

# NPRS-PRF

Helping Accelerate Poverty Reduction in Asia and the Pacific

## REACHING THE POOR: STRENGTHENING INCLUSIVE ROAD DEVELOPMENT AND MANAGEMENT

Technical Assistance (TA) 4322, Poverty Impact of Area-wide Road Networks, intends to improve the planning process of road network investments in the PRC and demonstrate a working model to connect local roads and expressways. It also aims to provide road agencies with cross-disciplinary skills and tools to incorporate economic, social and poverty issues in all stages of road project planning, implementation and operation.

In the People's Republic of China (PRC), more than 30 million people living in poverty are concentrated in the rural areas.<sup>1</sup> They are typically geographically isolated, have little or no access to socioeconomic opportunities, and have limited access to basic social services. Expressways are built on the outskirts of key urban areas but, have no connections to the rural townships and villages. In 2003, 1,000 townships and 160,000 villages had no public transport services while 340 townships and 67,000 villages had no road connections.

A key component of the PRC government's poverty reduction initiative is to link the rural poor to major economic centers. Enabling poor people to benefit from greater mobility would increase their employment opportunities, open up trading and marketing of farm products, and improve access to health, education, and other social services.

On 13 January 2005, Minister of Communications Zhang Chuanxian announced that the PRC would build a network of 85,000 kilometer (km) km expressways over the next 3 decades. This road development aims to connect all provincial capitals and cities with a population of over 200,000,<sup>2</sup> of which 68,000km of this total length will be trunk roads and 17,000 km will be five regional ring roads.

The total cost of the national expressway network will be 2 trillion yuan (CNY) or \$240 billion. From 2005 to 2010, the annual investment will run from CNY140 billion (\$17 billion) to CNY150 billion (\$18 billion), while from 2010 to 2020, the annual investment will be around CNY100 billion (\$12 billion).<sup>3</sup>

The Asian Development Bank (ADB) has recently increased its lending to the PRC to an annual average of \$1.5 billion. The increase in ADB lending aims to help the PRC restructure its economy and reduced poverty by promoting sustainable and pro-poor economic growth, with transport dominating ADB

operations. In fact, the road sector is the largest sector in ADB's PRC operations, accounting for about 60% of the portfolio. ADB has provided approximately \$6.5 billion to finance 4,500 km of expressways and 8,500 km of local roads since 1991.

The scope of ADB-financed road projects has been broadened to include improving local roads, thus, providing better access to poor communities.

### Limitations in Road Development and Management

However, capacity constraints hamper road development as an effective poverty reduction measure. Among these limitations are:

- The need to move away from the traditional single-project approach to a comprehensive approach of road development that incorporates thorough planning and feasibility studies;
- Different agencies are responsible for expressways and local roads, creating problems in planning and coordination;
- Limited funds for local roads which, unlike expressways, are not tolled;
- Absence of an integrated data management system that would link engineering, poverty, social, and economic issues;
- Weak road safety-conscious system and capacity for maintenance and asset management;

- Need for an efficient monitoring system and an analytical framework to address social and stakeholder dimensions in road development projects.

## Initiating Pro-Poor Infrastructure Planning Process

Technical Assistance (TA) 4322, Poverty Impact of Area-wide Road Networks,<sup>4</sup> intends to improve the planning process of road network investments in the PRC and demonstrate a working model to connect local roads and expressways. It also aims to provide road agencies with cross-disciplinary skills and tools to incorporate economic, social and poverty issues in all stages of road project planning, implementation and operation.

The TA initially made an assessment of existing road development initiatives in the country, including policy and funding mechanism for various classes of roads. The assessment was used to develop an Area-wide Road Network Model (ARNM), a tool for prioritizing and optimizing road investment projects.

The ARNM represents a shift in approach for road development and road investment planning. It serves as a guide to balance the economic benefits and the poverty impact of road projects. It provides cost-benefit analysis for the integration of local roads and expressways.

To use the model, a set of improved guidelines for the road network feasibility study was developed to serve as basis for project development and funding selection. These include guidance on resettlement of people affected by road projects.

The TA established the integrated road network information system to help build the PRC government's capacity in data generation and analysis for sound planning. It is a one-stop transport information management system that will provide timely and appropriate information vital to project planning.

Capacity development activities were also provided to more than 100 stakeholders (transport officials and staff from the Ministry of Communication and the provinces). These activities form a critical component of the TA in order to ensure long-term sustainability.

The creation of the Transport Planning Unit (TPU) within the Ministry of Communications should also help ensure sustainability of the TA outcomes. The TPU serves as a national body dispensing advice and knowledge on road area network development and management. Moreover, the unit is expected to disseminate the lessons learned and outcomes of the TA and promote replication in other areas.

## Optimizing Road Investments by Linking the Poor

Poverty reduction through investments in road building is greatest when planning processes include the rural poor. With participatory processes, there will be an understanding on specific

social and economic issues that effect poor people's mobility and road use.

TA 4322 has demonstrated a planning process for poverty-reducing road development projects and provided an alternative to the old single-project approach. It has also institutionalized a mechanism that can sustain and replicate the gains of the TA.

The insights gained from the TA are particularly significant given further government commitment to build an additional 1.2 million km of rural road to link the isolated poor, costing around \$100 billion.

Following a successful pilot testing of this model, there are plans to replicate the model in three provinces in the PRC from 2007–2010, prior to the national implementation.

## References:

1. <http://adb.org/Projects/PRC-Road-Network/default.asp>
2. <http://adb.org/Projects/PRCRoadSafety/default.asp>

## Endnotes

- <sup>1</sup> Tang Huajun. 2006. *Poverty Mapping—A Useful Tool to Analyze the New Challenges for Poverty Reduction in China*. Beijing: Chinese Academy of Agricultural Sciences.
- <sup>2</sup> National Highway Trunk System. Wikipedia.
- <sup>3</sup> Ibid.
- <sup>4</sup> TA 4322—Poverty Impact of Area-Wide Road Networks; the executing agency is the Ministry of Communications; the total TA amount is \$1 million and financed on a grant basis by the Poverty Reduction Cooperation Fund. Date of approval 30 April 2004; completion date 31 December 2006.

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