

Asian Economic Cooperation
and Integration: Progress,
Prospects, and Challenges

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Increased Connectivity in Asia: Empirical Evidence and Issues

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The presence of transportation and communication networks is a key element of any integration plan. Infrastructure development and connectivity are also key components of economic development in Asia.

Regional and subregional economic cooperation programs always involve several geographically connected countries, especially the border areas of those countries. Border regions usually are underdeveloped areas because they are far from commercial centers in every country. Moreover, geographical difficulties, such as high mountains and thick forests, make any infrastructure development almost technically impossible to implement. Thus, increasing connectivity in such regions faces tough challenges.

A Review of Regional Infrastructure Developments in Asia

There are 10 major ongoing regional and subregional cooperation initiatives in Asia: Greater Mekong Subregion (GMS); Central Asia Regional Economic Cooperation (CAREC); South Asia Subregional Economic Cooperation (SASEC); Indonesia, Malaysia, Thailand, Growth Triangle (IMT-GT); Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA); People's Republic of China (PRC)-Mongolia; Pacific developing member countries (DMCs); Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, Thailand Economic Cooperation (BIMSTEC), Tumen River Area Development Program; and New Silk Road Development Project (Table 12.1). These projects share many common features: (i) They are all located in areas far from commercial centers, such as participating countries' capital cities. (ii) Many multilateral

organizations are deeply involved in these projects. The Asian Development Bank (ADB) has provided support to eight of them. (iii) As regards loans and investments, most of those projects are focused on infrastructure development. For example, all of ADB's loans, except for one tourism loan in GMS and one trade facilitation project in CAREC, went to infrastructure development projects. (iv) The early 1990s witnessed the first wave of regional cooperation in Asia. Almost all subregional cooperation initiatives, especially those that were supported by ADB, were initiated during this period. But because of the Asian crisis, regional and subregional cooperation suffered. As the economic environment in Asia generally weakened, governments refocused their attention on national economic issues, especially those affecting their financial and industrial centers. In the last few years, because of the uncertainty of the new round of multilateral negotiations under the World Trade Organization (WTO), a

TABLE 12.1

Ten Major Regional/Subregional Cooperation Projects in Asia

Subregional Cooperation Initiative	Start	Participating Countries	ADB Support
GMS	1992	Viet Nam, Lao PDR, Myanmar, Thailand, Cambodia, and PRC (Yunnan Province)	One of the most successful models of regional cooperation in Asia
CAREC	1997	PRC, Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan	The most promising and quick development program, after GMS
SASEC	1997	Bangladesh, Bhutan, India, and Nepal	TA
IMT-GT	1994	Malaysia, Indonesia, and Thailand Growth Triangle	Extensive TA support from ADB
BIMP-EAGA	1994	Brunei Darussalam, Indonesia, Malaysia, and Philippines East ASEAN Growth Area	Extensive TA support from ADB
PRC-Mongolia Pacific DMCs	2000 NA	PRC and Mongolia ADB's promotion of regional cooperation has focused on fisheries, airline and airspace management, regional stock exchanges, public sector management, and governance and money laundering	One TA project
BIMSTEC	1997	Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand	TA
Tumen River Area Development Program	1995	PRC, DPRK, Mongolia, Russia, and Republic of Korea	Not involved
New Silk Road Development Project	1995		Not involved

ASEAN=Association of Southeast Asian Nations; BIMSTEC=Bangladesh, India, Myanmar, Sri Lanka, Thailand Economic Cooperation; BIMP-EAGA=Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area; CAREC=Central Asia Regional Economic Cooperation; DMC=developing member country; GMS=Greater Mekong Subregion; DPRK=Democratic People's Republic of Korea; IMT-GT=Indonesia, Malaysia, Thailand Growth Triangle; Lao PDR=Lao People's Democratic Republic; PRC=People's Republic of China; SASEC=South Asia Subregional Economic Cooperation.
Source: Asian Development Bank (ADB).

second round of regional and subregional cooperation emerged. A new momentum is building up again in those old initiatives.

As far as infrastructure developments are concerned, there were 17 loans in all and more than \$3.1 billion worth of investments in these subregions: 14 loans and more than \$2.83 billion went to GMS, and the remaining 3 loans and \$273.3 in investments to CAREC.

Two issues are related to this type of infrastructure investment: one is the uneven investment among those subregions and the other is the gap in financial investment in infrastructure. According to Fay and Yepes (2003) the needed infrastructure investments should amount to about \$465 billion per annum or 5.5% of developing countries' gross domestic product over 2005–2010. Most subregions have inadequate tax revenues to finance local infrastructure development needs. Some of them even depend on transfers from central governments. Without sufficient local investment, even internationally sourced funds would not be enough to support local infrastructure development.

