

# Infrastructure Development Effectiveness: Lessons from East Asia

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# Decline of the Role of Infrastructure in the 1990s

- Infrastructure has been regarded as a linchpin of inclusive development, as the access enhances household welfare (Sawada et al 2010).
- However, in the 1990s, there was the notable decline of the priority of infrastructure in the international aid community (World Bank 2006):  
The World Bank viewed infrastructure as a 'sunset' sector  
Public and private infrastructure investment to developing countries had fallen significantly
- Background factors:  
Dominant development doctrine stressing poverty reduction and social sectors  
(Thorbecke 2000) —————> MDGs  
Skeptical view of infrastructure effectiveness: why so many 'white elephants'?  
(World Bank 2006) —————> **Aid effectiveness debate** on the infrastructure projects

# Is East Asia Really Exceptional?

- Critics say many infrastructure projects are wasteful. Meanwhile, it is said that infrastructure has contributed to East Asia's viable record of growth and poverty reduction (ADB, JBIC, World Bank 2005). **Is East Asia exceptional?**
- We made in-depth case studies in 2008, of 27 infrastructure projects of 8 countries (4 in Sub-Saharan Africa, 4 in East Asia: see the next slide)
- No regional difference in the performances of individual projects were found. What is remarkably different is the linkage among the projects, in the same and different regions/sectors.
- Our findings:  
**What matters is the linkage among projects rather than investment ratio or the performance of individual projects.**

