

**Country Assistance Program  
for  
India**

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# Japan's Country Assistance Program for India

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# 1. Principles and Objectives of Japan's ODA to India (Building an India-Japan Partnership Suitable for the "New Asian Era")

(1) With the collapse of the Soviet Union and subsequently the end of the Cold War, India moved from the nonalignment diplomacy under the Cold War structure to the active diplomacy which places importance on the Western countries led by the United States and Asia. On the economic front, it has continued to achieve steady economic growth by switching to a liberalization policy. Not only is India very influential in South Asia, but it has been also increasing rapidly its presence in the international community as a result of its political and economic stability in recent years.

(2) Taking a broad view of Asia, given the fact that India has a strong potential to become a diplomatic, political and economic superpower in Asia, equivalent to Japan and China in the near future, it is necessary for Japan, China and India to further strengthen the relations among them and build the cooperative relations designed for the "new Asian era." It is necessary for the international community, including Japan, to strengthen India's commitment to the international economy and to provide support for India, the world's biggest democratic state, to grow as a constructive partner of the Asian region where the strong market economies and economic partnerships are being promoted.

(3) India has a lot of potentials as a promising investment destination and market, and there is a strong necessity to promote closer India-Japan bilateral relations. Furthermore, India is an important country for Japan to ensure the security of sea lanes. From the perspective of strengthening Japan's security environment, it is important that India, a pro-Japan country, maintains stable development in South Asia. In addition, India has more than 300 million people in poverty which accounts for approximately one-third of the world's population in poverty, so that poverty reduction in India is a key for achieving the Millennium Development Goals (MDGs).

(4) In FY2003 and FY2004, India was the No. 1 recipient country of yen loans from Japan. Using economic cooperation to build stable bilateral relations with India, to support the sustainable development of India, which has the potential to become another growth axis of Asian economic development in addition to China, contributes to the peace and stability of Asia and the entire international community, and therefore it is a desirable option for Japan. Through Prime Minister Koizumi's official visit to India in April 2005, India-Japan relations were moved to a new stage and the two leaders agreed to add a strategic orientation to their global partnership in the new Asian era. Towards the "new Asian era," both India and Japan will expand their partnership from their traditional bilateral relations to cooperative relations in Asia and the world, and in this process economic cooperation will be clearly positioned as a part of Japan's diplomatic strategy toward India, in addition to politics and security, the economy, culture and global environmental issues, etc.

## 2. Current Situation of Development in India

### (1) Overview of Politics, Society and the Economy

(A) In the general elections of the lower house (lok sabha) held in April and May 2004, the Congress Party made a comeback to become the biggest party in parliament, and the ruling and opposition parties exchanged places. The Congress Party and its pre-poll allies, who provided election cooperation, gained the non-cabinet cooperation of a leftist alliance to control a majority of the seats in parliament, and the United Progressive Alliance (UPA) administration led by Prime Minister Manmohan Singh was formed. The UPA administration with the support of a leftist alliance which provided non-cabinet cooperation, announced the National Common Minimum Programme, and promoted “economic reforms with a human face” as the catchphrase of economic policy. The Singh administration, which had been in power for one year as of May 2005, although faced with new challenges, has produced good results with its economic reforms, and has shown efforts to grapple with liberalization of the economy.

Tensions with Pakistan, with whom India has the Kashmir issue and fought three wars, increased in 2002 as the military forces (of the two countries) confronted each other at the border. However on the occasion of the South Asian Association for Regional Cooperation (SAARC) Summit held in January 2004, the leaders of India and Pakistan met after an interval of approximately two and a half years and they agreed to commence a Composite Dialogue on the various outstanding bilateral issues, including the Kashmir issue. The UPA administration also confirmed that it would continue holding dialogues between the two countries, including summit level dialogues, and continue efforts to improve relations between the two countries, including the introduction of a new bus service in Kashmir in April 2005 as well as cooperation in relief activities for damage incurred from major earthquakes in Pakistan and other countries.

(B) Looking at social conditions, while the 1990's steady economic growth has led to a declining trend in the proportion of the population living in poverty, given the notable population growth the poverty issue remains serious for the agricultural workforce, low-income groups in urban areas and the lowest castes, and inequality in income distribution remains unaddressed. According to a 1999 study, the proportion of the population in poverty was 26.1% by India's official definition and that population was as large as 260 million. According to the international standard for poverty, which is defined as living on less than one dollar per day, the ratio of the population in poverty in India was 34.7% in FY1999. This figure amounts to 350 million which accounts for one-third of the approximately 1.1 billion people in poverty in the world.

