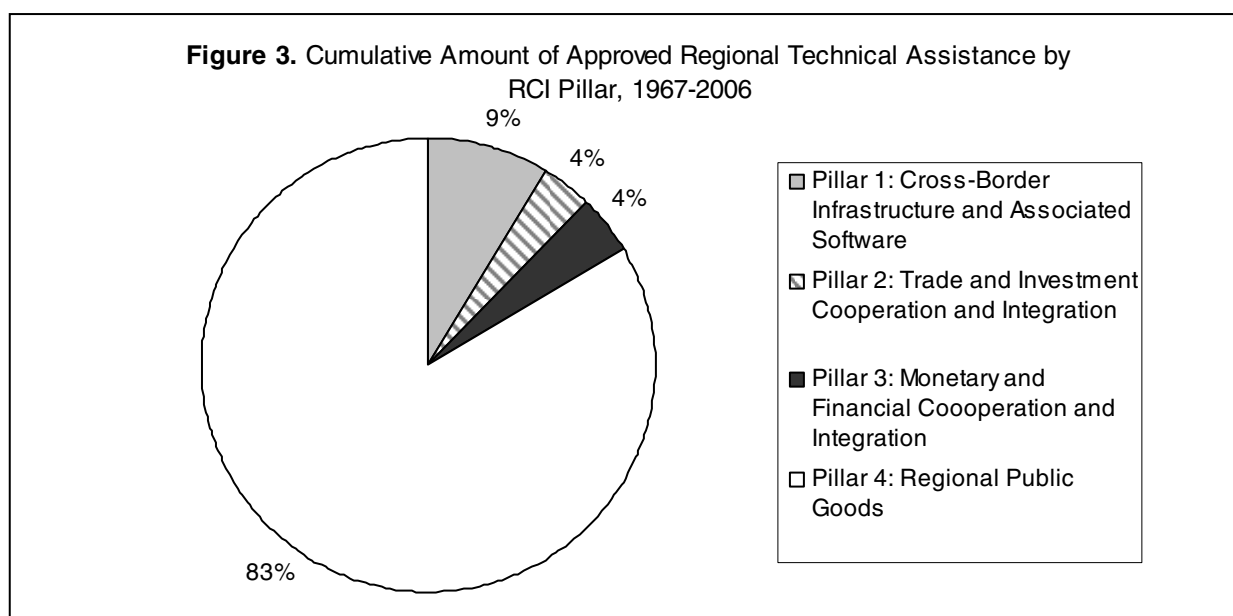
3. RETAs

35. By definition, all RETAs are regional cooperation activities. Hence, all RETAs approved from 1967 to 2006 were classified into the four pillars of the RCI Strategy and those falling under Pillar 4 were further categorized into six key RPG areas identified in the RCI Strategy (Table 3). Under Pillar 4, a seventh category (“Other RPGs”) was identified for RETAs that do not fall under any of the six key RPG areas. A detailed description of the methodology used to classify the RETAs is given in Appendix 2. The classification system revealed that, up to September 2006, 83% of all RETAs support the provision of RPGs (Figure 3). This is composed of 1,153 projects with a total amount of \$541 million (Table 2).

Table 2. Cumulative Amount of Approved Regional Technical Assistance by RCI Pillar, 1967–2006

Pillar	No. of RETAs	Total Amount (\$)	%
Pillar 1: Cross-Border Infrastructure and Associated Software	135	56,537,472	8.73
Pillar 2: Trade and Investment Cooperation and Integration	65	23,094,090	3.57
Pillar 3: Monetary and Financial Cooperation and Integration	71	26,385,568	4.08
Pillar 4: Regional Public Goods	1,153	541,468,134	83.63
Total	1,424	647,485,264	100.00

Source: ADB internal database on Loan, TA, Grant and Equity Approvals as of 30 September 2006.



Source: ADB internal database on Loan, TA, Grant, and Equity Approvals as of 30 September 2006.

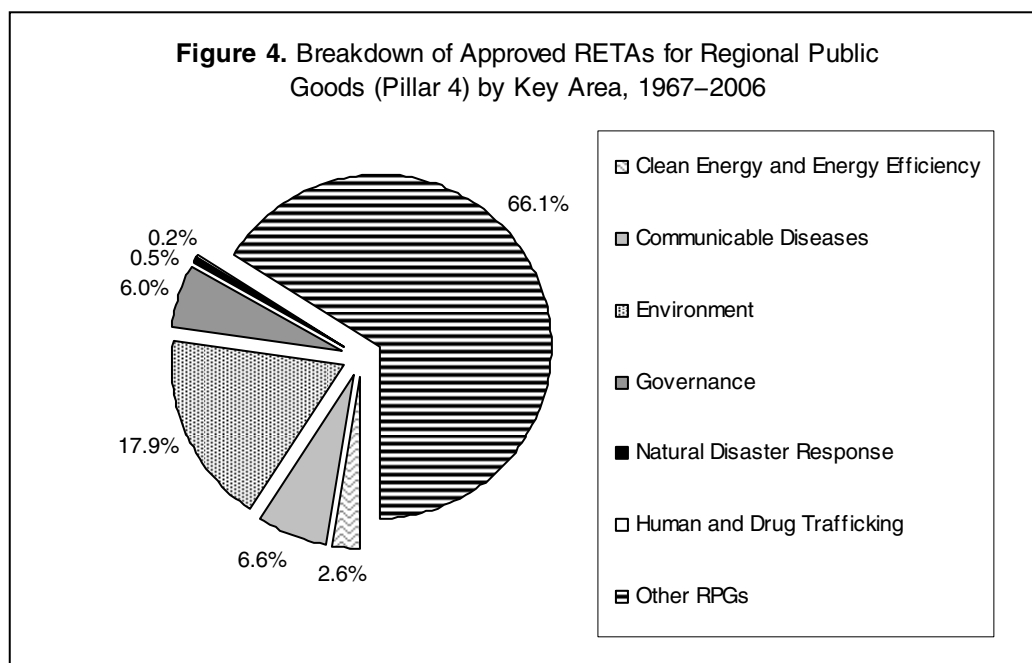
36. A breakdown of the RPG RETAs into the seven categories shows that 66% (\$357 million) are “Other RPGs”. This category covers knowledge building in a wide range of areas including law, economic management and public policy, and agriculture and natural resources sectors. These areas are at the core of development in DMCs and even though they are not identified separately as a key RPG in the RCI Strategy, they are a dominant part of ADB’s knowledge services. Environment RETAs, composing about 18% (\$97 million) of the RETAs, followed by communicable diseases at around 7% (\$36 million), are the next largest categories. Although there are more governance projects (101 RETAs) compared to communicable diseases (25 RETAs), governance is only the fourth largest category at 6% (\$32 million), as the average size of governance RETAs are lower. There are also several projects supporting CE and EE (27 projects) but these total only \$14 million, which is only around 2.6% of all RPG RETAs. The remaining key RPG areas—natural disaster response and human and drug trafficking—together make up less than 1% of the total amount for the support of RPGs (Table 3 and Figure 4).

37. ADB has not been remiss in its mandate to promote regional cooperation in Asia and the Pacific, as shown by the volume of RETA and grant projects that it has undertaken, especially in the provision of public goods. However, the figures show that these cover a wide range of areas, since the majority fall under the “Other RPGs” category. The RCI Strategy has identified six key RPG areas that are emerging as the key concerns along with increasing regional integration. These will need increasing attention in the future.

Table 3. Regional Technical Assistance for Regional Public Goods (Pillar 4) by Key Area, 1967-2006

Area	No. of RETAs	Total Amount (\$)	%
Clean Energy and Energy Efficiency	27	14,005,575	2.59
Communicable Diseases	25	35,880,000	6.63
Environment	117	96,923,233	17.90
Governance	101	32,705,931	6.04
Natural Disaster Response	7	2,950,000	0.54
Human and Drug Trafficking	3	1,290,000	0.24
Other RPGs	873	357,713,395	66.06
Total	1,153	541,468,134	100.00

Source: ADB internal database on Loan, TA, Grant and Equity Approvals as of 30 September 2006.



Source: ADB internal database on Loan, TA, Grant, and Equity Approval as of 30 September 2006.

B. Future ADB Work Program on RPGs¹⁸

38. As in the past, there are only a few loans in the pipeline for support for RPGs. In fact there are no projects planned for 2007 and 2008. However, in 2009, three projects are proposed amounting to \$175 million. One project, worth \$125 million is proposed by the South Asia

¹⁸ Based on the *Work Program and Budget Framework (2007-2009)* prepared by the Strategy and Policy Department.

Department for the promotion of regional cooperation in the subregion. The project will be funded through ordinary capital resources. The other two projects are proposed by the Southeast Asia Department, as part of the GMS program. There are similar projects on flood management and mitigation that will be implemented in Cambodia and Viet Nam. The projects cost \$20 million and \$30 million, respectively. They will be financed through ADF loans.

39. Three HIV/AIDS projects are to be funded through ADF grants in 2009. These are capacity building projects on HIV/AIDS prevention that are also part of the GMS program for Cambodia, Lao PDR and Viet Nam. The total cost of these three projects is \$30 million. Table A1.4, Appendix 1, lists the loans and grants program for 2007–2009.

40. The majority of RPG activities for 2007–2009 will be supported through TA. There are 60 projects in the pipeline covering various key RPG areas in the next 3 years. These projects are estimated to cost a total of \$91.46 million. 46% (almost \$42 million) of these projects will be implemented in 2007, 35% (\$32 million) in 2008, and 19% (\$17.6 million) in 2009. Table A1.5, Appendix 1, lists these RETAs by year and by key area.

41. Notably, most of the projects or 74% (at \$67.96 million) of the total amount programmed for RPGs over the next 3 years fall under “Other RPGs”. These projects involve mostly capacity and knowledge building in a wide range of areas such as water resources, agriculture and natural resources, education, economic management, involuntary resettlement and regional development. All the six key RPG areas are also addressed, with governance accounting for almost 9% (\$7.9 million) of the total amount, Communicable diseases for 7% (\$6.6 million), and environment for 5% (\$4.6 million). CE and EE, natural disaster response, and human trafficking, make up the remaining less than 5% of the total RETA amount.

Table 4. Nonlending Activities for Regional Public Goods by Key Area, 2007-2009

Key Area	Amount (\$'000)	%
Clean Energy and Energy Efficiency	1,600	1.75
Communicable Diseases	6,550	7.16
Environment	4,600	5.03
Governance	7,950	8.69
Human Trafficking	400	0.44
Natural Disaster Response	2,400	2.62
Other RPGs	67,960	74.31
TOTAL	91,460	100.00

Source: Strategy and Policy Department, ADB.

42. ADB’s activities in RPGs programmed for the next 3 years do not differ much from the past. Other RPGs continue to take up the largest piece of the pie, which highlights ADB’s continuing role in creation, capture, and dissemination of publicly available information in a wide range of areas. It should be noted that out of the six key RPG areas, the highest amounts are programmed for communicable diseases and governance, and the lowest amounts are programmed for human and drug trafficking, CE and EE, and natural disaster response. While ADB could increase its focus on the six key RPG areas, continuing the broad-based approach in its RETA activities has its own merit. Given that ADB is the premier regional organization, it seems that this broad-based approach to knowledge is appropriate. It is in investment projects, where ADB needs to be more particular about focusing on the six key RPG areas.

V. SECTOR AND THEME REVIEWS¹⁹

A. Clean Energy and Energy Efficiency

1. The Context

43. It is now widely recognized that increasing energy use has a strong impact on the global environment. The developing countries have been, by and large, following the carbon-intensive global growth pattern of the past. According to the International Energy Agency (IEA),²⁰ world primary energy demand is expected to expand by more than half between 2003 and 2030 and more than two thirds of the increase will come from the developing countries, particularly the PRC and India. The Organisation for Economic Co-operation and Development's (OECD) share of world demand will decline, from 51% in 2003 to 42% in 2030, while that of the developing countries will increase, from 39% to 49%. The share of Asia (including OECD countries in Asia) will be 38%, two percentage points more than that of North America and Europe. Thus, concerns related to clean energy and environment in Asia are attracting strong global attention.

44. Increase in carbon dioxide (CO₂) induced by fossil fuel based energy use results in climate change, the greenhouse effect, and changes in atmospheric behavior. Possible impacts are global warming, changing precipitation, more intense storms, arctic ice melting, sea level rise, and ocean warming.

