

Training Workshop for Journalists in Developing Asia

Infrastructure for a Seamless Asia: Regional Cooperation

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What is Infrastructure?

- “Hard” Infrastructure – refers to physical structures or facilities that support the society and economy such as transport, energy, telecoms and other basic utilities-Water and Sanitation
- “Soft” Infrastructure – refers to non-tangible things supporting the development and operation of “hard” infrastructure such as policy, regulatory and institutional frameworks, governance mechanisms; systems and procedures; social networks; and transparency and accountability of financing and procurement systems

Roles of infrastructure

- Promote Asia's rapid growth & make it more sustainable and inclusive -- reduced development gap, shared benefits, particularly for landlocked, low income and small countries as well as for poorer groups & communities in remote areas
- Facilitate regional economic cooperation and integration through physical connectivity
- Its major roles in socioeconomic development:
 - i. Basic infra promotes economic exchanges among areas and sectors of a country, as well as within the region & the outside world;
 - ii. Improving environmental, health, education, and other social conditions by providing basic needs and utilities (roads, water, sanitation, hospitals, clinics, schools, etc.) -- part of UN's Millennium Development Goals

- iii. Greater regional integration through enhanced physical connectivity supports trade and investment (including FDI) expansion
- iv. Better logistics resulting speedier movement of goods and services and in reduced trade costs within and across countries
- v. Cross-border infra providing access to a larger regional market and global market such as China and India-- countries can join regional production network and supply chains, particularly important for landlocked economies and thus narrowing the development gap
- vi. Cross-border infra helping regional economies to share scarce resources (energy, capital, and services)
- vii. Regional trading of green energy can address the challenges of energy efficiency and environmental degradation and climate change

Basic Infrastructure – Shocking Figures

- Despite modest to infra growth during the last decades, the region has a huge need for basic infra (ADB, 2007), as shown below:
 - 1.5 billion without access to improved sanitation
 - 638 million with no access to improved drinking water
 - 53.4% of total road network of 5.66 million km paved
 - 930 million (224M in China and East Asia and 706M in South Asia) without access to electricity service (WEO, 2006)
 - 300 out of 1,000 people access to telephone services

Quantity of Infrastructure

EAP lagged ECA & LCR (except for Road)-SA lower than all regions even AFR in sanitation & Tele density

Comparative indicators of infra across developing regions, 2005

Region	AFR	EAP	ECA	LCR	MNA	SAR
Electricity (% of pop with access to network)	24	88	99	89	92	43
Water (% of pop with access to improved sources)	58	78	91	89	88	84
Sanitation (% of pop with access to improved san.)	36	49	82	74	75	35
Roads (% of rural pop living within 2 km of an all-season road)	34	95	77	54	51	65
Tele density (fixed line & mobile subscribers per 1,000 people)	62	357	438	416	237	61

