

Japanese ODA Loan to India

--For Better Urban Investment Environment, Improved Living Conditions and Rural Poverty Reduction--

1. Japan Bank for International Cooperation (JBIC; Governor: Koji Tanami) signed seven Japanese ODA loan agreements totaling up to 185,575 million yen in the aggregate with the Government of India on March 10, 2008. This constitutes the second half of the FY2007 Japanese ODA loan package to India.^[1] The overall Japanese ODA loan to India in FY2007 that included the first half commitment (of two projects totaling 39,555 million yen) amounts to 225,130 million yen. This figure is a 20% increase compared to the package of FY2006 totaling 184,893 million yen (for 11 projects). India has now become the country receiving the largest volume of Japanese ODA loan for five consecutive years.
2. Since embarking on economic reforms in 1991, the Indian economy has achieved an average of 6% of economic growth annually, with its GDP ranking the 10th largest in the world. India is also drawing attention as a member of BRICs. In the Survey Report on Overseas Business Operations by Japanese Manufacturing Companies, released by JBIC, India, with a 300-million strong middle-class population, which is more than that of ASEAN countries, exceeded China for the first time to become the most promising destination for sales and investment in the coming 10 years. Despite this progress, about one-third of India's total population is still living on less than one dollar a day, comprising one-third of the people living in poverty across the world. Thus, to achieve the Millennium Development Goals (MDGs)^[2], it is indispensable to reduce poverty in India. In order to accelerate poverty reduction, it is crucial to promote economic growth and increase employment and income opportunities. However, inadequate infrastructure in such areas as power, transport, and water supply and sewerage has posed a bottleneck to economic growth. In addition, India is facing increasingly serious environmental problems, including environment pollution and deforestation caused by population growth and industrialization. Under these circumstances, Government of India pursues a balance between economic growth and environmental conservation in the new 11th Five-Year Plan (April 2007-March 2012).
3. During the visit of Prime Minister Abe at that time to India in August 2007, the Japanese Prime Minister and Indian Prime Minister issued Joint Statement on the Roadmap for New Dimensions to the Strategic and Global Partnership between Japan and India. This reflects part of the efforts being made by Government of Japan toward closer bilateral ties, in view of India's recent fast economic growth and its growing presence in the international community.
4. Given these situations, this year's Japanese ODA loan package will support economic infrastructure development, pro-poor rural development and improvement of the urban living conditions. The highlights of the package are described below.

(1) Economic Infrastructure Development

In the urban transport sector, JBIC will support the Delhi Mass Rapid Transport System Project Phase 2 (III) being implemented in the capital city, Delhi and the Kolkata East-West Metro Project to be implemented in Kolkata, the political and economic center in eastern India. These projects aim to reduce traffic congestion; relieve air pollution, among the most serious of the major cities in the world; and reduce greenhouse gas (GHG) emissions by providing an alternative to motor vehicle transportation systems. Both projects consist of construction of an urban transport system including underground and elevated rail sections.

In the power sector, JBIC will support the Haryana Transmission System Project in the northern Indian state of Haryana where a cluster of industry is rapidly developing, with many foreign companies, including about 60 Japanese firms, already conducting their operations. The project consists of increasing, expanding and improving transmission and substation facilities in Haryana. In the state of Haryana, as the "Delhi-Mumbai Industrial Corridor (DMIC)," which is currently being considered by the Indian and Japanese governments, runs through the state. This project is also expected to benefit an increasing number of Japanese firms that are planning to start their operations.

In the road sector, JBIC will support the Hyderabad Outer Ring Road Project Phase 1 in the metropolitan area of Hyderabad, the state capital of Andhra Pradesh, where a recent remarkable increase in IT companies has heightened expectations for this area becoming a hub of the information industry. The construction of an outer ring road will mitigate traffic congestion in the city, which has a population of more than 6 million, and contribute to regional development.

(2) Pro-Poor Rural Development

The northwestern area of Tamil Nadu, a state located in southern India, has less rainfall than the national average. Its groundwater is polluted with fluoride. JBIC will support the Hogenakkal Water Supply and Fluorosis Mitigation Project including development of a water supply system conveying the surface water from River Cauvery primarily for this area, diet consultation for the fluorosis patients and training on fluorosis for the doctors and teachers. Since there are many people living below the poverty line in the project area, access to safe water is expected to have an impact on poverty reduction.