45. Climate models in the late 1990s predict that land regions of Asia will experience an annual mean warming of about 3°C in the decades of the 2050s and up to 5°C in the decades of the 2080s as a result of future increases in atmospheric concentration of GHGs.²¹ More recent models indicate 5–6°C of warming a real possibility for the next century.²²

46. The impacts of rapid climate change are generally adverse and in Asia, the effects are likely to be profound. From the Himalayan highlands to the rich tropical forests of Southeast Asia and down to the Pacific Islands, many natural ecosystems are vulnerable to climate change and some will be irreversibly damaged. Many human systems are also sensitive to climate change and some are highly vulnerable, particularly the poorest people within the large populations of South Asia (footnote 22). Global economic damage from the negative impacts of climate change is placed by the insurance industry at hundreds of billions of dollars each year. The Intergovernmental Panel on Climate Change estimates that if atmospheric CO₂ concentrations were to double from pre-industrial levels, “developing countries would suffer economic costs of 5–9% of GDP.”²³ These would severely hinder long-term global and regional efforts to create a more healthy, prosperous, and sustainable world.

47. EE is one of the main technological drivers of sustainable development worldwide. Both supply and demand side efficiencies have to be addressed. Improvements in end-use efficiency can contribute for more than half the decrease in emissions, and renewable use for 20%. Since

¹⁹ This section concentrates on the six sectoral themes identified as RPGs in the RCI Strategy. The general knowledge product activities, which have been a key component of ADB's RETA program, remain an important regional public good provided by ADB.

²⁰ IEA. 2005. *World Energy Outlook 2005*.

²¹ Intergovernmental Panel on Climate Change. 2001. *Third Assessment Report*

²² Nicholas Stern. 2006. *The Economics of Climate Change*.

²³ World Bank. 2007. *Climate Change*. Available: <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTLAW/JUSTICE/EXTENVIRONMENTNATRESLAW/0,,contentMDK:20477622~menuPK:1736804~pagePK:148956~piPK:216618~theSitePK:1001743,00.html> (accessed March 2007).

the 1970s more efficient energy end-use in residential, commercial, institutional, and industrial areas in OECD countries has changed the link between economic growth and energy use. At the global level just 37% of primary energy is converted to useful energy—meaning that nearly two thirds is lost. The next 20 years will likely see EE gains of 25–35% in most industrialized countries and more than 40% in transition economies. Technology innovation will further reduce energy intensity. Meeting the energy demand while contributing to the stabilization of CO₂ concentrations in the atmosphere will need an unprecedented technology changes in the future.

48. Financing is often determined to be a key barrier to the widespread adoption of CE and EE technologies and development of service and product markets. The IEA estimates that as a whole, the world will need to invest approximately \$17 trillion in supply-side energy capital infrastructure by 2030. According to IEA, the Asia and Pacific region will require more than \$6 trillion from now to 2030 for new energy infrastructure. Shifting to cleaner and more energy efficient technologies will require additional funds. According to the World Bank Group's *An Investment Framework for Clean Energy and Development: A Progress Report*²⁴ (2006), the funding provided by the World Bank Group and other donors is clearly insufficient to meet the needs of Asia.

2. ADB Activities

49. In both its 1995 Energy Policy and the 2000 review, ADB has emphasized EE through promoting supply side measures and demand side management as strategies. ADB supports the United Nations Framework Convention on Climate Change campaign on stabilizing GHGs to prevent climate change, by (i) removing barriers to EE and conservation, (ii) promoting the adoption of RE by removing barriers to and reducing the implementation costs of commercial or near-commercial technologies, and (iii) reducing the long-term costs of low GHG-emitting energy technologies. Since the 2000 review, ADB has developed an Energy Efficiency Initiative (EEI)²⁵ which supplements the 2000 review and outlines strategies to strengthen ADB's focus on EE.

50. ADB has established a comprehensive program on Clean Energy and Environment to assist its DMCs achieve significant measurable change in their energy use patterns and secure a low-carbon sustainable energy future. The Clean Energy and Environment program comprises activities in several areas:

51. **Energy Efficiency Initiative.** In July 2005, ADB launched the EEI to expand its operations in EE. EE is taken to cover both supply side (including RE) and end-use efficiency. Phase I of the EEI was completed in June 2006 with the ADB Management's endorsement of the draft EEI report that firmly establishes the rationale for expanded ADB action and EE investment, defines the general principles of the EE investment and action plan, and provides priorities and a framework for next steps. Phase II (ongoing from June 2006 through December 2007) will: (i) develop country-level and regional strategies and action plans on how to reach the target set for the EEI, (ii) develop the necessary institutional capacity in ADB to scale-up as well as monitor and evaluate activities implemented under the EEI, and (iii) explore the possibility of establishing a clean energy financing partnership facility (CEFPP, formerly the Asia Pacific Fund for Energy Efficiency). The CEFPP is designed to finance: (i) smaller EE investments that require quick and efficient transactions; (ii) technology transfer costs of clean technologies for a small number of high-impact large interventions that will catalyze adoption of pre-commercial

²⁴ Jointly published by the International Monetary Fund and the World Bank.

²⁵ ADB. 2006. Report of the Energy Efficiency Initiative. March.

EE technologies; and (iii) grant assistance for nonlending measures, such as developing the knowledge base and incentive mechanisms, advocacy, institutional capacity building, project preparation, and establishment of the monitoring and evaluation mechanism. Immediate EE investment opportunities will also be pursued during Phase II. The strategies and action plans will be implemented in Phase III (2008–2010).

52. **Carbon Market Initiative.** ADB has also developed a Carbon Market Initiative (CMI) to draw on ADB's debt financing and investors' carbon financing to providing up-front and ongoing support for carbon-reducing projects and help meet the world's long term demand for energy and climate change mitigation. The CMI complements the EEI. The CMI will provide developing countries access to additional financial resources and technical support for promoting clean energy development and climate change mitigation. Through the CMI, ADB has launched three interrelated programs to fill market gaps. First, ADB has approved the establishment of a dedicated project cofinancing facility, called the Asia-Pacific Carbon Fund. The fund will cofinance clean development mechanism (CDM) projects by making up-front payments. In return, the projects will supply certificates of emissions reductions that ADB will use for collecting its investment. Second, the CMI provides technical support to CDM developers and projects through the Technical Support Facility, which provides capacity building, due diligence, documentation, and CDM project implementation support. Third, the CMI also makes available provision of marketing support services to CDM project developers to promote the sale of carbon credits from their CDM projects, through the Credit Marketing Facility.

53. **Energy Efficiency in Transport and Sustainable Transport Initiative.** Transport is currently the largest contributor to GHGs in Asia and is the fastest growing sector in terms of contribution. Yet, relatively limited attention has been given so far to the formulation of dedicated policies to reduce the growth in GHG emissions from the transport sector in Asia. ADB assigns high priority to EE in transport. ADB in cooperation with the Clean Air Initiative for Asian Cities, with support from the Government of the United Kingdom through the Department for International Development, have recently completed a study on EE and climate change considerations in road transport in Asia. Separately, ADB is also developing a sustainable transport initiative to establish an investment and development framework for efficient urban transport systems to contain air pollution in the region's burgeoning towns and cities, and promote economic growth.

54. **Knowledge Hubs.** ADB has established regional knowledge hubs to act as regional think-tanks for ADB as well as DMCs on clean energy. The knowledge hubs support and strengthen the Asia-Pacific's regional capacity for innovative concepts, science, technology, and clean energy development. They also promote information exchange and sharing of knowledge by establishing a network on clean energy among the regional institutes. ADB provides technical expertise and financial support to establish and operate the knowledge hubs in the selected topics. Initially, three knowledge hubs have been initiated: (i) The Energy Research Institute in New Delhi for RE; (ii) Tsinghua University in Beijing for climate change; and (iii) Asian Institute of Technology in Bangkok for 3Rs (reduce, reuse and recycle).

55. **Renewable Energy, Energy Efficiency and Climate Change (REACH).** Recognizing the need for examining the potentially larger role of RE and EE in meeting the rapidly growing demand for energy in the Asia and Pacific region, ADB launched the REACH Program in early 2002, by bringing together several funds provided by the governments of Canada, Denmark, Finland, and the Netherlands. Under REACH, ADB is providing assistance to many of its DMCs to address policy, market, financial and structural barriers facing RE and EE, and to develop the institutional capacity and technical capability of governments and local institutions. The

interventions are aimed at developing innovative solutions that would lead to widespread commercial application of renewable and EE technologies and services, which will also lead to a decrease in GHG emissions. Experience gained from REACH is helping in the process of mainstreaming renewable and EE improvements in ADB's lending programs, many in conjunction with incentives available through the international mechanisms to promote environmental sustainability such as the Global Environment Facility (GEF) and CDM.

56. In the GMS program, ADB is supporting the development of regional hydropower projects and in collaboration with International Fund for Agricultural Development, rural RE (biofuels). Furthermore, ADB has prepared a study to identify new and RE resources as part of a Roadmap for the Development of the Energy Sector in the BIMP-EAGA region.

57. **Energy for All.** The program will help ADB build on its expertise and respond to requests from its DMCs to implement energy access projects that will utilize more efficient and modern forms of energy for the rural and urban poor. With financing from the Netherlands, ADB is specifically looking at modalities, financial instruments, and mechanisms needed to catalyze and mobilize financial and private sector entities into this area. In addition, awareness needs to be raised and capacity built within DMCs so that the issue of "Access to Energy" can be a part of policy dialogues and country programs of the ADB energy portfolio with the DMCs.

58. Despite the strong efforts of ADB in the past, there are serious deficits in the overall program in this important area of CE and EE. There is a large funding gap for meeting the needs of the region. There is no consensus on whether and how the developing countries would be subject to caps on GHG emissions. There is a large knowledge gap about how developing countries can design a less carbon intensive development pattern. The climate change is a global public good but its regional dimensions are important. This is an area where ADB can make an important contribution.

B. Environment

1. The Context

59. As in the case of the present-day developed countries in the early stages of development, sustained and rapid economic growth in the Asia and Pacific region is putting strains on the local and transboundary environment. The key areas of environmental concern in the region are urban air pollution; water pollution; municipal and industrial solid waste; land degradation; deforestation; biodiversity loss; coastal, marine and freshwater aquatic resource depletion; and adverse climate change.²⁶ The level of air pollution, which causes respiratory diseases in Asia's cities, shows among the world's highest level of suspended particulates, which is generally twice the world average, and more than five times that in industrial countries. Asia's rivers typically have four times the world average level of suspended solids and 20 times the levels found in OECD member countries. The biological oxygen demand, a measure of organic pollution, is 1.4 times the world average, and 1.5 times the OECD levels. There is growing concern about the declining flow of water from Himalayan sources due to glacial melting and other impacts of climate change and a declining water table in many parts of the region (in particular in the PRC and India). There is a sharp increase in the quantity of municipal and industrial solid wastes as well as in toxic and hazardous wastes from factories, hospitals, and households disposed without proper safeguards.

²⁶ ADB. 2002. *Environment Policy*. 8 November. Manila.

60. Asia has per capita land resources less than a quarter that of developed and other developing countries, and even these limited resources are severely degraded due to deforestation, cultivation of steep slopes, poor drainage and inadequate soil conservation. Deforestation is a severe problem with forest cover on a per capita basis at only one third the world average, and the region is losing it further at the rate of 1% a year. Asia accounts for 40% of the world's species of flora and fauna but with few exceptions, Asian countries have lost 70–90% of their original wildlife habitat to agriculture, infrastructure, deforestation, and land degradation. Asia's coastal and marine fisheries, mangrove forests, and coral reefs are among the most diverse in the world. However, more than half of Asia's wetlands have been lost, and more than half of the mangroves in the Indo-Malayan realm have been cleared. Most wetlands of international significance are being threatened by hunting, drainage, pollution, destructive fishing practices, and conversion to other uses.

61. Environmental degradation is a public “bad” at the national, regional and global levels, and correspondingly corrective action is needed at all these levels. However there are certain areas where externalities are primarily regional and they call for regional action. Examples include degradation of the Aral Sea in Central Asia; desertification and dust storms in Central Asia and the PRC; forest fires and haze in Southeast Asia; biodiversity management in the Mekong subregion and in South Asia; cross-country water management in South, Central and East Asia; and marine and coastal management in the Pacific islands.