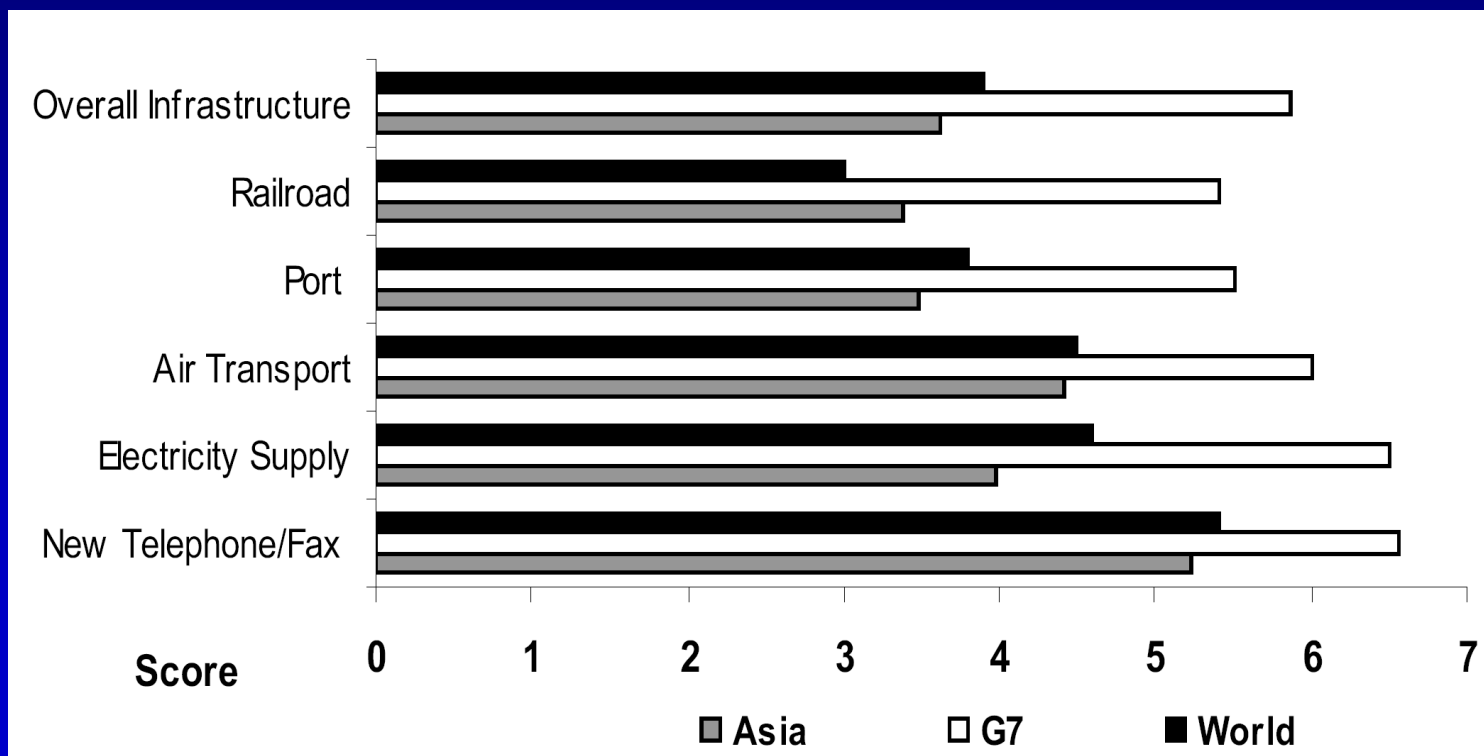
ADBInstitute

Source: World Bank (2005). AFR: sub-Saharan Africa, EAP: East Asia and Pacific; ECA: Eastern Europe and Central Asia, LCR: Latin America and Caribbean; MNA: Middle East and North Africa; SAR: South Asia.

Quality of Infrastructure

- The growth of infra in Asia lags behind international standards in terms of quality; Asia has performed poorly compared to world average except for railroad.