In the state of Uttar Pradesh, a northern region of India, where the country's largest poor population is living in poverty, Scheduled Castes^[3] and Scheduled Tribes who have a high poverty incidence obtain fodder, fuel woods and fruits, which are their income-earning source, from forests. However, their excessive harvesting of forest resources has caused degradation of forests. JBIC will therefore support the Uttar Pradesh Participatory Forest Management and Poverty Alleviation Project. In this project, afforestation activities will be conducted with the participation of local communities to rehabilitate forests, as they are crucial for the livelihoods of the poor people; small infrastructure facilities such as link roads will be developed; and financial support will be provided for small-scale, income-generating activities. The objective of the project is to raise the living standards of the local people dependent on forests for their living.

(3) Improvement of Urban Living Conditions

In India, the development of water supply infrastructure is lagging behind the fast-rising demand for water induced by rapid population growth and economic development. Underdeveloped sewerage systems are also forcing citizens to live under inferior hygienic conditions, posing a major challenge to improving their living conditions. JBIC will thus support the Tamil Nadu Urban Infrastructure Project that aims to improve public health and the living conditions of urban communities. The project will ensure stable water supplies and sewerage services by developing water supply and sewerage systems. Through this project, JBIC will also support capacity enhancement regarding the operation and maintenance of these facilities by urban local bodies, which, it is hoped, will lead to improved water supply and sewerage services and their business performance. The project executing agency is India's first development fund where the public and private sectors jointly contributed capital for the specific purpose of improving urban infrastructure. This is drawing attention as an unique financing scheme for infrastructure development in local cities to be emulated by other states which foresee significant demand for infrastructure development.

(4) Promoting Knowledge Assistance

To increase the sustainability of project effectiveness, JBIC will provide various forms of knowledge assistance to implement the projects mentioned above.

In the Hogenakkal Water Supply and Fluorosis Mitigation Project, training will be provided for doctors and teachers on fluorosis in cooperation with the local experts who have knowledge of fluoride. This will help identify the patients, as well as shift water sources and provide diet consultations for the patients to prevent the worsening of the disease. In the Uttar Pradesh Participatory Forest Management and Poverty Alleviation Project, JBIC has cooperated from the project preparation stage with the Forest Tree Breeding Center of the Forestry and Forest Products Research Institute in Japan, which, based on its experience in Japan, offered to Indian participants the recommendations on the tree breeding that is likely to maximize benefits obtained from the forests, including increased production of high-quality timber and fruits. In implementing this project, JBIC will support the development of afforestation activities into a CDM project that contributes prevention of global warming as carbon dioxide sink. Furthermore, the project also has a component of children's forest program as an attempt to help children learn the importance of forest conservation through environmental education and forestering activities.

In the Delhi Mass Rapid Transport System Project Phase 2 (III), Kolkata East-West Metro Project and the Hyderabad Outer Ring Road Project Phase 1, HIV prevention programs will be implemented, including an awareness campaign for migrant workers to reduce the risk of contracting HIV/AIDS.

(Click here for details.)

[1] Following the Japanese government's announcement in June 2007 to bring more flexibility to the processing of the projects to be financed by Japanese ODA loans, the appraisal procedures and lending decisions have taken place twice a year instead of the traditional once a year. India became the first case to which this new procedural system has been applied, with the first half of ODA loan package in FY2007 offered in September 2007. The current package is the second half to be offered in FY2007.

[2] The Millennium Development Goals (MDGs) were eight goals developed from the United Nations Millennium Declaration, which was adopted in the U.N. Millennium Summit held in New York in September 2000. The U.N. Millennium Declaration set out such objectives as peace and security, development and poverty, environment, and human rights and good governance. In the following year, based on this Declaration, international development goals adopted in the summits and major international conferences during the 1990s were integrated to develop MDGs. These are the common goals of the international community to be achieved by 2015.

[3] Scheduled castes and scheduled tribes are communities socially regarded as the lowest class and thus granted special preferential status in schooling and employment under the Indian constitution to redress social discrimination.

