

countries. To maintain friendly relations and prosper together with emerging countries in the future as well, Japan must promote even deeper mutual interchanges of people, goods and money. At the same time, it will be necessary to mutually share and create knowledge and technologies that will spur innovation that originates overseas. Besides securing the human resources needed to work as engineers at the front lines of assistance, one major future task for Japan will be to firmly nurture Japanese citizens capable of fulfilling such important roles as leading the international community and overseas markets to ensure Japan's stability and growth in the future.

In stark contrast to those Asian and other emerging countries that are enjoying solid growth, in more fragile countries, including numerous African nations, as well as counties like Afghanistan that are in the midst of reconstruction following a period of conflict, people are still unable to extricate themselves from their harsh struggle to merely survive. Although Africa's GDP rose from US\$0.6 trillion in 2000 to US\$1.6 trillion in 2010, this accounted for only approximately 3% of the world economy. Moreover, the poverty rate (the proportion of citizens with an income of less than US\$1 per day) in Sub-Saharan Africa has improved only slightly, declining from 56% in 1990 to 51% in 2005, and today, 400 million people in this region live in extreme poverty.

These fragile countries, where development proceeds at a snail's pace, are significantly affected by global-scale threats that transcend national borders, such as the financial and economic crises, infectious diseases, natural disasters and climate change. Today, there is an unprecedented deepening of complementary relationships and mutual dependence among developing and other countries worldwide as resource production regions and markets for selling manufactured goods. In particular, strengthening support for these fragile countries is not only an essential initiative from a humanitarian perspective but is also indispensable for realizing Japan's stability and prosperity. The importance of such support will likely grow further in the future.

At the Gleneagles Summit in 2005, the advanced countries agreed to increase ODA to US\$154.0 billion by 2010. According to a report by the United Nations, however, the governments of advanced countries are still US\$35.0 billion (approximately ¥3 trillion) short of attaining this international commitment.

Alternately, there has been large growth in "private-sector funds" and "assistance funds from countries other than the advanced countries" that are allocated for development assistance. In contrast to the simple dichotomic structure deployed to the present consisting of "the Donor side and the Recipient side," we are now approaching an era characterized by the promotion

Case Study

Utilizing Japan's Railway Technologies for the Construction of a Dedicated Freight Corridor between Delhi and Mumbai

India: Dedicated Freight Corridor Construction Project (Phase 1)

The volume of freight transportation in India, which has been experiencing solid economic growth, is growing rapidly at an annual rate of around 15%. As a result, both railway and road transportation capacities are reaching their limitations. To address this situation, the Indian government plans to establish a transportation network linking country's principal cities and regions that have large concentrations of industry. As part of these efforts, the government has initiated the Delhi-Mumbai Industrial Corridor Initiative under which it will link the capital Delhi with Mumbai, which has an international port. The initiative plans to establish an infrastructure such as trunk railroads and roads along the Western Dedicated Freight Corridor (DFC). The establishment of this infrastructure will help spur regional economic development, enhance logistics and encourage investment by foreign companies.

In response to this planned network, JICA is assisting with the construction of an approximately 1,500km new railway dedicated freight corridor linking Delhi and Mumbai as a flagship project for Japan-India cooperation. In March 2010, JICA signed an agreement to

provide an ODA Loan worth approximately ¥90.3 billion for the construction of an approximately 950km priority section as Phase 1 of the project. Preparations are currently proceeding with the aim of commencing operation in 2016. Numerous plans for building railway systems have been advancing in countries worldwide that have outstanding environmental performance capabilities and energy efficiency. JICA has a proven track record in India and has provided India with 18 ODA Loans for railway projects in four major cities. These projects include the Delhi Metro (the first railway system registered under the Clean Development Mechanism (CDM) scheme



in the world), the Kolkata Metro, the Chennai Metro and the Bangalore Metro. The project is noteworthy not only because the new DFC will be built with the largest ODA Loan to date but also because this marks the first Special Terms for Economic Partnership (STEP) project in India. The introduction of high-performance, electric locomotives and totally automated signal and communications systems that integrate cutting-edge Japanese technologies will enable the realization of large-volume, high-speed transportation, energy efficiency and safe and on-time operations.



Logistics efficiency is expected to be enhanced with large-volume, high-speed transportation.