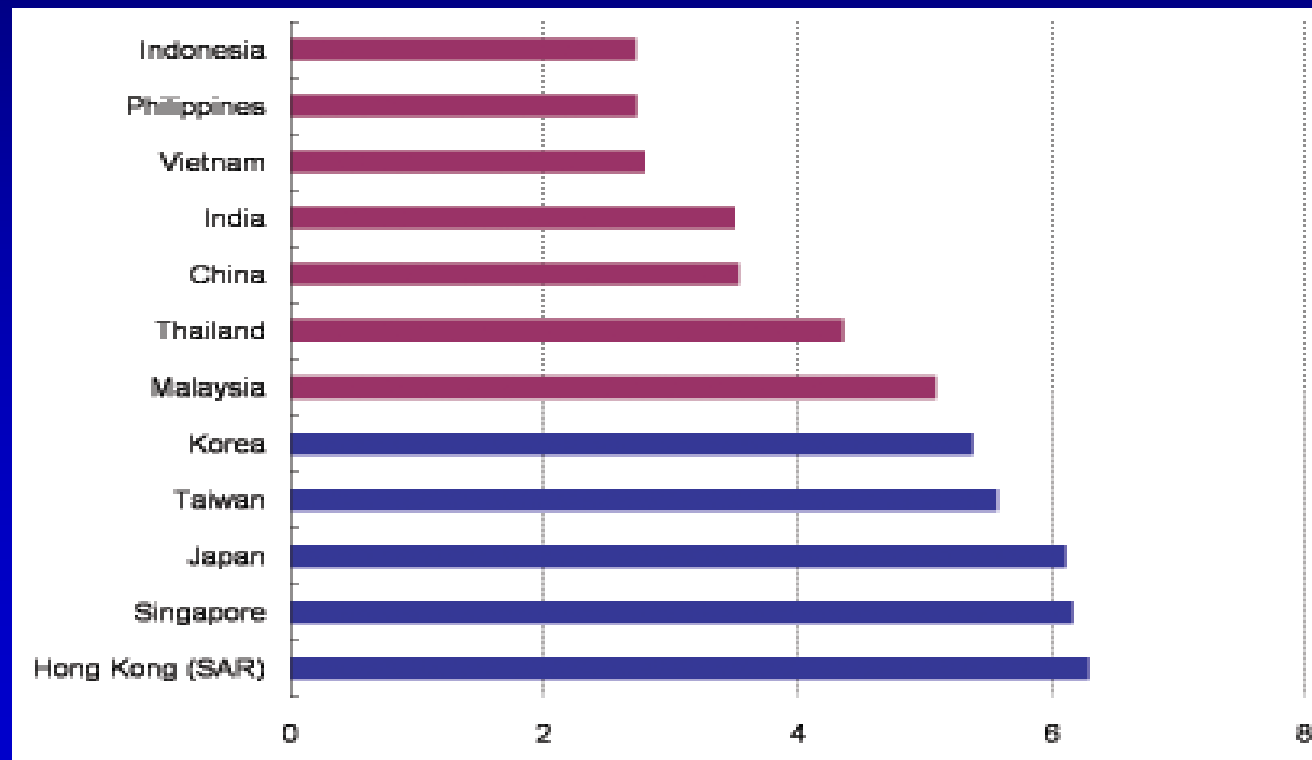
Infrastructure Quality in Asia, Industrialized Countries, and the World



Quality of Infrastructure

- Infrastructure quality varies widely across Asian economies. Much remains to be done in developing Asia, such as India, China, Indonesia, Viet Nam, and Philippines

Overall infrastructure Quality Ranking in Selected Asian Economies



Source: ASIA TODAY INTERNATIONAL 2008

Notes: Scale 1= poorly developed and inefficient 7= among the best in the world

Need for Infrastructure

- Lack of adequate infra can hinder potential growth of Asian countries, weaken their international competitiveness, and hamper poverty reduction efforts
- Increasing need to invest in cross-border infra projects due to continuous widening & deepening of regional/global production chain/network resulting in increasing integration of Asian economies
- Huge basic need due to large and increasing population

Infrastructure, Trade, and FDI

- Asian infra expanded quite quickly to support rapid trade integration, but still needs superior infrastructure for logistics and trade. Several emerging Asian economies, although with good logistics infrastructure, are coming under increasing pressure from over concentrated economic activities along coastal areas and the consequent need to expand inland.
- Studies have shown that infra quality is an essential consideration for export-oriented FDI inflows; adequate infra is an effective tool for stimulating FDI inflow.

Infrastructure & Economic Growth

- Infrastructure-economic growth linkage is multiple and complex – infra not only affects production/consumption directly but also creates many direct and indirect externalities, involving large flows of expenditure, thereby creating additional employment
- Studies have shown that differential endowments in physical infra were responsible for regional income disparity and account for the variation of growth

- Poverty as a major challenge facing the region: 1 of every 2 individuals living under the poverty line of US \$ 2 per day (WB,2007)
- Appropriate investments in infra can lead to a reinforcing cycle of growth, service provision, poverty reduction.