Reference

1. Loan Amount and Terms

Project Name	Amount (Mil. Yen)	Interest Rate (% per annum)		Repayment Period/Grace Period(year)	Procurement
		Project	Consulting Service		
Haryana Transmission System Project	20,902	0.65	-	15/5	General United
Delhi Mass Rapid Transport System Project Phase 2 (III)	72,100	1.2	0.01	30/10	
Kolkata East-West Metro Project	6,437	1.2	0.01	30/10	
Hyderabad Outer Ring Road Project Phase 1	41,853	1.2	0.01	30/10	
Uttar Pradesh Participatory Forest Management and Poverty Alleviation Project	13,345	0.55*	0.01	40/10*	
Hogenakkal Water Supply and Fluorosis Mitigation Project	22,387	1.2	0.01	30/10	
Tamil Nadu Urban Infrastructure Project	8,551	1.2 0.45*	-	30/10	
Total	185,575				

* These terms are more favourable than those applied to ordinary Japanese ODA loans with a view to proactively promote environmental protection measures by developing countries.

(1) Haryana Transmission System Project

(a) Project Background and Necessity

The concentration of industry in Haryana is rapidly progressing with a large number of overseas companies, including about 60 from Japan advancing into the region, in places such as the capital Delhi's neighboring city Gurgaon. As a result, the quantity of electricity supplied to meet the rapidly increasing power demands is escalating, leading to a strain on transmission amounts at many facilities. Expansion of the transmission system has therefore become a pressing issue for providing a stable supply of electricity to consumers.

(b) Project Objectives and Outline

The project focuses on the East of Haryana which includes the Gurgaon district and aims to ensure a stable supply of electricity to respond to the surging power demands. This will be achieved through the establishment of about 500km of new transmission lines and 14 new substations, upgrading the transmission network of the state and contributing to the economic development of the region and an increase in the standard of living.

The proceeds of the loan will be used for the procurement of transmission equipment and the installation work.

Project Executing Agency: Rural Electrification Corporation Ltd. (REC) (address: Core-4, SCOPE, Complex, 7 Lodi Road, New Delhi 110003, India, TEL/FAX: +91-11-4175-7033)) and Haryana Vidyut Prasaran Nigam Ltd., address: Shakti Bhawan, Sector-6, Panchkula, 134 109, Haryana, India, TEL: +91-17-2256-0579, FAX: +91-17-2256-0640).

(2) Delhi Mass Rapid Transport System Project Phase 2 (III)

(a) Project Background and Necessity

In recent years, the population of major cities in India has increased dramatically, accompanied by a rapid diffusion of private vehicles. This has led to traffic congestion and exacerbated the environmental problems caused by vehicle exhaust gases.

In the capital Delhi too, in response to a doubling of the population (approximately 14 million) over the past 20 years, the diffusion of vehicles has been advancing dramatically. (Number of registered vehicles in 1980: 0.52 million - 2004: 4.17 million). Since short-distance rail links linking the suburbs to the city center and intra-city rail networks are underdeveloped, people have little choice other than to rely on bus or private vehicle as their means of transport (1). This in turn causes chronic congestion and an average vehicle speed of just 13kph in the city. What is more, as private vehicles and buses use low-quality fuels and old model engines, the resulting atmospheric pollution has become a serious issue (2).

Under these circumstances, the establishment of a mass rapid transport system is essential to ease congestion in Delhi, reduce the atmospheric pollution from exhaust gases and furthermore to reduce the emission of greenhouse gases through the replacement of vehicle traffic.

(b) Project Objectives and Outline

This project aims for the construction of a total length of 414km of subway and elevated and at-grade railway in Delhi. This will help to activate the economy and improve the environment by relieving congestion and reducing the emission of exhaust gases and additionally, of greenhouse gases.

All of the lines in Phase 1 of the project (three lines, approximately 65km) went into operation in November 2006. In Phase 2, the target is approximately 83km over six lines (of which three are to be extended). In addition to places such as Red Fort which have already become accessible via Phase 1, the World Heritage-registered ruins (Qutub Minar (tower of victory)) will become accessible with the completion of Phase 2, leading to an anticipated stimulation of tourist activity.

Originally there was no established practice in India of working in safety helmets and safety shoes. However, a sense of safety and efficiency permeated the work sites in Phase 1 of this project, with each and every worker being made to wear safety helmets and shoes, and with thorough organization of the work sites. This is said to have brought about a cultural revolution in Indian construction works, and the same kind of approach will be continued in Phase 2.