2. ADB Activities

62. ADB has been active in all these major areas, including coordinating environmental initiatives among national and subregional organizations; harmonizing standards, regulations and laws—sometimes in conjunction with trade integration; and addressing air pollution, land degradation, and global climate change. In partnership with United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), United Nations Environment Programme, and the United Nations (UN) Convention on Drought and Desertification, ADB has worked with the governments of the PRC, Japan, Republic of Korea, and Mongolia to develop an action plan and to design a regional network for prediction and monitoring of major dust and sand storms. The Central Asian Countries Initiative for Land Management (CACILM) is a good example of a partnership between Central Asian countries and development cooperation partners dedicated to combating land degradation and improving rural livelihoods. ADB, through a TA cofinanced by the GEF and the Global Mechanism, led the design of CACILM as a 10-year program of country-driven action and resource mobilization (2006–2015) to achieve the following in the Central Asian countries: (i) strengthened policy, legislative, and institutional frameworks to create conditions conducive to sustainable land management; (ii) increased capacity in key institutions responsible for planning and implementing sustainable land management interventions; and (iii) improved land management and natural systems through the combined impact of enabling conditions and targeted project investments. The design phase produced a framework to guide the activities of the CACILM partnership over its 10-year planning horizon, with the program anticipated to require \$100 million from the GEF and to generate in excess of \$1 billion in cofinancing.

63. CACILM is partly addressing the aftermath of one of the worst ecological disasters—the shrinking of the Aral Sea. Between 1950 and 2000, the annual flow of freshwater into the Aral Sea was reduced by 90% and salinity levels increased, destroying the flora and fauna of the sea and much of its two river deltas. Today, the Sea is divided in two, and its surface area is approximately one fifth of the 1950 size. The people of the surrounding “ecological disaster zone” disproportionately suffer from kidney disease, diarrhea, and tuberculosis due to

contaminated water, toxic dust storms, and other adverse effects of the environmental and economic situation. While there are considerable efforts underway to address these problems—much remains to be done. In addition to policy and project support to be provided through CACILM, ADB has been assisting the Central Asian countries with preparation of interstate agreements covering water management in the two tributary rivers, the Amu Darya and Syr Darya. On this basis ADB may be in a position to provide further support to help address this ongoing regional ecological crisis.

64. ADB also played a key role in helping the ASEAN countries deal with the aftermath of a subregional environmental crisis brought on by fires and haze in 1997-1998. A regional TA provided important inputs to the ASEAN Agreement on Transboundary Haze Pollution (June 2002), which provides a legal framework to facilitate regional cooperation in addressing cross-border impacts of haze pollution. However, this treaty is not yet serving as an effective mechanism for haze control, as witnessed by a recurrence in the ASEAN region in October 2006 of serious transboundary haze pollution, primarily from land and forest fires in Indonesia.

65. In the GMS, ADB is working with the governments and a number of international and local partners to create a new approach to protecting and managing natural areas through the Biodiversity Corridors Initiative. Part of the ADB-led Core Environment Program for the GMS, this Initiative is piecing together a network of transboundary protected areas with measures designed to support sustainable management of adjacent forests, wetlands, and other valuable ecosystems in the face of rapid development in the GMS.

66. As in the case of EE and RE, so in the area of environment in general, there is a broad-based agreement in the region that developing countries do not have to repeat the mistakes of the past. They should aim to reach where the developed countries are now trying to go without following the same path. Environmental problems have to be addressed, even though many of these countries are at an early stage of development. However, these efforts will be successful only if the necessary funding and political will can be mobilized at regional and global levels to supplement the national efforts—with corresponding institutional mechanisms to handle the difficult problems of coordination in cross-border projects and programs. ADB's RCI strategy is a good beginning in this direction but, as noted above in the case of the CE and EE programs, much stronger efforts are needed for resource mobilization as well as for institution building.

C. Disaster Management²⁷

1. The Context

67. The Asia and Pacific region is recognized as a disaster hot spot and the vulnerability of the region was dramatically illustrated by the events of 2004 and 2005. The Asian Tsunami that hit the region on 26 December 2004 will go in the record books as one of the worst natural disasters in history. Nearly a quarter of a million people died; over half a million were injured; and up to five million people lost homes or access to foods, and water. The worldwide relief effort was exemplary. About \$7 billion of international aid was mobilized and relief and rehabilitation work was undertaken on an unprecedented scale. Then in 2005 the region witnessed major earthquake in Pakistan. Fortunately, the international relief and support was again speedy and substantial. Given their transboundary dimensions, it is imperative that the region should respond collectively and in a coordinated manner to these disasters. These

²⁷ This section draws heavily on the paper Framework for Sustainable Approaches to Disaster Risk Management and Emergency Assistance under preparation in RSDD.

events also underline that establishment of an effective, well resourced, and capable regional disaster response system is a key RPG required for the region.

68. These events also highlighted to the global community the need for improving the framework for managing disasters. The World Conference on Disaster Reduction held in Kobe, Japan, in January 2005, came out with the Hyogo Framework of Action (HFA) for 2005–2015 which is a landmark in global commitment for disaster management. It defines five areas of priority action: (a) ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation; (b) identify, assess, and monitor disaster risks and enhance early warning; (c) use knowledge, innovation and education to build a culture of safety and resilience at all levels; (d) reduce the underlying risk factors; and (e) strengthen disaster preparedness for effective response at all levels. The HFA defines the areas of primary responsibilities at national, international, and regional levels. Regional organizations with a role related to disaster risk reduction are called upon to undertake the following tasks within their mandates, priorities and resources:

- (i) Promote regional programs, including programs for technical cooperation, capacity development, the development of methodologies and standards for hazard and vulnerability monitoring and assessment, the sharing of information and effective mobilization of resources, in view of supporting national and regional efforts to achieve the objectives of this Framework for Action;
- (ii) Undertake and publish regional and subregional baseline assessments of the disaster risk reduction status, according to the needs identified and in line with their mandates;
- (iii) Coordinate and publish periodic reviews on progress in the region and on impediments and support needs, and assist countries, as requested, in the preparation of periodic national summaries of their programs and progress;
- (iv) Establish or strengthen existing specialized regional collaborative centers, as appropriate, to undertake research, training, education, and capacity building in the field of disaster risk reduction; and
- (v) Support the development of regional mechanisms and capacities for early warning to disasters, including for tsunamis.

69. The HFA allocated a supportive role to regional institutions with the lead role including resource mobilization assigned to global institutions. In support of the HFA the World Bank recently set up a Global Facility for Disaster Reduction and Recovery to develop and implement risk reduction strategies.

70. Examples of subregional efforts in the region include the GMS that is working towards the establishment of collective emergency response mechanisms for agricultural and natural resource crises including animal disease, floods, pest infestation, and forest fires. A geographic information system-based disaster preparedness, mitigation and emergency response system for agricultural crises will be developed and coordinated with ASEAN which is sponsoring a similar initiative among its member countries. ADB has been actively supporting the provision of RPGs in GMS. For example, ADB has been improving assistance to the Flood Management and Mitigation Program of the Mekong River Commission, which comprises land use planning, flood preparedness and flood emergency measures, and ADB's indicative investment pipeline for 2009 includes loans to Cambodia, Lao PDR, and Viet Nam to implement the recommended structural and flood-proofing measures.

71. There are a number of regional organizations (e.g., United Nations Development Programme [UNDP]; Regional Disaster Reduction and Recovery Advisor, Bangkok; United Nations Office for the Coordination of Humanitarian Affairs, Regional Office of Asia and the Pacific, Bangkok; European Commission Humanitarian Aid Office, Bangkok; Asian Disaster Preparedness Center [ADPC], Bangkok) that are advocating greater regional coordination as a means of focusing disaster management issues. ADPC and UNDP in particular have recommended the establishment of a regional coordination group to build on the momentum, to identify and develop programs and practices that can lead to greater institutionalization of disaster risk reduction applications.

2. ADB Activities

72. ADB's Disaster and Emergency Assistance Policy (DEAP) was approved by the Board of Directors in May 2004. Under this policy ADB has the following modalities for emergency assistance: (i) portfolio restructuring and loan savings, (ii) emergency assistance loans, (iii) follow-up development loans, and (iv) TA support for disaster and emergency to support short-term post-impact needs and enhance the reach and impact of emergency assistance loans. In response to the Asian tsunami, a special ATF of \$600 million was set up in February 2005 to provide ADB with a dedicated source of grant financing to support priority rehabilitation and reconstruction needs on a multi-sector basis. A second fund, the Pakistan Earthquake Fund, was established in November 2005 in response to the South Asian earthquake, which impacted Pakistan, India, and Afghanistan in October 2005.

73. Following the Asian tsunami, the Pakistan earthquake and work on the ATF and Pakistan Earthquake Fund, ADB has been working on a number of related activities including (i) road mapping for implementation of DEAP; (ii) investigating catastrophe risk insurance (RETA 6284: Development of Catastrophe Risk Insurance Mechanisms); (iii) reviewing projects under ADB's three disaster policies (1987 to present) for application of disaster/hazard management; (iv) mapping ADB projects in disaster-prone locations to identify project risks; (v) identifying lessons learned from the 2004 Indian Ocean tsunami; (vi) reviewing civil society organization involvement in disaster preparedness; and (vii) participating in the international debate on disaster risk management.

74. The specific activities noted above should be seen in the broader context of the implementation of ADB's DEAP, namely: (i) strengthening ADB's effectiveness in supporting DMCs to identify and manage risks from natural hazards through risk assessment, vulnerability reduction, and risk reduction strategies; (ii) facilitating ADB assistance to DMCs following disaster impact by assisting early recovery measures, building in greater resilience to post-impact reconstruction efforts, and identifying relocation efforts to safer sites for critical infrastructure; and (iii) encouraging and participating in actions that assist greater regional disaster risk management cooperation, coordination, and institutionalization. These objectives can be viewed as a series of prerequisites, or key elements, to be undertaken by ADB Headquarters, resident missions, and DMCs in full partnership with regional agencies. This is a key issue to reducing disaster risk in Asia and the Pacific.

75. Greater collaboration and integration is required of the dozens of individual programs being undertaken by regional players within individual countries (many of which are being undertaken without any knowledge of what other agencies are doing). In this regard, a regional coordination grouping would have some advantages for ADB, in particular to offset the slow development of coordination networks that ADB could use to build on the DEAP foundation, and in particular to enable country partnership strategy programs to be consolidated into similar

programs being carried out in the region. Other benefits would include (i) identification and promotion of long-term regional disaster reduction issues such as climate change; (ii) performing advocacy functions internal and external to the region; (iii) establishment and linkage of training and capacity development programs that can be tailor-made to regional requirements; (iv) networking with local/regional scientific and technical groups; and (v) leveraging ADB's financial and human resources.

76. One question that arises is whether the ongoing programs are commensurate with the risks faced by the Asia and Pacific region. The region is a disaster hot spot. With climate change under progress, the risks of natural disasters are likely to increase substantially. In the current approach, ADB relies mainly on project restructuring and savings for disaster relief. This process can potentially disrupt the project cycle. Consideration may have to be given for larger funds being available without restructuring ongoing projects. One possibility is to make disaster management funds part of an RPG facility, which would have substantial funds that can be used in a flexible manner for various contingencies including disaster management, outbreak of communicable diseases, and financial emergencies.

D. Communicable Diseases

77. Greater connectivity and movement of goods and people across borders associated with increasing regional integration have increased the risk of spread of communicable diseases in the region, which calls for a coordinated regional response. Moreover, regional approaches in responding to the problem of communicable diseases can more effectively and efficiently address commonalities between countries within the region, thereby strengthening national responses and taking advantage of comparative advantages, synergies, and economies of scale through joint production and provision of public goods. Cost-effectiveness is another obvious benefit. Such responses can take the form of harmonizing mechanisms for open sharing of information about communicable diseases affecting the region, cost-sharing of joint research projects and development of cheaper pharmaceuticals and vaccines, and sharing experiences, particularly where there are shared factors such as language, culture, or religion.