Cost of Lack of Infrastructure & Growth rate

- Infrastructure is essential for realizing growth potential
 - WB studies concluded that if Africa could achieve infra growth rates comparable with those in East Asia in the 1980s-90s, then it could have had 1.3% higher annual economic growth.
 - Latin America witnessed 1-3% lower long term growth due to the lack of investment in infra (Richards,2008)
 - Lack of adequate infrastructure holds India's economic growth by 1.5% to 2% per year (Mr. P.Chidambaram, Finance Minister of India)

Current Financial Crisis and Infrastructure

- Growth in Asia slowed sharply in 2008
- Weakening exports & sharply reduced private capital inflows pose a significant challenge
- Long term consequences of current crisis are not clear but Asia's long-term growth potential should not be affected.
- Reduce export-dependency of Asian economies through rebalancing its growth-increasing regional demand/consumption
- In view of Asia's enormous untapped economic potential & ongoing global financial crisis, now is time to build efficient & seamless green, connections across Asia and with rest of world for a more competitive, prosperous, and integrated region.

Ongoing Crisis and Reasons for Infrastructure Connectivity

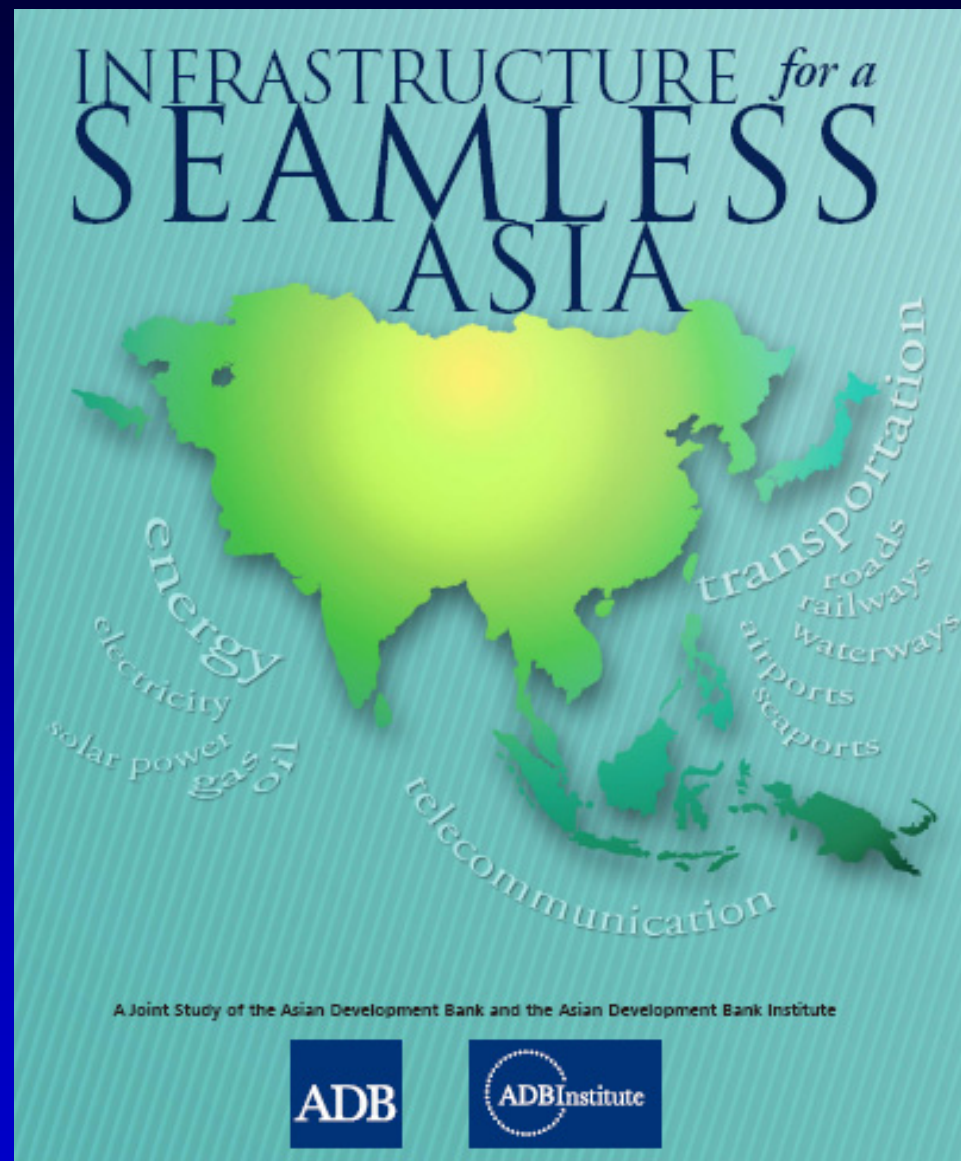
6 reasons for enhancing infrastructure connectivity for sustainable trade and economic development of Asia:

1. Enhances competitiveness & productivity; economic recovery & sustaining growth in medium-long term;
2. Helps to increase standard of living and to reduce poverty by connecting isolated places and people with major economic centers and markets;
3. Narrow development gap among Asian economies by connecting LDCs with major markets/business centers;
4. Promotes environmental sustainability;
5. Infrastructure financing forms an important part of fiscal stimulus package, if crisis is prolonged;
6. Helps in increasing regional demand and intraregional trade for rebalancing Asia's growth.

Vision: Infra for Seamless and Integrated Asia and Pacific

- Overall-vision: Seamless and Integrated Asia and Pacific
- (i) Achieving well-built, barrier-free infra network for full physical connectivity (roads, railways, airways, and maritime transport lines)
- (ii) Moving toward regionally integrated and seamless; environmentally sustainable, and inclusive economic growth and development in the Asia-Pacific region
- (ii) Achieving energy security and self-sufficiency in energy through effective sharing of resources across countries
- Achieving full potential of cross-border trade and investment, and improve competitiveness of countries in the region—through reduced and competitive trade costs, especially cross-border costs (through improved transport, logistics systems and procedure)
- Building strong and resilient regional financial markets that effectively channel Asian-Pacific savings and resources into productive investment (including infrastructure) throughout the Asia-Pacific region.

This new book was launched at the 42nd Annual Meeting of ADB in Bali (4 May 2009)



Objectives and Scope

- Examines the key issues and challenges in strengthening cross-border connectivity in Asia up to 2020;
- Examines benefits and costs of regional infrastructure;
- Estimates the financing requirements for developing Asia's infrastructure.
- Provides recommendations for effective programs, policies and institutions for regional infrastructure.
- Presents a framework for pan-Asian infrastructure cooperation towards a Seamless Asia.
- Cover ADB's 44 DMCs, Japan, and Brunei

Definition:

Regional Infrastructure Projects

- Cross-border (or transnational) projects that involve “hard” and “soft” infrastructure spanning two or more neighboring countries;
- National projects that have a significant cross-border impact—in stimulating regional trade and income; or in connecting with the network of neighboring or third countries.
- Examples: Lao PDR exporting hydropower to Thailand, and Roads/Rails/Bridges connecting countries

Financing Needs for Asia's National Infrastructure by Sector, 2010–2020

(2008 \$ million)

Sector/ Subsector	New Capacity	Replacement	Total
Energy (Electricity)	3,176,437	912,202	4,088,639
Telecommunications	325,353	730,304	1,055,657
Mobiles	181,763	509,151	690,914
Telephones	143,590	221,153	364,743
Transport	1,761,666	704,457	2,466,123
Airports	6,533	4,728	11,260
Ports	50,275	25,416	75,691
Railways	2,692	35,947	38,639
Roads	1,702,166	638,366	2,340,532
Water and Sanitation	155,493	225,797	381,290
Sanitation	107,925	119,573	227,498
Water	47,568	106,224	153,792
Total	5,418,949	2,572,760	7,991,709

Sources: ADBI (2009); Bhattacharyay (2008).