This financial difficulty will remain in the next few years. According to the planned ADB loans for regional cooperation in the 2004–2006, the majority of planned investments are for transportation infrastructure (64% of planned lending) followed by energy infrastructure (28%), and most of them are concentrated in GMS and CAREC.

The Nature of Cross-Border Infrastructure Development in Asia

Asia differs from other parts of the world with regard to economic disparities. There are several developed or relatively developed economies, such as Japan and the four newly industrialized economies, namely, Hong Kong, China; Republic of Korea; Singapore; Taipei, China as well as many developing economies, such as PRC, Lao People's Democratic Republic, India, etc. In some areas of these countries, the poor population is large, and will require huge assistance from international organizations, such as the World Bank, ADB, United Nations Development Programme (UNDP), etc., to reduce poverty. Cross-border infrastructure development is expected to create a sound environment in geographically proximate areas of neighboring countries to promote trade and investment there. However, to examine the implications of the previous discussions, there is a need to take a look at the nature of cross-border infrastructure development first.

A Bottom-Up Approach

According to Hideaki Tanaka (2004), there are two approaches to infrastructure development. One is bottom-up infrastructure development that aims to eliminate poverty in a given geographic area; and the other is the building of core infrastructure

that aims to support national economic development. The main difference between the two approaches is that the first takes poverty reduction as the first priority, while the second addresses economic development in terms of higher gross value-added. The second approach can reduce poverty indirectly through large-scale economic development, taking advantage of available resources to accelerate the speed of capital accumulation. The direct and immediate effect in terms of poverty reduction would not be evident. In contrast, the first approach focuses on poverty reduction to obtain direct and immediate effects. Therefore, the key step in the first approach is to pay attention to the extent of poverty reduction, whereas the key step in the second approach is to make a forecast of future demand.

All multilateral financial organizations, such as ADB, World Bank, and UNDP, that have deep involvement in regional and subregional cooperation projects adopt the first approach in dealing with infrastructure development. Poverty reduction is their top priority. Therefore, regional and subregional cooperation initiatives, in general, and infrastructure investment, in particular, in Asia all belong to the bottom-up approach. The fact is that in Asia most of the poor live in remote and isolated areas, especially in border regions. Those areas urgently need to set up linkages with the outside world—such as highways, railways, and telecommunications—to take advantage of their rich resources or cheap labor. ADB has responded to these needs through its cross-border infrastructure development programs.

Cross-border infrastructure development programs could make use of complementarities and economies of scale in geographically contiguous areas of neighboring countries. Such programs would, at the very least, establish physical linkage among neighboring countries through transportation and telecommunications services. Consequently, the cost of factor mobility will be reduced, and greater intraregional trade and investment will be encouraged.

A Regional Public Good Approach

Devlin and Estevadeordal (2002) consider trade and cooperation as a regional public good. So is regional and subregional infrastructure development.

In terms of transnational public goods, nonrivalry and nonexclusive properties are beyond national borders, and show themselves in two ways. One way is to deal with specific projects, such as, cleaning up a lake or a transnational park, preserving a rain forest; preventing or mitigating natural disasters, reducing acid rain; cooperating on power grids and other energy projects, airport hub-spoke networks, transportation infrastructure; conducting research on transnational diseases, agriculture, and other topics; and harmonization of policies (e.g., financial policy, labor policy, etc.). The other way is to establish formal regional integration agreements (RIAs), such as a free trade area, a customs union, etc.

With regard to the first way, or focusing on specific projects, cross-border coordination can be difficult to attain. Cooperation between states is usually defined as

mutual adjustment of state policies to achieve outcomes that all prefer to the status quo (Keohane 1984). Thus, project-specific cooperation also needs all participating states to coordinate policy consciously so as to extract mutual benefits for all participants. Although it is voluntary, cooperation requires some form of subordination of the members' sovereignty to the interests of the group. This subordination of internal interests is always associated with some costs to participants. The costs could be political or economic. With respect to political costs, participants may have to make concessions regarding territory, the right of development, etc. As regards economic costs, some benefits that could have been solely enjoyed by one country would now have to be shared with other participants.

More importantly, the full benefits of cooperation should be internalized not only by participants. It is difficult to exclude free riders from these benefits. And in some instances, they should not be excluded either, especially if the objective is to make more poor people rich. If the full benefits of cooperation could not be internalized, as in the case of project-specific cooperation, there would be lack of incentives for cooperative or collective actions.