1. HIV/AIDS²⁸

78. **The Context.** The UNAIDS 2006 Report on the Global AIDS epidemic estimates that, in 2006, some 8.6 million people were living with HIV in Asia, including 960,000 newly infected people. Approximately 630,000 died from AIDS-related illnesses in 2006. In South and Southeast Asia, the number of new HIV infections rose by 15% during 2004–2006. About 5.1 million people in India are living with HIV and serious epidemics are underway in several states. In Tamil Nadu, HIV prevalence of 50% has been found among sex workers and in Chennai, 64% of drug injectors were found HIV-positive in 2003. National HIV infection levels are highest in Southeast Asia, where the main risk factors include unprotected paid sex, sex between men, and unsafe injection drug use.

79. According to UNAIDS, East Asia is facing the fastest-growing epidemic in the world, due to the rapid spread of HIV in the PRC, Indonesia and Viet Nam. HIV has now spread to all of the PRC's 31 provinces, autonomous regions, and municipalities. In Indonesia, one in two injecting drug users in the capital city Jakarta now test positive for HIV, while in far-flung cities such as Pontianak, a high percentage of injecting drug users requesting HIV tests are also HIV-positive.

²⁸ The write-up is largely based on the UNAIDS Asia Fact Sheet, July 2005.

In Central Asia, the HIV epidemic is still relatively young but continues to grow. Nearly 70% of the HIV infections in 2005 were due to the use of non-sterile injecting drug-use equipment, while sex workers and their clients accounted for about 12% of infections. The epidemic in this region is mainly affecting young people with women increasingly bearing the burden of the disease. In Uzbekistan, which straddles major drug-trafficking routes, the number of reported HIV cases has more than doubled, and in Tajikistan reported HIV cases have risen fourfold since 2001. In the region as a whole, some 8.2 million people are estimated to be living with HIV—the second largest number after Sub-Saharan Africa—and 1.2 million were newly infected in 2004. The number of women living with HIV has increased by 20% since 2002 to around 2.3 million. AIDS has already claimed some 540,000 lives in Asia.

80. The experience of Sub-Saharan Africa is a cautionary reminder of what can happen to economies if HIV/AIDS gets out of control. However, to date, AIDS response in Asia and the Pacific has been inadequate. Without immediate action, the region could witness an additional 12 million new infections between 2005 and 2010. There is a significant gap in funding for AIDS in addition to inadequate institutional setup for taking preventive and curative measures. By 2007, AIDS funding in the region is expected to be \$1.6 billion, more than twice what it was in 2003 but still less than half of the \$5 billion needed (based on a 2004 ADB–UNAIDS Joint Study).

81. **ADB Activities.** ADB recognizes that more needs to be done to reverse spread of AIDS in the region. Since the early 1990s, ADB has supported projects including interventions that focus on cross-border areas and mobile populations in the Mekong region, a joint ADB-World Health Organization (WHO) care and treatment initiative in Papua New Guinea, and joint studies with UNAIDS and conferences. ADB is providing grant assistance for preparation of regional roadmaps on HIV/AIDS in the Pacific DMCs. ADB has been designing HIV/AIDS components for integration with road projects which present a confluence of risk factors of the spread of HIV—mobile worker populations, commercial sex workers and injecting drug users. Under the eighth replenishment of the ADF finalized in May 2004, 2% of funds (equivalent to some \$140 million) was provided as grant financing for projects focusing on HIV/AIDS and other infectious diseases.

82. ADB's program for regional HIV/AIDS falls into three main categories: strengthening the commitment and capacity of regional leaders; capacity building at regional, subregional and country levels; and targeted programs that expand HIV/AIDS interventions to mitigate risk among the poor, the vulnerable, and people with high-risk behavior. In 2005, ADB set up a Cooperation Fund for fighting HIV/AIDS in the region with a contribution of 100 million Swedish kroners from Sweden. The Fund is a multi-donor umbrella facility to promote effective HIV/AIDS interventions at regional, subregional, and country levels. The Fund is meant to (a) support demonstration of innovative approaches to fighting HIV/AIDS; (b) help develop knowledge base to support policy development and build capacity; and (c) support coordination, monitoring and evaluation of the programs supported by the Fund. Currently, ADB is supporting an HIV/AIDS prevention and control initiative in the GMS, where ethnic minorities in cross-border areas are one of the targeted populations. ADB's HIV/AIDS Prevention and Capacity Development in the Pacific grant is assisting in the implementation of the Pacific regional Roadmap on HIV/AIDS and is truly regional in nature involving 12 island countries.

83. ADB is committed to maximizing collaboration and minimizing unwarranted overlap with other major donors and development partners. It adheres to the UNAIDS principles of “three ones”: one agreed HIV and AIDS national strategy that provides the basis for coordinating the work of all partners; one national AIDS coordinating authority with a broad-based multi-sector

mandate; and one agreed country-level monitoring and evaluation system. ADB is a partner in the Toronto Joint Initiative, signed by six major development partners (ADB, African Development Bank, Department for International Development, Japan Bank for International Cooperation, KfW, and the World Bank) in August 2006. This Initiative recognizes the urgency of action in the infrastructure sectors and encourages agencies to coordinate their activities to mainstream HIV/AIDS prevention and treatment programs in infrastructure projects.

84. Despite serious efforts of donor community, there is, as already noted, a significant gap in funding for HIV/AIDS in the region. There are also widespread misperceptions and taboos about the disease in many parts of the region. In view of tragic human consequences for those affected by the disease, some eminent leaders such as Bill Clinton and Bill Gates have taken initiatives to mobilize funds, improve access to needed medicines, and raise consciousness about the disease. Some entertainment leaders such as Shabana Azmi in India have also taken initiative to demystify the disease and mobilize public support for the victims. To help close the funding gap and raise consciousness about the disease, consideration can be given to ways of upscaling these initiatives from the political, corporate and entertainment world. Perhaps a conference of regional leaders in politics, business, and entertainment could be organized to share the experience of the pioneers in mobilizing funds and public support for HIV/AIDS, and to generate ideas on how such leaders could assist in mobilizing funds from private sources, both individuals and corporate funds and raise public consciousness about the need for preventive and curative actions as well as human treatment of the victims. Acting as a catalytic agent for such an initiative may be unconventional for ADB but well within its mandate and in line with other MDBs such as the World Bank.

2. Avian Flu

85. **The Context.** The avian flu which started in Asia is now becoming a worldwide phenomenon that has also affected Europe and Africa, with growing risks of a new human pandemic that may kill millions. Between the end of 2005 and end of 2006, the number of countries that have reported avian flu outbreaks has increased from 16 (mostly in East and Central Asia) to 55 countries (including some developed countries such as Denmark, France, Germany, Japan, Spain, Switzerland, and United Kingdom) with an estimated 250 million poultry killed. The number of human deaths is steadily rising with deaths occurring in all affected regions. The number of confirmed human deaths in 2006 reported to WHO reached 80, thus nearly equaling the total for the previous 3 years combined. Indonesia, where the disease has become endemic within the domestic poultry population saw on average one death a week in 2006. In addition, there are several worrying reports of human-to-human transmission of the virus. As first estimated in an ADB study in November 2005 (footnote 6) and noted in a World Bank study of 2006,²⁹ if the virus mutates and begins to spread easily from human to human, potential costs of a pandemic can be catastrophic, as high as \$1.5 trillion–\$2 trillion. The threat has become a truly global challenge requiring multisectoral, cross-border worldwide cooperation.

86. In order to tackle this global threat, a strong partnership has emerged between global technical agencies (such as Food and Agriculture Organization, WHO, World Organization for Animal Health), international financial institutions (IFIs) (such as the World Bank and ADB), regional organizations (such as ASEAN, CAREC, GMS, and SAARC), and bilateral donors (such as Australia, Canada, Japan, United States, and EU). Despite the global and regional

²⁹ Burns, Andrew, Dominique van de Mensbrugge, Hans Timmer. 2006. *Evaluating the Economic Consequences of Avian Influenza*. September.

dimension of the problem, it is recognized that the coordinated response must be led at the country level and many countries have started the process of preparing and implementing comprehensive country plans with funding and TA from the donor community. In addition, however, there are global and regional funding needs—notably for global and regional stockpiles of medicines and medical equipment, and for vaccine research, development and distribution. According to the most recent World Bank estimates,³⁰ the total financing gap for the next 2–3 years to address the avian flu related programs at country, regional and global levels is between \$1.2 billion and \$1.5 billion. For the Asia and Pacific region the financing gap is estimated to be between \$306 million and \$517 million.

87. **ADB Activities.** ADB has been active as a part of international efforts to control the disease. It has contributed \$68 million in grant assistance for two regional projects. The first, Communicable Disease Control Project (\$30 million) in the GMS, is aimed at controlling the outbreak of emerging communicable diseases by improving regional coordination. The second, Prevention and Control of Avian Influenza in the Asia and Pacific (\$38 million), covers all ADB member countries and focuses on both the short-term needs for fighting avian flu and the longer term strengthening of regional capacity to fight emerging diseases. In the GMS, ADB, together with the Food and Agriculture Organization, is supporting the control of transboundary animal diseases (TADs) including the establishment of a regional cooperation framework and strengthening of capacity in TADs control. In view of the increased funding gap to fight the disease, there is a need to enhance its efforts to fill the gap which would have to be largely on a grant basis, especially for low-income countries.

88. To consolidate regional efforts in RPGs in this area, there is a need to take concrete steps to facilitate dialogue with regional bodies, such as the Asia-Pacific Economic Cooperation (APEC) and ASEAN, which are both strong advocates for RPGs.

E. Governance

1. The Context

89. Good governance is a quintessential public good needed for market stability, economic development, and public security: its benefits accrue to all people on a nonrivalry basis. These benefits and by implication costs of poor governance also accrue to all other countries and organizations that deal with the country. Thus governance has important regional and global dimensions. For example, weak governance in one country can lead to transboundary crime such as money laundering, corruption and threat of terrorism. The importance of collective coordinated action for good governance and control of transborder crime in the region is becoming increasingly important as the regional economies become more integrated and interdependent. Both regional and global development institutions have over the years become increasingly active in improving the provision of this public good. Collective efforts to address governance-related issues need to intensify quickly before governance problems become sources of major threat to the future prospects of this rapidly growing region. Transnational corruption and crime is a key governance issue that poses serious threats to the market stability of the region.

³⁰ The World Bank. 2006. *Avian and Human Influenza: Update on Financing Needs and Framework*. 30 November.

2. ADB Activities

90. In 1995, ADB became the first multilateral development bank to adopt a comprehensive governance policy. ADB's governance work seeks to advance the following critical objectives: transparency, predictability, accountability, and participation. In this area, ADB has recently approved the Second Governance and Anticorruption Action Plan (GACAP II). The purpose of GACAP II is to improve ADB's performance in the implementation of the governance and anticorruption policies in the sectors and subsectors where ADB is active. GACAP II will contribute to the implementation of the mandatory requirements of ADB's governance and anticorruption policies through focusing on four key result areas:

- (i) improved identification and management of governance, institutional, and corruption risks in ADB's country partnership strategies and programs, and annual country portfolio review missions;
- (ii) strengthened governance and anticorruption components in program and project design;
- (iii) strengthened program and project administration, and portfolio management; and
- (iv) improved organizational structure, human resources and access to expertise.

91. It is expected that implementation of GACAP II will enable DMCs, in partnership with ADB, to design and deliver better quality projects and programs. A key element of ADB's efforts to combat corruption in Asia and the Pacific is the ADB-OECD Anticorruption Initiative. Through this Initiative, 27 countries and jurisdictions have jointly developed and endorsed the Anticorruption Action Plan for Asia and the Pacific, and are working together toward its implementation. The initiative is jointly managed by the OECD and ADB. Its secretariat supports the countries' efforts to build effective and sustainable anticorruption mechanisms through fostering policy dialogue, policy analysis, capacity building and donor coordination, and by providing an extensive online database on the region's fight against corruption. The implementation of the action plan aims at offering participating countries regional and country-specific policy and institution-building support. This strategy is tailored to policy priorities identified by participating countries and provides means by which participating countries and partners can assess progress and measure the achieved results.

92. ADB is also active in Anti-money Laundering/Combating Terrorist Financing (AML/CFT), where its work seeks to advance the following critical objectives: (i) promote understanding of the negative impact of money laundering and terrorism in an economy among policy makers, officials, and civil society; (ii) introduce and implement AML/CFT measures to meet Financial Action Task Force recommendations; (iii) deliver public awareness programs; and (iv) support mutual aid mechanisms to share information and legal assistance. ADB helps advance these objectives by providing capacity-building, TA, and support to assist countries carry out priority tasks efficiently and effectively.