Indicative Investment Needs for Regional Identified and Pipeline Infrastructure Projects, 2010-2020

Region/ Subregion	Transport Projects		Energy Projects		Total	
	Cost (\$ million)	No.	Cost (\$ million)	No.	Cost (\$ million)	No.
Asia	177,077	931	-	-	177,077	931
Asian Highway	43,276	121	-	-	43,276	121
Trans-Asian Railway	82,801	45	-	-	82,801	45
Asian Container Ports ^a	51,000	765	-	-	51,000	765
East/Southeast-Central-South Asia ^b	-	-	22,975	5	22,975	5
Southeast Asia	5,858	17	41,444	33	47,302	50
GMS	5,858	17	2,604	14	8,462	31
Trans- ASEAN Gas Pipeline	-	-	7,000	1	7,000	1
BIMP-EAGA	-	-	100	1	100	1
Others	-	-	31,740	17	31,740	17
Central Asia	21,414	38	11,131	44	32,545	82
CAREC	21,414	38	10,861	43	32,275	81
Others	-	-	270	1	270	1
South Asia	293	3	6,846	6	7,139	9
Total	204,642	989	82,369	88	287,038	1,077

Meeting the Financing Needs

- On average, Asia needs to invest about \$750 billion per year in infrastructure (both national and regional) during 2010-2020
- Mobilize region's vast domestic savings as the main source of financing for Asia's infrastructure
- Strengthen national and regional local currency bond markets for long-term financing
- Identify and prepare "bankable" projects to encourage private financing involving Public Private Partnerships

Key Messages

This is the first time that such a study on regional infrastructure has been undertaken.

- (1) The required infrastructure investment for pan-Asian connectivity in the transport, communications, and energy sectors during 2010-2020 would produce substantial real income gains of about \$13 trillion for developing Asia during this period and beyond;
- (2) A “Pan-Asian Infrastructure Forum (PAIF)” should be established to help coordinate and integrate existing subregional infrastructure initiatives toward a seamless Asia;