The second way involves forming a formal regional arrangement first, and then promoting cross-border infrastructure cooperation. Traditionally, regional integration means that a group of countries form a simple free trade agreement first, and then move on to deeper forms of economic integration. In this approach, other forms of cooperation are for the most part ancillary to the whole process of integration. Deepening integration is the focus of this approach. In recent years, the situation has changed. Other forms of cooperation, as an integral part of this process, have been playing a more and more important role. RIAs are just instruments for responding to and managing increasing globalization and technological changes. In this context, regional public goods are needed more than ever. On the other hand, in order to provide regional public goods, formal regional cooperation frameworks are needed to create a sound environment for public goods providers. If there were economic benefits, the incentives for cooperation would be greater. However, if the goal is simply poverty reduction without considering economic and business benefits, there would be no incentive for the provision of public goods. In this context, therefore, trade integration and cooperation are endogenous components of this process. Entering into a RIA is the first step, without which the provision of public goods through cross-border infrastructure cooperation would just be lip service. However, RIAs are not arrived at in one day. They require a lot of coordination cost as discussed earlier. In terms of the second approach, therefore, under the regional integration framework, it could be easier for specific projects to be operated jointly. However, the RIA itself is a set of coordination that involves many fields and countries, and would require more efforts to be exerted by participating countries to finish negotiations and reach agreements.

In the last few years, because of the new development in regional and subregional economic integration or free trade agreements, almost all Asian countries have

become members of at least one RIA. So, the platform for the provision of regional public goods has changed from that of project-specific to RIAs. For example, before the Association of Southeast Asian Nations (ASEAN)-PRC free trade agreement was signed in November 2002, Yunnan Province of the PRC participated in GMS only on a project-specific basis. Later, however, the GMS project became one of the 16 top projects of the ASEAN-PRC economic cooperation.

Issues Related to Cross-Border Infrastructure Development

Low Potential for Regional and Subregional Cooperation

Given the types of regional and subregional infrastructure development projects, they are less attractive in an economic sense.

Two of the foremost criteria for generating meaningful cooperation among member countries are trade intensity and transportation linkages of the region. The more trade among the members, the more cooperation is needed when members are faced with different levels of factor endowments (Georgakopoulos et al 1994, Robson 1998). If RIAs can reallocate factors of production within the bloc and improve trade structure and productivity level, then cooperation would be successful (Anderson and Norheim 1993, Balassa 1989). Furthermore, for participating economies, income levels and openness of the economy matter. In most cases, countries with higher incomes and better infrastructure facilities gain more from free trade than poor members (Ben-David 1996). There is ample empirical evidence showing that RIAs among open economies develop faster than those among closed economies (World Bank 2000).

In Asia, most economies that are involved in cross-border infrastructure cooperation are developing economies with varying degrees of economic openness. The majority of the areas involved are remote and lack linkages with the outside world. The question is, can they realize economic gains from cooperative arrangements?

Let us take BIMSTEC as an example (De 2004).

The openness of BIMSTEC member countries to the subregion is very low compared with their openness to the outside world (Table 12.2). In terms of intra- and extra-BIMSTEC trade share, Table 12.3 tells the same story. All BIMSTEC members except Bangladesh saw increases in trade shares within BIMSTEC and declining trade shares with countries outside of BIMSTEC during 1995–2001. However, the shares of extra-bloc trade are higher than those of intra-bloc trade in all member countries, especially those of the most important members, such as India and Thailand. These are all low-income developing countries. If trade intensity is so limited among them, a proposal for subregional cooperation and integration would not be a sound initiative in an economic sense.

TABLE 12.2

Openness of BIMSTEC Members

Country	Openness to World (%)		Openness to BIMSTEC (%)	
	1995	2001	1995	2001
Bangladesh	27.92	37.74	3.05	3.20
India	25.59	29.08	0.68	0.83
Myanmar	3.15	3.78	1.07	3.78
Nepal	58.83	54.42	6.83	14.80
Sri Lanka	81.42	80.62	5.02	5.47
Thailand	90.43	126.45	0.92	2.43
BIMSTEC(6)	47.89	55.35	2.93	5.09

BIMSTEC=Bay of Bengal Initiative for Multisectoral Technical and Economic Cooperation.

Notes:

(i) Openness to world=trade in world as percentage of GDP.

(ii) Openness to BIMSTEC=trade in BIMSTEC as percentage of GDP.

(iii) GDP is in current \$ million.

Sources: World Bank, *World Development Indicators* CD-ROM, 2003; IMF, *Direction of Trade Statistics Yearbook*, 2002.