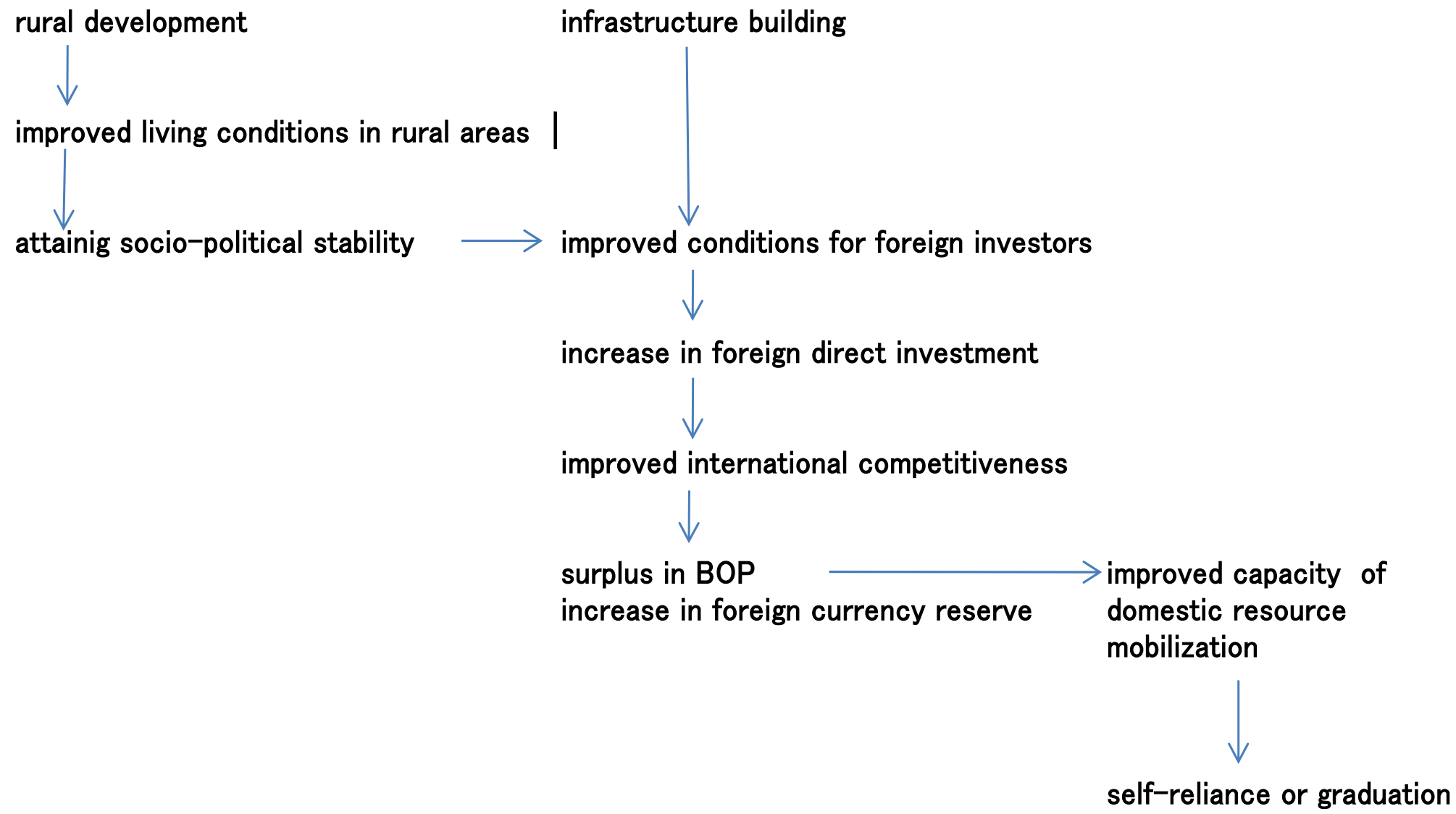
### List of Projects Studied

Project Name (X: referred in the book)		Main Donors
<b>Senegal</b>		
	Regional Hydropower Development Project	World Bank (WB)
	The Debi-Tiguët Project	JICA
	Ndombo Thiago and the Thiagar Projects	French Cooperation / WB
<b>Kenya</b>		
	The Bura Irrigation and Settlement Scheme	WB, European Development Bank etc.
	The Tana River Delta Irrigation Project	JBIC
	The Nairobi Water Supply Project	JBIC, WB, AfDB, European Investment Bank
	The Nyeri Town Water Supply Syatem	GTZ, KFW
<b>Tanzania</b>		
	Tanzania Zambia Railway Authority	China
X	Lower Moshi Agriculture Development Project	JBIC
	Kapunga Rice Irrigation Project	AfDB
<b>Ghana</b>		
	Anwiankwanta Yamoransa Road Project	JBIC
	National Electrification Project	WB
	Self Help Electrification Project	Gov. of Ghana, JICA etc.
<b>Indonesia</b>		
X	Brantas River Basin Development Project	JBIC, JICA
	Citarum River Basin Development Project	WB, ADB, Gov. of France, Dutch etc.
	Jakarta Water Supplu System Development Project	JBIC
<b>Philippines</b>		
	Batangas Port Development Project	JBIC
	Pasig River Rehabilitation Project	ADB
	Circumferential Road No.3 Construction Project	JBIC
	Metro Manila Radial Road No.10 Construction Project	JBIC
<b>Thailand</b>		
X	Eastern Seaboard Development Plan	JBIC, WB
	Private Sector Investment in Infrastructure in the 1990s	N.A.
	Small Scale Irrigation Program	JBIC
	Comprehensive Rural Development Program of CDD	JBIC
<b>Vietnam</b>		
X	The National Highway No.5 Improvement Project	JBIC
	The National Highway No.10 Improvement Project	JBIC
	The Rural Infrastructure Sector Project	ADB, AFD

# Network Matters

- Remarkable features of infrastructure development in East Asia are:
- Linkage in the same region and/or sector  
Connecting Haiphong Port and Noi Bai Airport with the Metropolitan Ha Noi, by highways and bridges
- Linkage with the other regions and/or sectors  
Network of ports, roads, railways, water pipelines, and industrial estates in the Eastern Seaboard of Thailand  
Mutual reinforcing between rural and economic infrastructures
- **Linkage among the public and private projects**  
[Public investment in port, airport, highways, and bridges]+[Private industrial estates construction]+[FDI in manufacturing]

Path to self-reliance/graduation: 'Aid to end aid'



(Source) Prepared by the author

**Figure 7-2 Concerted activities between public and private sectors: the case of the Eastern Seaboard**

	Public sectors		Private sectors		
	Thai	Japanese	Thai	Japanese	Other foregin
Infrastructure construction	Ports Industrial estates Dam and water pipeline Railways and roads		Industrial estates*		
Institutional reform	One Stop Service				
Direct investment					
Industrial cluster				Anchor firms (Automobile industry) Parts and material suppliers	
Macroeconomic impacts	Economic growth Employment increase Export increase			Production, job creation, and export Technical transfer	

\*Amata Group, Hamaarji Land Group

(Source) Prepared by the author

# Concerted Actions Based on Shared Expectations

- Shared 'cognitive model' among partner/recipient government, donor government, and local and foreign investors

A **shared understanding of the way the world works**; every actor knows it and everyone knows that others know it (Greif 2006: 130-131)



- **Concerted actions, with the shared goal**, by the partner government's long-term commitment, donors' aid funding with long-term views, and private investments in industrial estates and production facilities



# Anchor Firms and Backward Linkage

- Industrial estates can function most effectively when anchor firms locate at the center of industrial cluster.
- The products of an anchor firm\*, are composed of a great number of parts. An anchor firm's investment attracts parts manufacturers' factories: backward linkage.

\*Toyota, Nissan, GM, Mitsubishi etc. for the Eastern Seaboard  
Canon and Honda for the Hanoi-Haiphong Corridor

- **Linkage and synthesis is the keyword of East Asian infrastructure development: an important message for other regions**