The proceeds of the loan will be used for the civil engineering work of subway construction, the procurement of rolling stock, consulting services and so on.

Project Executing Agency: Delhi Metro Rail Corporation Limited (DMRC) (address: 3rd Floor, East Tower, N.B.C.C. Place, Bhishma Pitahmah Marg, Pragati Vihar, New Delhi 110003, India, TEL: +91-11-2436-5202, FAX: +91-11-2436-5370).

(1) As of 2001, the ratio of commuting methods in Tokyo is bus 12.7%, private vehicle 15.9% and rail 52.1%, compared to which the ratio in Delhi is bus 60.0%, private vehicle 39.5% and rail 0.5%.

(2) The annual average density of suspended particulate matter here is the highest among all major cities of the world, far greater even than places such as Beijing and Bangkok. Tokyo's average density is 42ug/m3, compared to which Delhi's is 177ug/m3.

(3) Kolkata East-West Metro Project

(a) Project Background and Necessity

Kolkata, the target region of this project is East India's political and economic center. Similar to other large Indian cities such as the capital Delhi, the population has surged and the diffusion of private vehicles has rapidly progressed, leading to traffic congestion and exacerbating the environmental problems caused by vehicle exhaust gases.

The population density in Kolkata is 25,000 people/km2, making it one of the most overpopulated cities in the world (3). The main method of transport in Kolkata is bus, but the ratio of road surface in the city is just 6%, which is extremely low compared to other major Indian cities (Delhi: 23%, Mumbai: 18%). Congestion is therefore becoming very serious.

However, it is difficult to widen the roads and implement new development in the heart of Kolkata where it is already overcrowded. For this reason, the establishment of a mass rapid transport system is essential to ease the heavy traffic, reduce the atmospheric pollution from exhaust gases and furthermore to reduce the emission of greenhouse gases through the replacement of vehicle traffic.

(b) Project Objectives and Outline

This project will help to activate the economy and improve the environment by relieving congestion and reducing the emission of exhaust gases, through the construction in Kolkata, the capital of West Bengal of a total length of 13km of subway and elevated railway. Development will be carried out taking into consideration the synergistic effects of networking with the already established Metro Railway Kolkata.

Safety and efficiency at construction sites of this project will be improved by applying our experience in providing support for ensuring the use of safety helmets and shoes, as well as keeping construction sites as tidy as possible. In addition, in order to curb the risk of HIV infection among the many itinerant workers involved in the project, HIV prevention activities will be implemented with the cooperation of the West Bengal AIDS Control Society, and by employing local NGOs.

The proceeds of the loan will be used for the civil engineering work of the subway construction, the procurement of rolling stock, consulting services and so on.

Project Executing Agency: Transport Department, State Government of West Bengal (address: Writers' Buildings, Kolkata 700001, India, TEL: +91-33-2214-5455, FAX: +91-33-2214-4700).

(3) The population density in Tokyo's 23 wards is 13,000 people/km² (2001)

(4) Hyderabad Outer Ring Road Project Phase 1

(a) Project Background and Necessity

Hyderabad, the capital of the state of Andhra Pradesh in Southern India, is situated in the middle of South India's major cities, Mumbai, Bangalore and Chennai. In recent years, it has been rapidly developing as a growing center for the IT and biotechnology industries, as well as for medical-related research and development activities. As a result, the population of the Hyderabad metropolitan area grew between 1991 and 2001, from 4.67 million to 6.38 million, while the number of vehicles leaped up from 0.59 million to 1.45 million, causing serious traffic congestion. The population is furthermore predicted to reach 9.05 million in 2011, and 13.64 million in 2021, while the annual growth rate of vehicles is expected to exceed 7%.

The main trunk roads, which connect East/West and North/South India, radially cross through the heart of the city. Therefore, in addition to private vehicles and buses for movement within the city itself, a large number of vehicles enter the city only to pass through, causing serious congestion. Under these circumstances, the necessity is increasing for construction of an outer ring road which will promote regional development in the area surrounding the city, ease congestion and reduce the emission of greenhouse gases by reducing the number of vehicles passing through the city center.

(b) Project Objectives and Outline

This project aims to respond to road traffic demands through the construction of the northwestern section (the section connecting National Road No. 7 – No. 9, approximately 38km) of the outer ring road (total length 158km) in the Hyderabad metropolitan area, thereby easing traffic congestion in the city center and promoting regional economic development.

