Imperatives of Infrastructure Development in India

Presentation by
Dr. Ramgopal Agarwala
Distinguished Fellow, RIS
In
Conference on “Opportunities for Global Partnership between India and Japan—Infrastructure, the Environment, and Finance”
Organized by ICRIER and JBIC in collaboration with JCIF,
Claridges Hotel, New Delhi
13-14 September, 2010

Two Themes

- A dramatic increase (about doubling) of investment in not only physical infrastructure but also social and ecological infrastructure is essential to maintain rapid growth of 8-9 % per year over the long-term.
- Funding for these investments may be less difficult than commonly presumed provided we are prepared to do some out-of-the –box thinking involving, for example, innovative use of foreign exchange reserves of the region, land resources of the country and proper pricing of carbon emission.

Mystery of high growth in 2003-07

- During 2003-2007 the Indian economy grew rapidly (about 9% p.a.) despite low investment in infrastructure and no breakthroughs in reforms..
- There was large increase in saving and investment, but almost totally concentrated in private corporate sector.
- These spurts in GDP growth and saving-investment might have been due to external factors, coming through rapid growth in exports and large foreign capital inflows.
- The traditional analysis measuring the impact of foreign demand by exports minus imports and foreign savings by current account deficit may be flawed. The right measure of the role of exports is export minus imports for exports and the role of foreign capital is current account deficit plus increase in forex reserves.
- As analyzed in RIS discussion paper #158, this approach suggests that the spurt in growth in India during 2003-2007 might have been largely a derivative of 'bubble' in the US and other western economies.
- In the absence of increased investment in infrastructure, broadly defined, the Indian economy may settle back to lower growth rate of 6-7% p.a.

Need for higher investment in physical infrastructure

- If India is to aim at sustained growth rate of 8-9% over the long term, the usual link between infrastructure and growth found from the experience of East Asian countries may obtain.
- This may require at least a doubling of investment in physical infrastructure as the Panning Commission is rightly presuming.

Need for higher investment in social infrastructure for rapid growth

- An analysis of the sources of growth done at RIS suggests that over the long term rapid growth will come not from growth of labor force and of capital per se but improvement in <u>quality</u> of labor (through human capital formation) and innovation, particularly because we are moving into a knowledge economy.
- According to estimates made by experts (e.g. Mashelkar) India will have to more than double its current rate of expenditures on education and R&D to meet its requirements of skills and innovation over the long -term.
- Thus in a reversal of the usual dictum that rapid growth is necessary though not sufficient condition for human development, we can say that human development is necessary though not sufficient condition for rapid growth.

Need for higher ecological investment for maintaining high growth

- It is clear that if India tries to grow rapidly with the current intensity of use of resources (including energy), the growth rate will be stymied by lack of resources. Gandhi's dictum applies.
- Similarly availability of carbon emission space will constrain growth. In a replacement of the traditional Harrod-Domar model, in a carbon constrained world, GDP growth rate will equal growth rate in carbon emission plus growth rate in income-carbon ratio. Even if India is given equality in per capita emission rights by 2050, its carbon emission rights can only increase at most by 1.5% p.a. Thus rapid growth will be possible only to the extent that India can increase income –carbon ratio. That in turn will require heavy investment in improving energy efficiency of GDP and carbon efficiency of energy.
- In addition to investment in mitigation India needs to invest heavily in adaptation, without which there could be serious disruptions particularly in agriculture.
- Thus high growth can only be maintained by large ecological infrastructure investments which could easily amount to several percentage points of GDP.

Type of funding needed

- Given the externalities and long gestation lags in infrastructure investments, such investments need long-term funding and concessional funding.
- Pure market-oriented funding is not enough.
- Public sector funding has to provide the major part of funding.
- Fortunately such funding could be available if we are prepared to be innovative.

Better Use of Foreign Exchange Reserves

- At present Asia’s foreign exchange reserves are nearly $4 trillion still increasing at about 10% p.a. These reserves are much more than required for transaction and precautionary purposes. Asia earns a very low rate for return on the reserves when it invests in US Treasuries or lends to the IMF.
- An alternative is to lend a part of these reserves to regional lending institutions such as ADB for onlending for infrastructure.
- More importantly, part of these reserves could be put in an Asian Monetary Fund (Mr. Sakakibara’s term) or Reserve Bank of Asia (as we have argued in RIS in several Policy Briefs and Discussion papers available at www.ris.org.in) which will invest these funds more aggressively and use profits to fund infrastructure investments. It can also issue an Asian Currency Unit (ACU) and use the resultant seigniorage to fund regional public goods such as regional infrastructure investments.
- Since this mechanism will be one instrument of rebalancing the global economy, it should be welcome to the developed countries, including the US.
- The Japanese authorities together with the Chinese and Indian authorities can play a key role in this area.

Aggressive use of public land

- With land prices rising rapidly, the opportunity cost of underutilized land is enormous. Every government bungalow on an acre of prime land is costing the government crores of rupees every year. So is an acre under bustee or under railways or port authority. Encashment of the values in underutilized land in the public sector alone can generate billions of dollars per year.

Getting Carbon Prices Right

- “Polluter pays” principle which we emphasize in international dialogue applies domestically too. Eliminating subsidies to carbon emission and imposing carbon taxes would be desirable irrespective of what the rest of the world is doing.
- If India emits 2 billion tons of CO_2 and the marginal cost of mitigation is $20, polluters should be paying $40 billion per year which will go a long way to fund ecological infrastructure investments.

Will economic ideas prevail over vested interests?

- There are always vested interests against reforms and the current proposals are no exceptions. Asian rivalries, US hegemony, land mafia, energy lobby etc. and sheer inertia and fear of new ideas.
- Nobody knows who will win. But if we want Asia including India to assume its rightful place in the community of nations we must fight the battle for right ideas.

- Thank you for your attention