

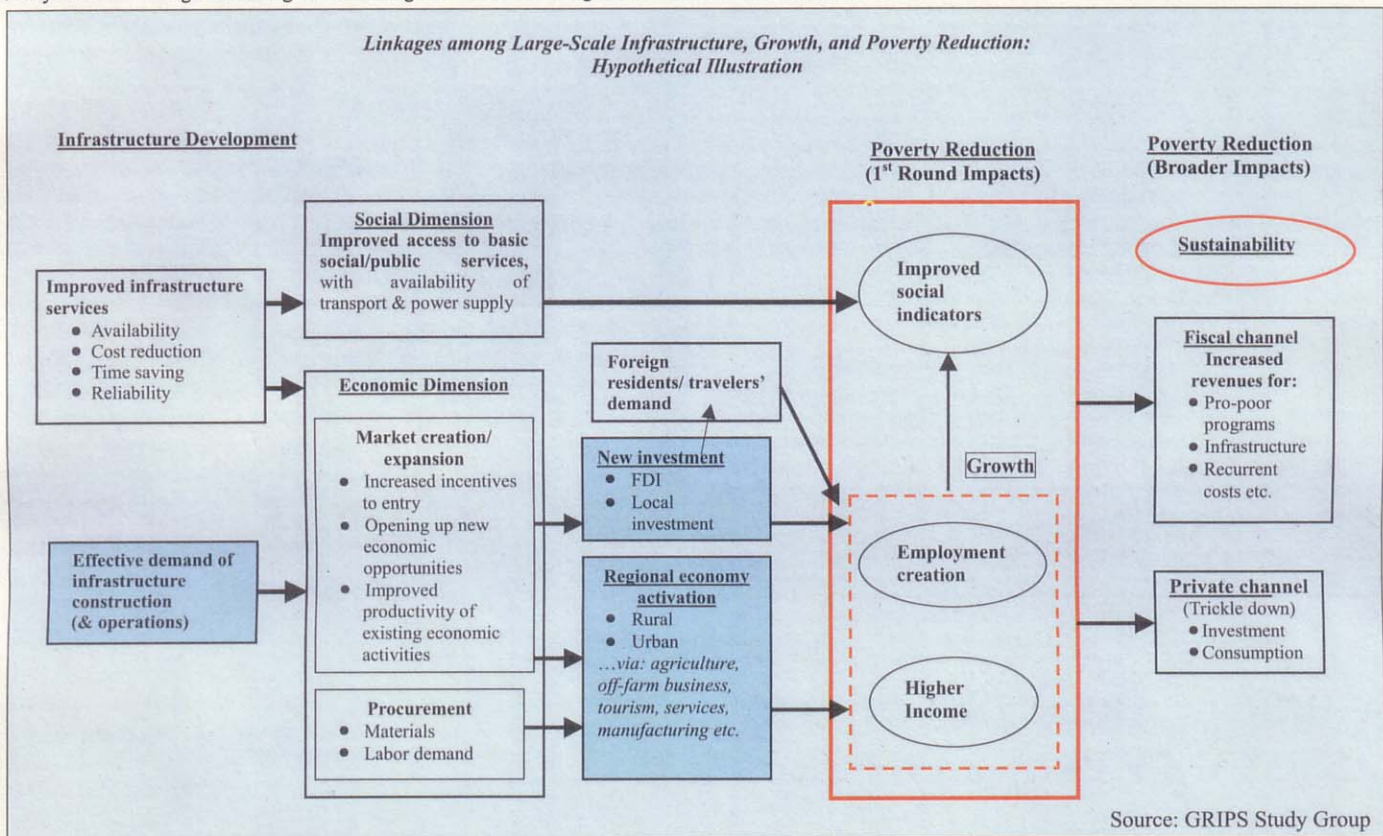
## How does large-scale infrastructure contribute to growth and poverty reduction?

The study carried out by the GRIPS Group responded to this question by identifying three channels; **direct channel, market channel, and policy channel**. Then, it examines the roles large-scale infrastructure in each channel. This approach addresses not only the impacts of large-scale infrastructure on poverty reduction through facilitating and enhancing the

programs for basic health, sanitation, education, and rural roads (**direct channel**). It also pays attention to the impacts through inter-sectoral and inter-regional labor migration, increased demand, reinvestment through formal, informal and internal finance (**market channel**), as well as through subsidies, fiscal transfer, public investment, and proper design of trade, investment and financial policies (**policy channel**). The study clearly showed, through its case analysis, that large-scale infrastructure development contributes to the economic growth and poverty reduction through these three channels and the combination of these.

In addition to identifying these channels, the GRIPS Group study emphasized the importance of the following key measures as necessary points to ensure effective and sustainable large-scale infrastructure investment:

- **Measures to ensure appropriate resource allocation** (e.g., considering budget allocation criteria and project selection criteria; conducting comparative analysis with other investment projects and financing options, and considering relations between infrastructure development and operation & maintenance.)
- **Measures to make inputs into large-scale infrastructure effective** (e.g., analyzing complementary policy/challenges facing the sector and its future direction, mobilizing diverse resources, and considering infrastructure from the viewpoint of network effect, not of individual projects); and
- **Measures to mitigate possible negative impacts of large-scale infrastructure investment** (e.g., addressing environmental and social impacts such as resettlement and traffic safety issues).



## Impact Assessment of Transport Infrastructure Projects in Northern Vietnam

The study on impacts of transport infrastructure projects in Northern Vietnam clearly indicated their contribution to economic growth and poverty reduction by quantitative data. This study examines the impacts of the two JBIC-financed projects: the National Highway No. 5 Improvement Project and the Hai Phong Port Rehabilitation Project focusing on their impact on the promotion of FDI and to the regional economies. The study thus complements the GRIPS Group study. As suggested by the data below, those projects have not only contributed to economic growth, but also contributed to realize greater and diversified economic opportunities as well as poverty reduction in rural areas, as a consequence of increased FDI and stimulation of rural economic activities in their surrounding areas.

- **Impact on economic growth by increased industrial output**

➤ *National Highway No. 5 and the Hai Phong Port contributed to a large number of direct investments from overseas along this Highway.*

➤ *The economic impact of increased FDIs was a 7.9% GRP growth in the four provinces of the Red River delta region. The share of output attributable to FDI in Industrial Gross Output increased from 14% (1995) to 37% (2000).*

- **Diversified household revenue sources**
  - *The survey of 200 households sampled from 6 villages in Hun Yen and Hai Duong Provinces during the period 1997-02 found a 117% average increase in per capita income in this period. Among communes along Highway No. 5, the comparable figure was 126%, while an average increase in per capita income in Hung Yen and Hai Duong Provinces posting 55% and 60% respectively. This is a clear manifestation of the contribution of these projects to greater and more diversified economic opportunities*

## Anti-HIV/AIDS Measure in Large-Scale Infrastructure Projects

J BIC have made various efforts to alleviate possible adverse impacts in providing loans to large-scale infrastructure projects. In the Cuu Long (Can Tho) Bridge Construction Project (a loan provided in fiscal year 2000), in view of the incidence of AIDS in Southern Vietnam, contractor is required to take measures against HIV/AIDS in the bidding document for the construction workers. CARE Vietnam, an NGO, has been cooperating in designing the anti-HIV/AIDS program.