93. Governance is a sensitive subject and external advice needs to be mixed with knowledge. Accordingly, ADB's knowledge bank role for improving governance remains important for the region. To the extent advice needs to be combined with knowledge, peer pressure would also be a useful tool. Further, there is a need to create forums, where regional leaders exchange information on the seriousness of governance problems in various countries and exchange ideas on how to improve governance within countries and across the region.

F. Human and Drug Trafficking

1. The Context

94. Trafficking of human beings is one of the most serious and widespread violations of human rights in Asia today. Trafficking occurs within a series of human movement (forced or voluntary) and involves many forms of exploitation including forced labor, debt bondage, sexual exploitation, forced marriages, and other types of exploitation. Many are enslaved in the sex industry, but others are in factories, on farms, or in domestic servitude. While women and girls are the majority cases, men and boys are also trafficked. The clandestine nature of the problem makes compilation of accurate statistics extremely difficult. According to the US State Department statistics, about one third of global trafficking incidents of women and children (estimated to range from 0.7 million to 2.0 million per year) take place within and from Southeast Asia.³¹

95. The problem of trafficking—by itself having existed for centuries—is considered intensifying and expanding, due both to the “push” factors such as poverty and unequal development, conflicts, natural disasters, dysfunctional families, social and gender discrimination and to “pull” factors like globalization and global demand for cheap labor; improved communication systems; image of better urban life portrayed by media; improved connectivity such as transport networks by land, sea, and air; and growing global tourism. Various preventive, legal/prosecuting and rescue/rehabilitation measures have been taken by government and nongovernmental forces over the past decade throughout the world and especially in the Asia and Pacific region. The results, however, are limited due in part to the lack of commitment, corruption, and complexity of anti-trafficking interventions involving multiple agencies. Although progress in strengthening measures to discourage demand has been especially slow, the growing global movement toward corporate social responsibilities has increased the awareness of private operators especially those in the tourism industry. There are also increasing cases of innovative private-public partnerships, e.g., collaboration between the port authority and ferry companies for identification of potential trafficking cases among ferry passengers. Drug trafficking is another continuing challenge facing the region, which has led to several regional or subregional efforts to contain this menace. The ASEAN–China Cooperative Operations in Response to Dangerous Drugs is an example of such regional initiative.

2. ADB Activities

96. The current approach of the donor community is categorized into prevention (e.g., awareness raising of “at risk” individuals and communities, socioeconomic empowerment of “at risk” social groups such as women and children, social protection of vulnerable groups), rescue/repatriation (e.g., capacity building of NGOs and law enforcement), prosecution (e.g., legal support, capacity building), and reintegration (e.g., psycho-social support to victims, rehabilitation training). Policy dialogue, research, and capacity building have been important tools. While there are many international conventions and regional initiatives that provide monitoring mechanisms, the best known is the US annual Trafficking in Persons Report that classifies countries according to the performance of the government’s efforts in combating human trafficking issues. As a regional development bank, ADB has been contributing to these efforts along with other stakeholders, particularly in preventive interventions. Examples of ADB’s

³¹ United Nations Children’s Fund. 2003. *Towards a Region Fit for Children: An Atlas for the 6th East Asia and Pacific Ministerial Consultation*, Bali, 5–7 May 2003.

research work include *Preventing Trafficking of Women and Children and Promoting Safe Migration*, *Reviewing Poverty Impact of Regional Economic Integration in the Greater Mekong Subregion*, and *Combating Trafficking of Women and Children in South Asia*. Where trafficking vulnerabilities are identified in donor funded projects, donors are recommending inclusion of an anti-trafficking component. This is particularly important in cross-border transport corridor and tourism projects. Along with others, ADB has also facilitated policy dialogue within and between different subregions of Asia including GMS and South Asia.

97. The problem of human trafficking has to be seen in the context of increasing international mobility of labor and increased importance of worker remittances as a source of income for many low-income countries. Having gained more experience in this area, there is a need to adopt a programmatic, comprehensive regional approach that is linked to regional corridors and connectivity planning. Further, action programs for mitigating trafficking risks should be designed in coordination with agencies overseeing labor migration such as the International Organization for Migration and International Labour Organization. ADB is already working with these agencies to build partnerships and develop collaborative networks between government, law enforcement, and civil society. In the GMS, ADB is coordinating initiatives and sharing knowledge on human trafficking and labor migration with the World Bank, the UN Inter-Agency project on Human Trafficking, and the Coordinated Mekong Ministerial Initiative Against Trafficking, and the Rockefeller Foundation. Such coordination programs are also needed in other subregional and regional organizations.

VI. THE WAY FORWARD

98. As noted above, ADB's RCI strategy identifies four distinct roles of ADB in supporting and promoting RCI: money bank, knowledge bank, capacity builder, and honest broker. This four-pronged approach applies to the provision of RPGs and operational implications of the sectoral discussion above can be structured along the lines of these four functions of ADB although some ideas are general and apply more to the region than ADB. While indicating directions for future action, one should be fully aware of the difficulties and constraints facing the provision of RPGs. By their nature, RPGs generate benefits for which users cannot be charged directly and there is natural tendency for under-funding these services. Often these benefits are long-term, dispersed, and intangible. There is hardly any agency within the DMCs or donor countries that is responsible for the provision of these RPGs and for which it can claim credit in the political process. Given the opportunity for free riding, each country may try to underplay its need for RPGs. Often a leader is needed to promote and fund these public goods but the line between benign leadership and hegemony is a thin one and can easily create misunderstanding among cooperating nations. Non-cooperation from one country can frustrate the entire chain of action of RPGs. All these problems are there but at the same time, necessity does lead to inventions. The current surge of regional cooperation activities in Asia where heads of states frequently get together in regional forums suggests that this is an idea whose time has come. With its mandate for regional cooperation, ADB can play an important role in such collective endeavors of the region.

A. ADB as Money Bank

99. The sectoral reviews have shown that there are sizeable funding deficits for many of the RPGs. Among the areas where there are identified large funding deficits are: funding for reducing carbon intensity of growth, environment, and communicable diseases.

100. The World Bank estimates the global financing gap in the energy sector at as much as \$80 billion per year, a sizeable part of which is for Asia. While separate estimates for Asia have not been made, it will be reasonable to assume that this funding gap is at least as large as the share of Asia in energy consumption, i.e. about 30%. Further, estimates by the World Bank and others have shown that a substantial amount of additional funding will be needed to reduce carbon intensity of growth. The World Bank report on investment needs for clean energy³² estimates that to significantly decarbonize power production, incremental investments of up to \$30 billion per year (i.e., beyond the basic needs for electricity generation) would be required in non-OECD countries. It also concludes that the currently available resources and instruments from IFIs and the public and private sector cannot lead to a meaningful transition to a low carbon economy. Further, the global carbon market is currently limited due to regulatory risks. And even though there is potential for growth in the voluntary carbon market, it is highly uncertain and only for relatively low-priced options. The World Bank report proposes setting up two new financial instruments: the Clean Energy Financing Vehicle and the Clean Energy Support Fund. The former with an initial capitalization of \$10 billion is proposed to have an annual disbursement of up to \$2 billion. The latter would be a subsidy mechanism that supports projects in line with the degree of carbon emission.

101. It is clear that even with new instruments under consideration by the donor community, a huge funding gap remains for transition to low carbon economies in the Asia and Pacific region. Funding requirements are substantial in other RPGs as well. For environment, it is estimated that projects such as Aral Sea rehabilitation, reversing desertification, checking forest fires, and improving water management will require tens of billions of US dollars though precise estimates have not been made. For HIV/AIDS the financing gap for Asia is estimated to be over \$3 billion in 2007, and for avian flu, between \$306 million and \$517 million per year. While regional estimates have not been made for disaster management, the magnitude is likely to be substantial.

102. The importance of the money bank aspect of ADB's RCI strategy should not be underestimated. IFIs derive their capacity for engaging the DMCs and other stakeholders largely from their investment funding ability. In fact all other functions such as knowledge bank, etc. gain greater relevance and coherence when associated with investment funding, as is indicated by the contrasting experience of TAs supported by IFIs and other UN institutions such as UNDP. In this regard, the money bank role for RPGs has substantial scope for expansion. The funding of course could be in a variety of forms: grants to DMCs, regional organizations and corporate entities and NGOs; concessional lending to DMCs, regional organizations and corporate entities; and nonconcessional lending to DMCs, regional organizations, and corporate entities. In this respect, there is a need for paradigm change in two important aspects: first, about the role of regional members for providing funding, and second, about the method for raising funds for RPGs.

³² The World Bank. 2006. *An Investment Framework for Clean Energy and Development: A Progress Report*. 1 September.

103. In the first aspect, it is worth emphasizing that the traditional role of international assistance in resource transfer from developed to developing countries or from nonregional to regional members needs to evolve given the rising savings and foreign exchange reserves in the Asia and Pacific region. Over the last few years, the center of gravity of the world's savings seems to have shifted to Asia. In fact it is the surplus savings of Asia that is funding the huge saving deficits in other regions of the world. Further, aid for development is becoming a significant aspect of government budget in several regional members, including the PRC and India. The central banks of Asian countries are now holding foreign exchange reserves of over \$3 trillion. The corporations in many of these countries are now well-endowed with surplus capital and they are becoming a significant player in buying up assets in the rest of the world. Thus for meeting the funding gap for RPGs, ADB can depend more strongly on Asian countries. ADB can contribute to the efforts to explore how regional savings can be utilized effectively for regional development. The model of EU as a self-help unit is increasingly relevant for Asia as the region gains financial strength.

104. One important source of such funding could be better utilization of excess foreign exchange reserves of Asia. In the near term, a mechanism needs to be developed for better use of excess foreign exchange reserves of Asia. Larry Summers³³ has highlighted that the rate of return on excess reserves of many Asian countries is close to zero in real terms and a modern asset management unit can earn double digit rates of return. Mr. Summers suggested that part of the excess reserves could be handed over to the World Bank/IMF to earn a better rate of return which could be used for debt relief and/or aid. The importance of better management of excess external reserves is now widely recognized in this region. It is reported that the PRC is considering setting up a new company to improve management of the country's foreign exchange reserves. The Government of India has also recently announced its intention to consider innovative methods for enhancing the availability of financial resources for infrastructure through the use of a part of its foreign exchange reserves. It is important to examine how ADB can help in the matter and also generate resources needed for funding RCI programs including RPGs. One possible option would be to examine the merits of setting up of a regional cooperation facility in ADB to manage the external reserves of the region. A portion of the foreign exchange reserves of member countries can be provided or lent at an agreed rate to such an agency authorized to invest in long-term security and equity indices in international markets. Larry Summers suggested that the additional return can be up to 6% per year. Even at an additional return of 4% per annum, for example, \$250 billion out of the reserves can generate additional \$10 billion per year which can meet many of the RCI needs of the region. As the PRC and India are likely to have their own agencies to manage foreign exchange reserves, ADB's potential role in the management of excess reserves needs further consultations and examination.

105. In addition, efforts can be made to mobilize private funding for the development of the region. It is worth noting that private foundations in the developed countries (including Ford Foundation) played an important role in development aid. Now there are many corporations in Asia whose business is regional and who have the capacity to support development, in particular, RPGs. There is a need to explore the modalities for involving the private sector more fully in development of the region. One policy measure that can help is to allow tax deduction for grants given by the private sector for this purpose, say, to a facility in ADB. There is a need to create consensus among the regional players in favor of such tax relief. More generally, ADB could create a forum of business leaders to demonstrate to the business community the long-

³³ Larry Summers. 2006. Reflections on Global Account Imbalances and Emerging Markets Reserve Accumulation, L.K. Jha Memorial Lecture Reserve Bank of India, 24 March. Mumbai, India.

term benefits to their businesses of sustained development in the region, which is what the RCI strategy is trying to promote. The case for such contributions could be particularly strong for controlling of communicable diseases for which contributions are already being made by private corporations of developed countries as illustrated by the Bill and Melinda Gates Foundation in India.