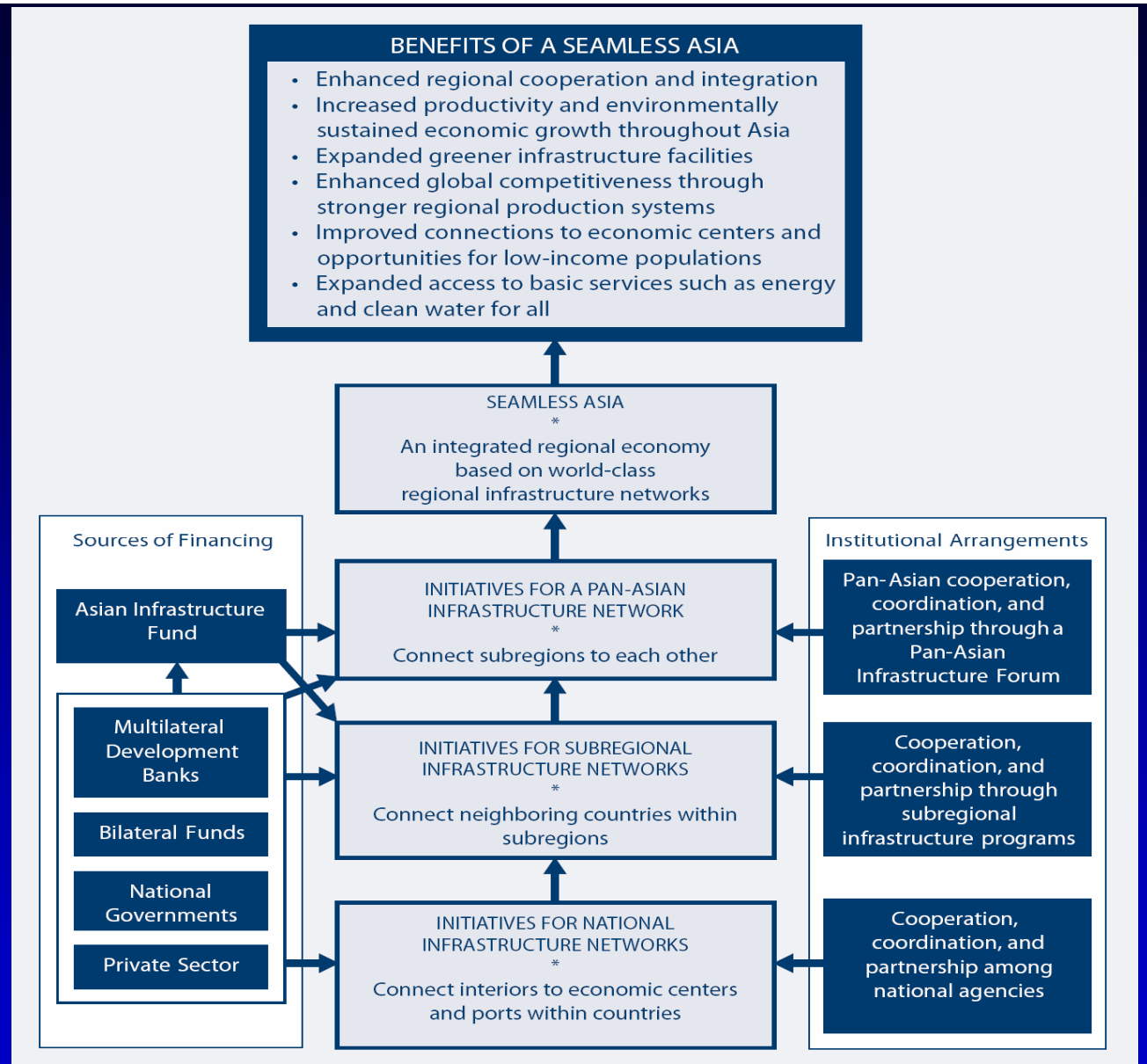
Key Messages (cont'd)

- (3) During 2010–2020, Asia needs to invest about \$8 trillion in national infrastructure and \$290 billion in 1099 regional infrastructure projects—an overall average infrastructure investment of about \$750 billion per year; and
- (4) An “Asian Infrastructure Fund (AIF)” is needed to mobilize international funds (public and private) and help prioritize, prepare, and finance “bankable” regional infrastructure projects.

Key Messages (cont'd)

- (3) During 2010–2020, Asia needs to invest about \$8 trillion in national infrastructure and \$290 billion in specific (1099) regional infrastructure projects—an overall average infrastructure investment of about \$750 billion per year; and
- (4) An “Asian Infrastructure Fund (AIF)” is needed to mobilize international funds (public and private) and help prioritize, prepare, and finance “bankable” regional infrastructure projects.

A Framework for Pan-Asian Infrastructure Cooperation



Conclusion

A Pan-Asian Infrastructure Cooperation requires:

- A common vision, strong leadership and a shared commitment by Asian leaders;
- Strong institutional capacities at the national level;
- Coherent infrastructure development at the national, subregional, and regional levels;
- Pan-Asian infrastructure strategies to prioritize investments and coordinate policies;

Conclusion (cont'd)

- Effective planning and implementation of projects to ensure “win-win” outcomes among participating countries by
 - addressing the issue of asymmetric distribution of projects’ costs and benefits
 - managing negative socioeconomic impacts
 - ensure “win-win” outcomes among participating countries; and
- Effective financing framework to help mobilize the region’s vast savings, and encourage public-private partnerships
- International and regional development partners, such as ADB, WB, and UNESCAP, JBIC can work together to facilitate Asia’s Seamless goal

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