TABLE 12.3

Countrywise Intra- and Extra-BIMSTEC Trade Share

Country	Export Share (%)				Import Share (%)				Trade Share (%)			
	Intra-Bloc		Extra-Bloc		Intra-Bloc		Extra-Bloc		Intra-Bloc		Extra-Bloc	
	1995	2001	1995	2001	1995	2001	1995	2001	1995	2001	1995	2001
Bangladesh	2.05	1.46	97.95	98.54	16.84	15.67	83.16	84.33	12.03	10.14	87.97	89.86
India	6.37	6.22	93.63	93.78	1.35	2.33	98.65	97.67	3.71	4.12	96.29	95.88
Myanmar	15.69	37.49	84.31	62.51	1.07	17.40	98.93	82.60	6.02	27.63	93.98	72.37
Nepal	9.26	35.03	90.74	64.97	35.33	46.49	64.67	53.51	27.99	43.07	72.41	56.93
Sri Lanka	1.66	2.54	98.34	97.46	13.19	13.10	86.81	86.90	7.90	8.33	92.10	91.67
Thailand	1.45	1.90	98.55	98.10	0.97	2.50	99.03	97.50	1.18	2.19	98.82	97.81

BIMSTEC=Bay of Bengal Initiative for Multisectoral Technical and Economic Cooperation.

Source: De (2004).

Actually, most regional and subregional cooperation share this feature; that is, trade intensity is very low between member countries, and openness to the outside world is much higher than that to the member countries. Thus, even if the potential for cooperation is high, there is still a long way before it can be commercially tapped.

Less Private Sector Involvement

Less profit means less attractiveness of projects to private enterprises. Resources from the public sector are in short supply in almost all developing countries. Even in Korea, the difference between infrastructure investment requirements and government spending from 2002 to 2011 is estimated to be around \$23 billion–\$33 billion (Sung 2004). In other low-income countries, the situation is worse. To fill the financial

gap, active private sector involvement in infrastructure development is therefore necessary.

If no private investment is attracted to infrastructure projects, the purpose of this process cannot be achieved. The greater the private sector involvement, the more prosperous would these regions be. To attract private investment, the profit expectation is very important. However, no profits can be expected from projects following the bottom-up approach up to now. Besides, cross-border investment also faces more uncertainty compared with a national one. Any unfavorable change in member countries will affect these projects.

Long-Term Commitments

The areas involved in cross-border infrastructure development are remote from the center of industrialization and have low levels of economic development. For these reasons, central governments usually neglect their demand for development and provide them little financial support. Without strong support from the private sector, and the local and central government, recouping investments in these areas and projects will take a long time and can worsen the financial difficulty of those projects.

For instance, in 2001 government expenditure in the capital of the PRC, Beijing, was 5 times more than that in Ningxia, a western province, although the population in Beijing is just 2.5 times of that in Ningxia. Among government expenditure items, expenditure for construction in Beijing is around 4 times more than that in Ningxia (China Statistical Yearbook 2002). One dollar invested in Beijing infrastructure gets more profit than a dollar invested in Ningxia. Therefore, it takes a shorter time to get the investment repaid in Beijing.

A Big-Package Investment

A cross-border infrastructure project is more like a regional poverty reduction initiative, not just a single or several projects at all. To make it effective, a comprehensive set of projects and investments, such as supporting and related investments, would be needed. Therefore, the transition process from poverty reduction types of projects to business investment projects is long and gradual.

Financial Difficulties

Finally, and most importantly, the financing needed for subregional and regional infrastructure development is huge. On the one hand, more investments are needed in order to get rid of poverty in those areas and move the local economy forward. On the other hand, there are several sources of funding: the central government or local government, the local capital market and private institutions, or international markets and multilateral organizations. However, the domestic financial systems in

these countries are usually underdeveloped and the barriers for accessing funds from international markets are very high. Such investments have to depend on multilateral organizations and some participating governments. Funds from these financial resources are relatively small and not likely to be sustainable. Therefore, it is difficult for such a financing mechanism to pool enough resources.