106. Another paradigm shift that is necessary is about the place of RPGs in relation to national public goods. As argued earlier, public goods form a continuum below as well as above national level. At the country level, it is found useful to have a broad allocation of responsibility for public goods at national, provincial, and local levels. Similarly, it may be useful to allocate responsibility for public goods at national, regional, and global levels. As also discussed earlier, there is no clear cut theoretical criteria for such allocation either at the country or at cross-country level. The allocation has to be pragmatic. Correspondingly, the principles of intergovernmental fiscal allocation can have some relevance for funding of regional and global public goods. There could be some taxes such as carbon tax, tax on tourism, tax on short-term capital movements, etc. where a certain percentage of taxes collected by national authorities may be allocated to regional agencies for RPGs.

B. ADB as Knowledge Bank

107. As discussed earlier, as the premier regional development bank, ADB's knowledge bank role is important not only for the six key RPGs, but also for a wide range of other subjects. As noted in section IV, ADB's regional activities for RPGs have been primarily in the provision of RETA. These RETAs have been the principal vehicle for ADB support for different subpillars of RPGs. Although there have been no formal evaluations of RETAs, the recent review of TAs by the Operations Evaluation Department³⁴ suggests some important lessons that apply to RETAs as well. In general, TAs are most effective when they are demand-driven and the DMC concerned participates fully in the program implementation. Thus the problems of TAs found at the national level are likely to be even deeper for RETAs given their multi-country character. This situation was not particularly critical when ADB was playing a largely supportive role to global institutions. However, with the initiation of the RCI strategy, ADB has taken a leadership role in the area of regional cooperation and there is now a need for some basic rethinking on how to make RETAs more effective.

108. The issue can be well illustrated by what needs to be done on CE and EE activities. Providing knowledge on how to reduce carbon intensity of growth will be an important public good in this area. Over the last few years, major efforts were made in various parts of the world toward that objective and most of the best practices are occurring in developed countries. These best practices relate to technologies at production and consumption end as well as at regulation and incentive levels. The EU and Japan have made impressive progress in CE and EE. In the US there are some innovative cases such as the California initiative. The ADB paper "Towards a Cleaner Energy Future in Asia and the Pacific" (2006) provides several examples of efforts by big business, and national, regional, and local governments in various OECD countries for emission reduction. ADB can focus on identifying innovative programs for cutting GHG emissions not only among the developed countries; some innovative examples of emission reduction have also been successful in developing countries. ADB can also examine what needs to be done to upscale these examples. Negotiations on GHG emission control beyond 2012 require working with both developed and developing countries to help design acceptable compromises where ADB can play an important role. Further, ADB can increase knowledge

³⁴ ADB. 2006. *Special Evaluation Study on the Performance of Technical Assistance*. Draft as of December 2006.

about the weakness of old style industrialization, and the promise of the new (a sort of “post-modern”) paradigm of low carbon intensity development that the developed countries are now aiming at. In general, a strong regional knowledge base is particularly important for new or hitherto unattended areas such as regional natural disaster response, new communicable diseases, new transborder crime, and human trafficking.

109. The technical knowledge needed for these initiatives will require a change in how TAs are managed and used. This required long-term and cutting edge technical support cannot perhaps be effectively provided by the normal outsourcing mode of TA by ADB. Typically most TAs by ADB are done by outside consulting firms. Further, often there is very little follow-up of reports. Since the consultants change frequently even on the same topic, the continuity of work gets disrupted while ADB’s institutional memory of these TA outputs gets adversely affected. This mode needs improvements to support the lead role that ADB is now expected to provide in regional cooperation, including for RPGs. For more effective delivery of this knowledge product, a team of high quality experts have to be mobilized on a long-term basis (e.g., 3 years or more) and work with DMCs to improve their capacity on such complex items. ADB has a major TA reform ongoing exercise, which might result in addressing some of these concerns. Further, with high quality knowledge product coming out of ADB work, ADB could also become more aggressive in disseminating its findings in DMCs as well as in regional and international forums through seminars and publications.

110. There is a need to establish greater knowledge and awareness of RPGs at the highest political levels within the region. This will require creating efficient channels for disseminating information relating to RPGs. Workshops, roundtables, and summits (like the Asian Sustainable Development Summit planned by ADB for the end of 2007) are examples of instruments for such dissemination. Once there is general commitment on RPGs at a political level, ADB can be more active with regional cooperation frameworks such as APEC, ASEAN, BIMSTEC, CAREC, GMS, Indonesia-Malaysia-Thailand Growth Triangle, SAARC, SCO, UNESCAP, etc., as well as think-tanks with a regional mandate such as the Research and Information System for Development in India. There is also a need to increase efforts to learn from experience of other regions in the provision of RPGs, in particular from EU. ADB’s recent proposal for the establishment of an RCI financing partnership facility is a good example of ADB’s increasing attention to such issues in this region.

C. **ADB for Building Capacity**³⁵

111. In the past, ADB has provided assistance to regional organizations and institutions that provide capacity building and technical trainings in specific areas, which can be scaled up. The advantage of such programs is that participants learn not only technical issues but learn together with participants from neighboring countries and thereby enhance collective regional capacity and possibilities of long-term regional cooperation. In this regard, close collaboration with existing regional and subregional institutions (e.g., ASEAN, CAREC, GMS, SAARC, SASEC) to build capacity through knowledge building and training, and implementation of specific activities and programs will be important. As discussed earlier, for many RPGs, the principal player will be the national authority and ADB can best assist the provision of these public goods by helping to strengthen the national capacity.

³⁵ More recently, ADB is using the term “capacity development” rather than “capacity building” to capture its more organic approach. In January 2007, the Board approved a policy paper on *Integrating Capacity Development into Country Programs and Operations Medium-Term Framework and Action Plan*.

112. RETAs will continue to be a major vehicle for such capacity building and the changes in RETA approach mentioned above applies to capacity building as well. At the same time, the capacity building impact of investment projects—learning by doing—should not be underestimated.

113. One additional area could be enhanced efforts for consensus building for provision of RPGs and ADB's role in it. Here ADB may try to replicate the examples of political and entertainment leaders at global level for building consensus for provision of RPGs. This may be particularly relevant for handling taboos and social sensitivities associated with some communicable diseases such as HIV/AIDS. Global leaders such as Bill Gates and President Clinton have been active in creating consensus and mobilizing funds for this scourge. At the national level, there are entertainment leaders such as Shabana Azmi in India who have taken a lead in consensus building on HIV/AIDS. Recently, the World Bank has been active in mobilizing political leaders to spread consciousness about the disease and for mobilizing efforts for corrective action in Sub-Saharan Africa. ADB can play a role in utilizing regional political and entertainment leaders to be active at the regional level for these purposes.

D. ADB as an Honest Broker

114. Provision of RPGs is generally welfare enhancing for all participating countries. But these benefits and costs are not always symmetrical for the countries involved and there are gainers and losers at least in relative terms. Moreover, all participating countries are not equally endowed with financial and human resources needed to implement regional programs in a coordinated manner. In the provision of RPGs, therefore, ADB' role is that of a catalyst and coordinator. By providing resources, both human and financial, in a differentiated manner to meet the varying needs of the DMCs, ADB can help in negotiating and implementing regional programs in a consistent and coherent manner. In performing this honest broker function, ADB has to work in partnership with other regional and global institutions such as ASEAN, CAREC, SAARC, World Bank, and specialized UN agencies.

115. The enhanced task of ADB as an honest broker can perhaps be illustrated by reviewing what needs to be done for negotiating the post-Kyoto Protocol on emission controls. There are various alternatives under discussion for post-Kyoto Protocol, but the most difficult issue is common but differentiated responsibilities of developing countries. It is clear that the problem of global warming can be tackled only if both developed and developing countries reduce the carbon intensity of their growth pattern. There is however a major dilemma in terms of burden sharing between the two groups in reducing carbon emissions. Developing countries argue that on the principle of equality of human beings, standards of emission should be set on a per capita basis and developing countries should not have restrictions of carbon emissions until they reach the levels of developed countries on a per capita basis.³⁶ The developed countries on the other hand argue that history matters and they can only reduce emissions gradually and unless the developing countries do their part in reducing emissions to avoid the adverse impacts of climate change which will be faced by all, their efforts can be neutralized by the increased emissions of developing countries.

116. There are thus some serious possibilities of difference in the perceptions of developed and developing countries in negotiations for the post-2012 carbon emissions agreement. In this situation, regional institutions like ADB, where the representation of developed and developing

³⁶ In 2004, energy use per capita was 4.67 million tons of oil equivalent in OECD countries and 1.10 in the PRC and 0.61 in other Asia-Pacific countries.

countries is more balanced, may be more effective than global financial institutions. ADB is perhaps thus ideally placed to play the honest broker role for helping in negotiations between developed and developing countries for post-2012 emission control protocol. For that purpose, ADB could perhaps initiate a TA program to strengthen the technical capacities of DMCs to understand their stakes in and negotiate a sequel to the Kyoto Protocol. Adaptation to climate change constitutes a further area of direct interest to DMCs, and it is likely to be a key part of any post-2012 agreement. ADB experts can also work with both developed and developing countries and help develop formulae acceptable for both sides.

117. ADB's role as an honest broker in the region is also crucial in environment, which involve complex coordination among multiple government agencies, civil society, and the corporate sector within and across countries. This applies to the problem of human trafficking, where the focal ministry ranges from home ministry to women's ministry to foreign ministry. These focal ministries need to work closely to identify human trafficking risks, for example, when the transport sector stakeholders decide on regional corridor network development in order to ensure effective resource allocation for anti-trafficking prevention activities. ADB is in a strategic position to proactively bridge the gap in discussion between the transport sector stakeholders and the human trafficking sector stakeholders. A similar idea should also apply to the transport-HIV/AIDS linkages and other cross-cutting interfaces within the issue of RPGs.

118. Greater collaboration with regional bodies which focus on specific issues is an effective way for ADB to support RPGs. A noteworthy example of regional cooperation is the Mekong River Commission, which has in some form or another been in existence for almost 50 years, despite prolonged and widespread conflicts. Such organizations have the mandate for promoting cooperation and the technical expertise to design effective RPGs. They are, however, frequently prevented from realizing their full potential by shortage of financial resources, which ADB can provide either by itself or in partnership with other donors.

119. ADB's experience in the GMS has shown how its honest broker role can facilitate dialogue and concerted action when there is distrust and even hostility among the constituent partners as was the case in the GMS in 1990s. Perhaps lessons from the GMS can be utilized by ADB elsewhere, for example, in South Asia today. ADB's honest broker role can also be used to facilitate regional policy dialogue and the formation of regional policy framework on various development issues, in particular on RPGs.