In order to increase the project effects of the outer ring road that will be constructed in the project, the work will be implemented in tandem with a widening of the main radial roads that connect to it. This will improve access from the city center to the outer ring road and the surrounding development area that is planned along beside it. Also, in order to advance effective urban transport infrastructure development in the metropolitan area (where great population growth is expected in the future), it is important to adequately consider the division of the various modes of transport, railway, bus, etc., and consistency with land use plans. Therefore, this project is being carried out in accordance with the urban road development master plans of the state.

Recently, the Government of India is positively promoting Public Private Partnership in infrastructure development, under this circumstance, operation and maintenance of the outer ring road constructed in the project is planned to be outsourced to private companies.

In addition, since this is a large-scale construction project on which many single itinerant workers will work, the risk of HIV infection is thought to be high. For this reason, the consultants hired under the project will cooperate with local NGOs and health-related authority to implement occupational health and safety activities for construction workers, including HIV prevention activities.

The proceeds of the loan will be used for the road construction works, occupational health and safety activities, consulting services and so on.

Project Executing Agency: Hyderabad Growth Corridor Limited (HGCL) (address: HUDA Complex, Tarnaka, Hyderabad – 500 007, Andhra Pradesh, India, TEL: +91-40-2700-2913, FAX: +91-40-2700-3271).

(5) Uttar Pradesh Participatory Forest Management and Poverty Alleviation Project

(a) Project Background and Necessity

The rate of forest coverage in India is 24%, which is lower than the global average of 30%. Population growth and increasing demands for timbers has caused further deforestation and deterioration of the forests and their soil and moisture conservation capacities. For this reason, the lives of the poor who rely on them for fodder, fuel woods and cash-earning fruits. The vicious circle in the situation has led accelerating the burden on the forests.

Agriculture is an important sector in State of Uttar Pradesh, in North India (236,000 km², 166 million inhabitants). It makes up 75% of the employment, while 87.4% of the state is agricultural land distributed mainly in the Ganges river basin, in its center. However, in the North and the South where the density of forests is high, the scheduled castes and scheduled tribes live a life which relies on the forest. Uttar Pradesh has the largest population of people in poverty (59 million) in the whole of India, and most of them are the scheduled castes and scheduled tribes (indigenous peoples) which rely on the forest. For this reason, overgrazing and overharvesting of resources in excess of the forest's regenerative capacity is bringing about forest degradation. As a result, the rate of forest coverage is just 9%, a rather low level even within India. Under these circumstances, efforts are necessary to regenerate the degraded forest and improve the standard of living for the poor.

(b) Project Objectives and Outline

In 20 of the 85 forest divisions and wildlife divisions of Uttar Pradesh, afforestation of approximately 80,000 hectares (corresponding to about 1.3 times the area of Tokyo's 23 wards) will be carried out with the participation of the local people. Various approaches aimed at improving the livelihoods of local people will also be carried out. This project will work toward environmental improvement in the region and alleviation of poverty by regenerating the degraded forest and raising the standard of life.

Forest Department of the Government of Uttar Pradesh (UPFD) and the local people will cooperate in this project, adopting a "Joint Forest Management" system for carrying out afforestation and forest management more effectively. With this system, a joint forest management committees will be established comprising the village inhabitants living adjacent to the forest. The cooperation of UPFD and local NGOs knowledgeable in regional circumstances will be obtained and a Micro Plan (an action plan related to the details of forest management and regional development) drawn up with the inhabitants themselves. In addition, training in afforestation techniques will be carried out. In order to promote independent efforts aimed at ensuring alternative sources of income and to raise the lifestyle of the inhabitants who rely on the forest to live, approaches will also be implemented for the purpose of livelihood improvement, like small scale infrastructure improvement such as improvement of link roads.

The proceeds of the loan will be used for the afforestation activities, the livelihood improvement activities, consulting services and so on.

Project Executing Agency: Forest Department, State Government of Uttar Pradesh (address: 17, Rana Pratap Marg, Lucknow, Uttar Pradesh, India, TEL: +91-52-2220-7958, FAX: +91-52-2220-6176).