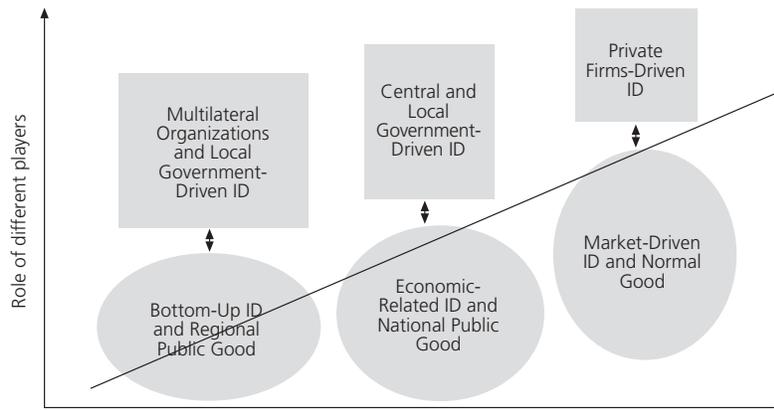
The Way Forward

Whether it is a regional free trade organization like ASEAN or a more neutral organization like ADB, a supranational agent is definitely needed for the provision of regional public goods like infrastructure development,¹ especially in the early stage. However, as these regional public goods are transformed into national public goods and, even normal goods, different drivers would be involved (Figure 12.1). Based on this simple framework, the following proposals are put forward to deal with this financial difficulty:

- (i) In the short run, more balanced investment portfolios should be pursued by multilateral financial organizations. Less profitable projects should be supported by highly profitable projects. This practice should be permitted. For example, multilateral financial organizations can have some projects in richer regions of a member country, while their other projects are in remote border areas.

FIGURE 12.1

Transformation of a Regional Public Good to a Normal One



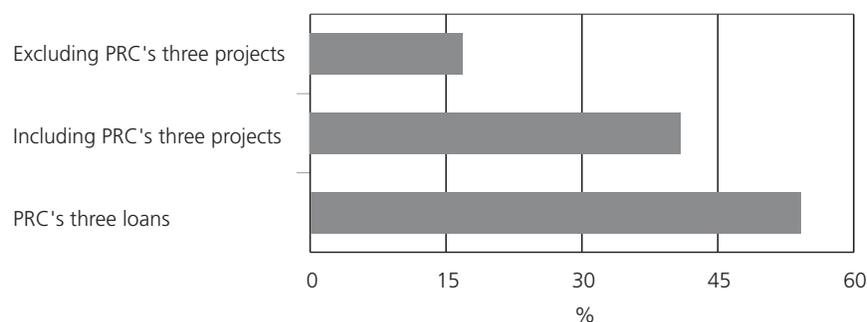
ID=infrastructure development.

¹ Just as Mr. Morita puts it in the High-Level Conference on Asian Economic Cooperation and Integration in Manila, "Infrastructure investment is important but it begs the question of who is going to do it and who will coordinate. The role of ADB is important in that context because of its neutral position and because it understands the concerns of the countries involved. ADB should conduct long-term studies at all times that are periodically reviewed because of the dynamic nature of the sector."

- (ii) Cooperation among international financial organizations should also be highly encouraged. In this area, RIAs or forums for discussions, such as APEC, ASEAN+1, ASEAN+3, etc., are on the rise. These forums feature many working cooperation programs in transportation, energy, trade, investment, digital economy, etc. Some of them seem fruitful at the present stage. ADB should deepen its involvement in these existing regional cooperation mechanisms to take advantage of their strength.
- (iii) In the medium term, some specific financial institutions should be set up to fuel economic development in remote areas. The existing multilateral financial institutions cannot sufficiently take care of specific demands in cross-border infrastructure in different subregions or regions in Asia. Actually, there is a proposal to create a specialized bank for northeast Asian infrastructure development. The same should be considered for other regions in Asia.
- (iv) In the long run, strong local government commitments are needed. In view of the limited roles of multilateral institutions and the private sector, local governments have to do more to promote regional cooperation and initiate projects to accelerate cross-border infrastructure development. The central governments may also have to play a leading role in seeking financial resources and providing guarantees. Private initiatives can play only supplementary roles. The multilateral institutions' role may be limited due to the complicated geopolitics in the region.

The PRC provides a good example in this regard (Figure 12.2). From 1992 to 2003, the share of local government investment in total investment in GMS was 40.95% if the PRC is included. This share goes down to as low as 16.87% if the PRC is excluded. In PRC's three projects, the local government invested 54.14% of the total amount. If other member countries do the same as the PRC did, the investment in that subregion would increase 2–3 times.

FIGURE 12.2

Share of Local Government Investment in GMS, 1992–2003

GMS=Greater Mekong Subregion, PRC=People's Republic of China.
Source: Asian Development Bank.

Finally, and most importantly, attracting the private sector to participate in these projects is the most effective and sustainable way of providing those regional public goods. If someday, cross-border efforts will have created a sound environment for private enterprises to do business, then those subregional and regional cooperative arrangements would produce real benefits that all expect, that is, economic growth and prosperity, and not only poverty reduction.

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