PAST AND FUTURE ACTIVITIES IN RPGS

Table A1.1 ADB Regional Loans, 1994–2006

REGION	COUNTRY	LOAN NO.	PROJECT NAME	AMOUNT (\$M)	SUBSECTOR	Approval Year
GMS	CAM	1503	Siem Reap Airport	15.00	Civil Aviation	1996
Pacific	REG	2183	Establishment of the Pacific Aviation Safety Office	1.50	Civil Aviation	2005
GMS	LAO	1329	Theun-Hinboun Hydropower	60.00	Hydropower Generation	1994
GMS	LAO	1456	Nam Leuk Hydropower	52.00	Hydropower Generation	1996
GMS	LAO	2162	Greater Mekong Subregion: Nam Theun 2 Hydroelectric	20.00	Hydropower Generation	2005
GMS	REG	1969	GMS: Mekong Tourism Development (Cambodia)	15.60	Industry	2002
GMS	REG	1970	GMS: Mekong Tourism Development (Lao PDR)	10.90	Industry	2002
GMS	REG	1971	GMS: Mekong Tourism Development (Viet Nam)	8.50	Industry	2002
GMS	PRC	2116	Dali-Lijiang Railway	180.00	Railways	2004
GMS	PRC	1325	Yunnan Expressway	150.00	Roads & Highways	1994
GMS	LAO	1369	Champassak Road Improvement	48.00	Roads & Highways	1995
GMS	REG	1659	GMS: Phnom Penh to Ho Chi Minh City Highway (Cambodia)	40.00	Roads & Highways	1998
GMS	REG	1660	GMS: Phnom Penh to Ho Chi Minh City Highway (Viet Nam)	100.00	Roads & Highways	1998
GMS	PRC	1691	Southern Yunnan Road Development	250.00	Roads & Highways	1999
GMS	REG	1727	GMS: East-West Corridor (Lao PDR)	32.00	Roads & Highways	1999
GMS	REG	1728	GMS: East-West Corridor (Viet Nam)	25.00	Roads & Highways	1999
CAREC	REG	1774	Almaty-Bishkek Regional Road Rehabilitation (Kazakhstan Component)	52.00	Roads & Highways	2000
CAREC	REG	1775	Almaty-Bishkek Regional Road Rehabilitation (Kyrgyz Component)	5.00	Roads & Highways	2000
SASEC/SAARC	BAN	2121	Road Network Improvement & Maintenance Project	126.00	Roads & Highways	2003
SASEC/SAARC	BHU	2187	Road Network	27.30	Roads & Highways	2005
SASEC/SAARC	NEP	1876	Road Network Development	46.00	Roads & Highways	2001
GMS	CAM	1945	GMS: Cambodia Road Improvement	50.00	Roads & Highways	2002
GMS	LAO	1989	GMS: Northern Economic Corridor	30.00	Roads & Highways	2002
GMS	PRC	2014	Western Yunnan Roads Development	250.00	Roads & Highways	2003
CAREC	TAJ	2062	Dushanbe-Kyrgyz Border Road Rehabilitation	15.00	Roads & Highways	2003
CAREC	MON	2087	Regional Road Development	37.13	Roads & Highways	2004
SASEC/SAARC	NEP	2097	Subregional Transport Facilitation	20.00	Roads & Highways	2004
CAREC	KGZ	2106	Southern Transport Corridor Road Rehabilitation	32.80	Roads & Highways	2004
CAREC	TAJ	2196	Dushanbe-Kyrgyz Border Road Rehabilitation Phase II	29.5	Roads & Highways	2005
CAREC	AZE	2205	East-West Highway Improvement	49	Roads & Highways	2005
CAREC	AZE	2206	East-West Highway Improvement	3	Roads & Highways	2005
GMS	VIE	2222	GMS: Kunming-Haiphong Transport Corridor-Noi Bai-Lao Cai Highway	6	Roads & Highways	2005
CAREC	REG	1926	Regional Trade Facilitation and Customs Cooperation Program (Kyrgyz)	15.00	Trade	2002
CAREC	REG	1927	Regional Trade Facilitation and Customs Cooperation Program (Tajikistan)	10.00	Trade	2002
CAREC	REG	2113	Regional Customs Modernization and Infrastructure Development (Kyrgyz)	7.50	Trade	2004
CAREC	REG	2114	Regional Customs Modernization and Infrastructure Development (Tajikistan)	10.70	Trade	2004
CAREC	REG	1976	Regional Power Transmission Modernization (Uzbek Component)	70.00	Transmission & Distribution	2002
CAREC	REG	1977	Regional Power Transmission Modernization (Tajik Component)	20.00	Transmission & Distribution	2002
GMS	CAM	2052	Greater Mekong Subregion Transmission	44.30	Transmission & Distribution	2003

AZE = Azerbaijan, BAN = Bangladesh, BHU = Bhutan, CAM = Cambodia, CAREC = Central Asia Regional Economic Cooperation, GMS = Greater Mekong Subregion, KGZ = Kyrgyz Republic, LAO = Lao People's Democratic Republic, MON = Mongolia, NEP = Nepal, PRC = People's Republic of China, REG = regional, SAARC = South Asian Association for Regional Cooperation, SASEC = South Asia Subregional Economic Cooperation, TAJ = Tajikistan, and VIE = Viet Nam.

Source: ADB internal database on Loan, TA, Grant, and Equity Approvals as of 30 March 2007.

Table A1.2. Grant-Financed Regional Public Goods by Year and by Subpillar, 1991–2006 (\$ Million)

Year	Subpillar			Total
	Clean Energy and Energy Efficiency	Communicable Diseases	Natural Disaster Response	
1991	0.00	0.00	0.00	0.00
1992	0.00	0.00	0.00	0.00
1993	-	-	-	-
1994	3.00	0.00	0.00	3.00
1995	-	-	-	-
1996	0.00	0.00	0.00	0.00
1997	0.00	0.00	0.00	0.00
1998	0.00	0.00	0.00	0.00
1999	0.00	0.00	0.00	0.00
2000	0.00	0.00	0.00	0.00
2001	0.00	8.00	0.00	8.00
2002	0.00	0.00	0.00	0.00
2003	0.00	0.00	0.00	0.00
2004	1.50	0.00	1.00	2.50
2005	0.00	38.00	780.40	818.40
2006	0.00	67.00	18.74	85.74
Total	4.50	113.00	800.14	917.64

- = no data.

Source: ADB internal database on Loan, TA, Grant and Equity Approvals as of 30 September 2006.

Table A1.3. Cumulative Amount of Grant-Financed Regional Public Goods by Fund Source, 1991–2006

Source	Subpillar			Total	%
	Clean Energy and Energy Efficiency	Communicable Diseases	Natural Disaster Response		
ADB	0.00	98.00	650.00	748.00	81.51
Asian Development Fund IX	0.00	98.00	0.00	98.00	10.68
Asian Tsunami Fund	0.00	0.00	570.00	570.00	62.12
Pakistan Emergency Fund	0.00	0.00	80.00	80.00	8.72
Australia	0.00	3.50	0.00	3.50	0.38
European Commission	0.00	0.00	88.20	88.20	9.61
JFPR	1.50	8.00	22.00	31.50	3.43
Netherlands	3.00	0.00	25.24	28.24	3.08
New Zealand	0.00	3.50	0.00	3.50	0.38
Sweden	0.00	0.00	14.70	14.70	1.60
Total	4.50	113.00	800.14	917.64	100.00

JFPR = Japan Fund for Poverty Reduction.

Source: ADB internal database on Loan, TA, Grant and Equity Approvals as of 30 September 2006.

Table A1.4. Work Program and Budget Framework for Cooperation in Regional Public Goods, 2007-2009
Lending and ADF Grants

Project Name	Amount (\$ million)				Subsector
	OCR	ADF Loan	ADF Grant	Total	
<i>2007</i> none					
<i>2008</i> none					
2009	125	50	30	205	
SARD	125	0	0	125	
1 Regional Cooperation 4	125			125	Other RPGs (Integrated)
SERD	0	50	30	80	
2 CAM: GMS Flood Management and Mitigation		20		20	Natural Disaster Response
3 VIE: GMS Flood Management and Mitigation		30		30	Natural Disaster Response
4 CAM: GMS Capacity Building for HIV/AIDS Prevention			10	10	Communicable Diseases
5 LAO: GMS Capacity Building for HIV/AIDS Prevention			5	5	Communicable Diseases
6 VIE: GMS Capacity Building for HIV/AIDS Prevention			15	15	Communicable Diseases
Total Pillar 4	125	50	30	205	

ADF = Asian Development Fund, CAM = Cambodia, GMS = Greater Meking Subregion, LAO = Lao People's Democratic Republic, OCR = ordinary capital resources, RPG = regional public goods, SARD = South Asia Department, SERD = Southeast Asia Department, and VIE = Viet Nam.

Source: Strategy and Policy Department. ADB.

Table A1.5. Work Program for Cooperation in Regional Public Goods, 2007–2009

NonLending Activities

Department	Project Name	Amount (\$'000)	Key Area
2007		41,800	
	Communicable Diseases	3,250	
1	RSDD Fighting HIV/AIDS in Asia and the Pacific II	3,000	Communicable Diseases
2	SERD Strengthening HRD Cooperation in the GMS	250	Communicable Diseases/Human Trafficking
	Environment	2,300	
3	EARD Study on Interprovincial Acid Rain Control	900	Environment
4	SERD GMS Core Environment Program (Phase 1, Supplemental)	1,000	Environment
5	RSDD Mobilizing Markets for Ecosystem Services	400	Environment
	Governance	5,650	
6	PARD Supports for Results-Based Management in the Pacific	1,000	Governance
7	SERD GMS Phnom Penh Plan for Development Management–Phase III	4,000	Governance
8	ERD Seventeenth Tax Conference	150	Governance
9	OGC Legal Aspects of Regional Economic and Financial Integration–Phase I	500	Governance
	Natural Disaster Response	2,400	
10	SERD GMS Flood Management and Mitigation	2,000	Natural Disaster Response
11	RSDD Disaster Preparedness and Emergency Response	400	Natural Disaster Response

Table A1.5. Work Program for Cooperation in Regional Public Goods, 2007–2009

NonLending Activities				
Department	Project Name		Amount (\$'000)	Key Area
Others			28,200	
12	PARD	Strengthening Land and Natural Resource Management in PDMCs	1,000	Other RPGs
13	PARD	Leadership Enhancement and Advancement Project (LEAP)	1,000	Other RPGs
14	SERD	Supporting Capacity Strengthening and Regional Cooperation in Agriculture Science and Technology in the GMS	500	Other RPGs
15	SERD	Enhancing the Development Effectiveness of the GMS Program (Supplemental)	150	Other RPGs
16	BPMSD	Orientation Program for Officials of ADB's Developing Member Countries under RETA	780	Other RPGs
17	COSO	Seminars on Capacity Building for Project Implementation and Administration	400	Other RPGs
18	COSO	Project Performance Management System (PPMS) II	800	Other RPGs
19	ERD	Asian Development Outlook 2008	420	Other RPGs
20	ERD	Policies for Pro-Poor Growth	500	Other RPGs
21	RSDD	Supporting the MDGs in the Asia-Pacific Region, Phase III	300	Other RPGs
22	RSDD	Good Practices in Poverty Reduction to Support MTS II	200	Other RPGs
23	RSDD	Involuntary Resettlement Capacity Building	500	Other RPGs
24	RSDD	Supporting Community Driven Development in Selected DMCs	1,000	Other RPGs
25	RSDD	Promoting Women Entrepreneurship in Selected DMCs	400	Other RPGs
26	RSDD	Water Financing Program Support	20,000	Other RPGs
27	RSDD	External Forums for Selected Sectors and Thematic Priorities at the Asian Development Bank—Phase II	250	Other RPGs
2008			32,060	
Clean Energy and Energy Efficiency			800	
1	EARD	Regional Cooperation on Clean Energy	800	Clean Energy and Energy Efficiency
Communicable Diseases			2,500	
2	SERD	GMS Capacity Building for HIV/AIDS Prevention (CAM/LAO/VIE)	500	Communicable Diseases
3	RSDD	Fighting HIV/AIDS in Asia and the Pacific III	2,000	Communicable Diseases
Environment			1,100	
4	CWRD	Demonstration of POPs Management & Monitoring System	600	Environment
5	RSDD	Asian Environment Outlook 2009	500	Environment

Table A1.5. Work Program for Cooperation in Regional Public Goods, 2007–2009

NonLending Activities				
Department	Project Name		Amount (\$'000)	Key Area
Governance			1,150	
6	OGC	Legal Aspects of Regional Economic and Financial Integration–Phase II	500	Governance
7	ERD	Eighteenth Tax Conference	150	Other RPGs
8	RSDD	Gender-Responsive Decentralized Governance	500	Governance
Human Trafficking			400	
9	RSDD	Integrating Concerns of Trafficking in Women and Children in Regional Cooperation – SASEC and CAREC	400	Human Trafficking
Others			26,110	
10	CWRD	Pasture Land Management and Monitoring	300	Other RPGs
11	PARD	Support for Implementing the Pacific Plan II	1,000	Other RPGs
12	PARD	Pacific Islands Economic Report	1,000	Other RPGs
13	SERD	GMS Program to Support the Implementation of the Core Agricultural Sector Program	1,000	Other RPGs
14	ERD	Asian Development Outlook 2009	460	Other RPGs
15	ERD	Key Indicators of Developing Asia and Pacific Countries	150	Other RPGs
16	ERD	Social Inequality in Asia	500	Other RPGs
17	RSDD	Targeted Capacity Building for Mainstreaming Indigenous Peoples Concerns in Development	600	Other RPGs
18	RSDD	Strengthening Implementation of Infrastructure Projects through Participatory Monitoring	600	Other RPGs
19	RSDD	Water Financing Program Support (Supplementary 1)	20,000	Other RPGs
20	RSDD	Exploring New Opportunities in the Areas of Science and Technology Education and ICT in Education	500	Other RPGs
2009			17,600	
Clean Energy and Energy Efficiency			800	
1	EARD	Regional Cooperation on Clean Energy	800	Clean Energy and Energy Efficiency
Communicable Diseases			800	
2	SERD	GMS Communicable Disease Control Project II	800	Communicable Diseases
Environment			1,200	
3	CWRD	CACILM Multicountry Support Project II	200	Environment
4	SERD	GMS Biodiversity Corridor Conservation Program	1,000	Environment
Governance			1,150	
5	ERD	Nineteenth Tax Conference	150	Other RPGs