(6) Hogenakkal Water Supply and Fluorosis Mitigation Project

(a) Project Background and Necessity

In Krishnagiri and Dharmapuri districts in the North West of Tamil Nadu, which are the project areas, the demand for water is increasing due to population growth though the annual rainfall is smaller than Indian average and usable surface water cannot be relied on year-round. Therefore, overdraft and exhaustion of ground water is occurring and there are

chronic water shortages. Also, large amount of fluoride which is harmful to human bodies is contained in the rock ground of the Deccan Plateau which consists of the project areas. Fluoride is transferred to the ground water and is having serious effects on the teeth, bones, organs and embryos of the local people.

Under these circumstances, in order to solve the water shortage and the problem of drinking water contaminated by fluoride, the necessity is mounting to supply safe surface water from River Cauvery, 45km distant from the project areas.

(b) Project Objectives and Outline

This project aims to provide a safe and stable water supply service to respond to the surging water demands, and alleviate the health damage caused by fluoride. This will be achieved through the establishment of water supply facilities that use the surface water from River Cauvery in Dharmapuri and some parts of Krishnagiri (target population of approximately 2.2 million) (4). These are the most serious areas in Tamil Nadu from the view point of both of the water shortage and the contamination of groundwater by fluoride.

In this project, we will cooperate with specialists and foundations/ NGOs that know about fluoride and fluorosis to carry out training for doctors and teachers about fluorosis, and promote the discovery of fluorosis patients. For the patients themselves, a change of water sources will be implemented along with diet consultation to make sure illness progresses no further. This project will tackle with the problem of fluoride in a comprehensive manner for the first time all over India.

The proceeds of the loan will be used for the civil engineering work of constructing water supply facilities, fluoride countermeasures, consulting services and so on.

Project Executing Agency: Tamil Nadu Water Supply and Drainage Board (TWAD) (address: 31, Kamarajar Salai, Chepauk, Chennai- 600005, Tamil Nadu, India, TEL: +91-44-2841-6420, FAX: +91-44-2854-8623).

(4) A level of 9.0mg/L of fluoride has been detected in the Dharmapuri district, far in excess of 1.5mg/L of WHO guidelines.

(7) Tamil Nadu Urban Infrastructure Project

(a) Project Background and Necessity

In India, development of water resources and water supply facilities has not been able to keep up with the rapidly increasing demand for water that has resulted from population increase and industrialization. Even in the national capital of Delhi, water is only supplied for 3.5 hours per day. Furthermore, since sewerage improvements in India are not keeping up with surging urban populations and industrialization, wastewater that clearly exceeds the natural purification capacity is being discharged into the rivers. Because of this, local residents are suffering from health problems caused by contaminated water, such as diarrhea and hepatitis.

In the major cities of the state of Tamil Nadu in Southern India, some part or all of the funds necessary for water supply and sewerage facilities improvement are provided by central and state government subsidies, and own financial resources of urban local bodies. On the other hand, for small and medium cities with a population of around 20,000 – 50,000, there are no clear budgetary supporting policies from central and state government, therefore the available funds for water and sewerage facilities improvement is inadequate.

(b) Project Objectives and Outline

The project aims for the provision of water and sewerage facilities for small and medium cities in the local area of the state of Tamil Nadu where the population is growing, by providing long-term funds though the Tamil Nadu Urban Development Fund (TNUDF), established via joint investment by the government and private companies, thereby promoting regional economic development of the small and medium cities and an improvement to the hygiene and living environment of local inhabitants. As an initiative responding to the urban infrastructure needs of local cities, TNUDF is attracting attention as a model project for all states in the country.

On a global scale too, with water being recognized and emphasized as a "resource", efficient management of water supply and sewerage services is attracting attention. Therefore, in order that urban local bodies can appropriately operate and maintain the water supply and sewerage services to ensure the project sustainability, placing particular emphasis on strengthening financial and technical capabilities, technical assistance for engineers in the urban local bodies, and training relating to improving financial performance will be implemented.

The proceeds of the loan will be used for the construction works for water supply and sewerage facilities, training, consulting services and so on.

Project Executing Agency: Tamil Nadu Urban Development Fund, TNUDF (address: Vairam Complex, 1st Floor, 112, Theyagaraya Road, T. Nagar, Chennai - 600 017, Tamil Nadu, India, TEL: +91-44-2815-3103, FAX: +91-44-2815-3106).