Table A1.5. Work Program for Cooperation in Regional Public Goods, 2007–2009
NonLending Activities

Department	Project Name	Amount (\$'000)	Key Area
6 SERD	GMS Phnom Penh Plan for Development Management–Phase IV	500	Governance
7 SERD	GMS Phnom Penh Plan for Development Management–Phase V	500	Governance
Others		13,650	
8 ERD	Asian Development Outlook 2010	500	Other RPGs
9 ERD	Central Repository of Survey Micro Data	150	Other RPGs
10 ERD	Social Protection in Asia	500	Other RPGs
11 RSDD	Improving Post-Secondary Science & Technology Education	1,000	Other RPGs
12 RSDD	Involuntary Resettlement, Impoverishment Risks and Approaches to Sustainable Livelihood	500	Other RPGs
13 RSDD	Gender Capacity Building in DMCs –Phase 3	1,000	Other RPGs
14 RSDD	Water Financing Program Support (Supplementary 2)	10,000	Other RPGs
Total		91,460	

BPMSD = Budget, Personnel, and Management Systems Department, CACILM = Central Asian Countries Initiative for Land Management, CAM = Cambodia, CAREC = Central Asia Regional Economic Cooperation, COSO = Central Operations Services Office, CWRD = Central and West Asia Department, DMC = developing member country, EARD = East Asia Regional Department, ERD = Economics and Research Department, GMS = Greater Mekong Subregion, HIV/AIDS = human immunodeficiency virus/acquired immune deficiency syndrome, HRD = Human Resource Development, ICT = Information and Communication Technology, MTS = Medium Term Strategy, OGC = Office of the General Counsel, PARD = Pacific Department, PDMC = Pacific developing member country, POP = persistent organic pollutant, RETA = regional technical assistance, RPG = regional public good, RSDD = Regional and Sustainable Development Department, SARD = South Asia Department, SASEC = South Asia Subregional Economic Cooperation, and SERD = Southeast Asia Department, VIE = Viet Nam.

Source: Strategy and Policy Department, ADB.

METHODOLOGY USED FOR CLASSIFYING RETAS INTO RPG PILLARS AND PILLAR 4 KEY AREAS

General Principle

1. All regional technical assistance (RETAs) approved from 1967 to 30 September 2006 were exhaustively classified into the four pillars of the Regional Cooperation and Integration (RCI) Strategy, since theoretically all regional activities promote regional cooperation and integration. RETAs that do not fall under any of the first three pillars are classified as regional public goods (RPGs), which is the fourth pillar, as all these involve generation of knowledge in the public domain. Those falling under pillar 4—regional public goods—were further classified into six key areas: communicable diseases, clean energy and energy efficiency, environment, human and drug trafficking, governance including anti-money laundering, and natural disaster response. Within pillar 4, those RETAs that do not fall under any of these six key areas are classified as “Other RPGs”.

2. In classifying the RETAs to the appropriate RCI pillar or RPG sub-pillars, various characteristics of the project such as title, objectives, sector, subsector, and theme were considered.¹ Overall, the classification was guided by the results framework for the RCI strategy. Generally, the classification principles followed for each pillar are as follows:²

Pillar 1. Regional and Subregional Economic Cooperation Programs (Cross-border Infrastructure and Related Software)

Sectors/subsectors:

- Agriculture and natural resources sector – Irrigation and drainage subsector only.
- Energy sector – Conventional energy generation, transmission and distribution, and energy sector development.
- Transport and communications sector – all subsectors.
- Multisector – if major project focus is on cross-border infrastructure and related software.

Activities:

- Regional policy dialogue including support for regional agreements, policies, and harmonization of sector regulations and legislations; creation of regional and subregional infrastructure networks; and support for policy reforms to facilitate private sector investments in cross-border infrastructure projects.
- Partnership with regional institutions on implementation of joint activities.
- Support for studies and information dissemination including preparatory and feasibility studies for cross-border infrastructure projects, books, journals, briefs, updates, research, working papers, reports, conferences, press conferences, interviews, ADB seminars, and ADB working papers.
- Capacity building and institutional strengthening including training programs for government officials, institutions, and agencies on issues related to physical connectivity and related software.

Pillar 2. Trade and Investment Cooperation and Integration

Sectors/subsectors:

- Industry and trade sector – all subsectors. It is notable that for the industry and small- and medium-sized entrepreneurs (SME) subsectors, most projects were classified under Pillar 4 as “Other RPGs” reflecting their project objectives. Only those activities that were connected with regional trade and investment cooperation were classified as belonging to this pillar.

¹ Generally, thematic classification for RETAs is available in ADB’s database only for the period 2001-2006.

² The sector and theme classification of ADB is given in *Updating Sector and Theme Classification at ADB* (July 2004), available at www.adb.org/Documents/Policies/Sector-Theme-Classification/default.asp.

<p>Activities:</p> <ul style="list-style-type: none"> Promoting policy dialogue on trade and investment among regional and subregional forums. Support for studies and information dissemination including research on free-trade agreement (FTA) issues; design of model frameworks of FTA negotiations; books, briefs, updates, journals, research, working papers, and reports on RCI issues; press conferences, conferences, ADB seminars on RCI, ADB working papers on trade and investment; and development and maintenance of Asian Regional Integration Center website. Capacity building and institutional strengthening through support for training of government officials, institutions, and agencies on FTA issues; and exchange of experience among government officials, institutions, and agencies. Strengthening partnership with regional institutions through memorandum of understanding (MOU), implementation of joint activities with stakeholders, presentation of papers on trade, and investment at regional and subregional forums. 	
<p>Pillar 3. Monetary and Financial Cooperation and Integration</p>	
<p>Sectors/subsectors:</p> <ul style="list-style-type: none"> Finance sector – all subsectors. However, only those activities that contributed to monetary and financial cooperation in the region were classified as belonging to this pillar. Further, most projects under the finance sector development subsector were seen as contributing to regional knowledge base and were classified under Pillar 4 as “Other RPGs,” based on project objectives and outputs. 	
<p>Activities:</p> <ul style="list-style-type: none"> Strengthening regional policy dialogue on monetary and financial cooperation among various regional bodies, forums, and initiatives including support for the Asian Bonds Market Initiative, the Chiang Mai Initiative, and the semiannual Asia Economic Monitor and Asia Bond Monitor. Support for studies and information dissemination on Asian currency indexes, and issues related to monetary and financial cooperation; books, briefs, journals, research, working papers, and reports on monetary and financial cooperation and integration; development and strengthening of the Asian Bonds Online website. Capacity building and institutional strengthening in regional economic and financial monitoring, support to the Association of Credit Rating Agencies in Asia and Asia-Pacific Economic Cooperation (APEC) financial regulators; and establishment of a network among banks and security market regulators in DMCs. Strengthening partnerships with regional institutions through MOUs and implementation of joint activities with stakeholders such as projects/programs, research, regional conferences/workshops/seminars, training, and other similar events to promote RCI. 	
<p>Pillar 4. Cooperation in Regional Public Goods</p>	
Key Area	Sector/subsector
1. Communicable diseases	<ul style="list-style-type: none"> Health, nutrition and social protection sector – all subsectors depending on project title and objectives.
2. Clean energy and energy efficiency	<ul style="list-style-type: none"> Energy sector – hydropower generation, renewable energy generation. Some RETAs under energy sector development subsector were classified under this subpillar if they tackle clean energy and energy efficiency.
3. Environment	<ul style="list-style-type: none"> Agriculture and natural resources sector – environment and biodiversity subsector. Water supply, sanitation and waste management sector – waste management subsector.
4. Human and drug trafficking	<ul style="list-style-type: none"> Various sectors – RETAs were classified under this key area based on project title and objectives.
5. Governance	<ul style="list-style-type: none"> Law, economic management and public policy sector – anti-money laundering, national government administration, law and judiciary, subnational government administration subsectors. Regional activities that contributed to improving

	governance in the region were classified as belonging to this subpillar. Most projects under the economic management, and public finance and expenditure management subsectors were seen as contributing to general knowledge base in the region and were classified under “Other RPGs”.
6. Natural disaster response	<ul style="list-style-type: none"> • Various sectors depending on project title and objectives.
7. Other RPGs	<ul style="list-style-type: none"> • Agriculture and natural resources sector – (i) agricultural production, agro processing and agribusiness; (ii) fishery; (iii) livestock; and (iv) agriculture sector development subsectors. Some projects under (i) forest and (ii) water resource management subsectors were also classified here based on project objectives. • Education sector – all subsectors. • Energy sector – energy sector development – majority of the projects under this subsector were classified as other RPGs. • Finance sector – finance sector development – majority of the projects under this subsector were classified as other RPGs. • Health, Nutrition and Social Protection sector – all subsectors except those dealing with communicable diseases. • Industry and trade sector – Industry and SME subsectors – all projects not dealing with regional cooperation in trade and investment. • Law, economic management and public policy – economic management, and public finance and expenditure management. Majority of the projects under these subsectors were classified as other RPGs. • Water supply, sanitation and waste management sector – (i) water supply and sanitation and (ii) integrated subsectors. • Multisector – all projects except those dealing with cross-border infrastructure.
<p>Activities:</p> <ul style="list-style-type: none"> • Supporting policy dialogue and promotion of regional initiatives to encourage private sector participation in cross-border projects in the above areas. • Supporting studies and information dissemination through publication of books, briefs, updates, journals, working papers, reports, studies, conferences, press conferences, ADB seminar series, and ADB working papers; and technical support for research and development, and maintenance of websites on the above areas. • Supporting capacity building and institutional strengthening for government officials, institutions and agencies on issues concerning the above areas and support for establishment of networks of early warning and monitoring systems of major environmental incidents. • Strengthening partnership with regional institutions to support cooperation in addressing cross-border issues, and formulation and implementation of joint programs with international organizations. • For “Other RPGs” these include activities that are regional in scope but focus on local and national policies and strategies. For example, regional conferences on public expenditure management is considered as “Other RPGs”. Knowledge building on a regional basis on sectors and areas not included in the three RCI pillars nor in the six key RPG areas is also included under “Other RPGs”. 	

Note: The above table only provides a general road map on how RETAs were classified. As in any classification system, exceptions were made based on project objectives and outputs.

Supporting Provision of Regional Public Goods in the Asia and Pacific Region

The development performance of the Asia and Pacific region during the last quarter of a century is without precedent in the annals of world economy. However, there are major risks facing the continuation of this trend in the future. One interesting characteristic of addressing many of the risks—such as managing global imbalances, helping lagging regions and states under stress, reducing carbon intensity of growth, and checking spread of communicable diseases—is that managing them effectively requires collective regional action.

Supporting Provision of Regional Public Goods in the Asia and Pacific region focuses on regional public goods (RPGs), which is the fourth pillar of ADB's Regional Cooperation and Integration (RCI) Strategy. The publication provides an interesting backdrop of insights from theories of public goods and intergovernmental fiscal relations, and discusses the new RCI Strategy, and ADB's recent activities and current programs in the provision of RPGs. The publication also attempts to serve as a useful input for drawing up an ADB action plan to support RPG provisions in the future, and for undertaking dialogue, consensus building efforts and operational activities related to RPGs.

About the Asian Development Bank

ADB aims to improve the welfare of the people in the Asia and Pacific region, particularly the nearly 1.9 billion who live on less than \$2 a day. Despite many success stories, the region remains home to two thirds of the world's poor. ADB is a multilateral development finance institution owned by 67 members, 48 from the region and 19 from other parts of the globe. ADB's vision is a region free of poverty. Its mission is to help its developing member countries reduce poverty and improve their quality of life.

ADB's main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance. ADB's annual lending volume is typically about \$6 billion, with technical assistance usually totaling about \$180 million a year.

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