(C) Since 1991, India has redoubled its economic reform efforts and, as a result, India realized annual average economic growth of over 6% throughout the 1990's and in particular, it achieved high economic growth of over 7% for three consecutive years in the middle of the 1990's. Currently India's gross domestic product (GDP) is \$685.9

billion (2004), making India's economy the third-largest in Asia, behind Japan and China. In FY2003 India achieved growth of 8.5% on the back of high growth in the booming agricultural production, manufacturing, and service industry sectors. India suffered from monsoons in FY2004 and made little progress with agricultural production; however, growth of 6.9% (government estimate) is expected. The fiscal deficit in ratio to GDP had fallen to 4.5% (government estimate) in FY2004 from 6.2% in FY2001, and foreign currency reserves are steadily increasing to approximately \$139.7 billion as of May 2005.

## (2) Current Situation of Economic and Social Development and Future Challenges

### (A) Closed Economic Management

From the second half of the 1960's India strengthened closed economic management and adopted a foreign policy that sought close relations with the then Soviet Union. Under this closed economic management, India achieved self-sufficiency in food supply and developed homegrown technology to some extent, but because market competition was extremely limited, low growth rates persisted, the quality of products worsened, and the strengthening of bureaucratic controls led to stagnation in business activities. Economic stagnation persisted with no improvement in poverty. From the second half of the 1970's, measures to deregulate the economy began to be introduced with a view to overcoming the economic stagnation, but these efforts became to work out only after economic liberalization, which was triggered by the 1991 economic crisis.

### (B) The Impact of Economic Reforms

In 1991 India implemented economic reforms, including the abolition of domestic investment regulations, a switch to a flexible exchange rate system, relaxation of the regulations on foreign direct investment, trade liberalization, etc., as the main pillars. Subsequently there was an investment boom, and production grew rapidly, not only in the durable consumer goods industry but also in the intermediate goods, capital goods, and non-durable consumer goods industries. In the mid-1990's the growth rate reached a peak and the annual average GDP growth rate from FY1991 to FY2003 was 5.9%. The industries that showed the highest growth rates were the manufacturing industry (6.5%); commerce, tourism, transport and communications (7.5%); and individual and social services (7.2%).

On the other hand, agriculture declined from 31% of GDP in FY1993 to 25% of GDP in FY1999. However, the proportion of agriculture in the labor force only declined very slightly during the same period, from 65% to 62%. Approximately 60% of the people work in agriculture, and it remains important from the perspective of the purchasing power of the population and poverty reduction.

### (C) Poverty and Regional Disparities

The proportion of the poor out of India's whole population decreased from 54.9% in FY1973 to 26.1% in FY1999. This decrease in the poverty rate is commendable, but even though the number of poor people showed improvement between FY1993 and FY1999, there were still 260 million living in poverty in FY1999.

The factors behind the decline in the poverty rate are thought to be i) the increase in the productivity of agriculture due to the Green revolution within India; ii) the increase in the wages of agricultural workers in line with the aforementioned productivity increase; iii) the impact of relatively stable commodity prices; and iv) the supply of food to the poor at low prices through the public distribution system. On the other hand, factors which prevented the number of the poor from decreasing are thought to include i) the growth in the rural population in particular, but ii) little progress with growth in job opportunities in non-agricultural area. In other words, the issue of poverty experienced in India dates back to the fact that sufficient employment has not been created to absorb non-agricultural labors due to the growth in the rural population and the retardation from economic liberalization and development in those areas.

Moreover, since economic reforms have commenced, disparities between states have become more pronounced. Looking at the state rankings by per capita Net State Domestic Product (NSDP) in FY2001, Goa was at the top, followed by Punjab, Maharashtra, Haryana and Gujarat. At the bottom of the rankings, in descending order, are Orissa, Assam, Uttar Pradesh and Bihar.

Goa's per capita NSDP in FY1993 was 5.5 times more than that of Bihar, but by FY2001 Goa's per capita NSDP had grown to 8 times more than that of Bihar. The higher the per capita NSDP is, the greater the poverty rate declines. In all of the states with a higher per capita NSDP than the national average, except Punjab, the poverty rate has declined by over 10% between FY1993 and FY1999, but in all of the states with a lower per capita NSDP than the national average, except Rajasthan and Bihar, the poverty rate has declined by less than 10% between FY1993 and FY1999.

### (D) Fiscal Policies and Infrastructure Development

Because expenditure on food subsidies, fertilizer subsidies and export subsidies ballooned in the 1980's, the fiscal deficit of the central government grew which brought about an increase in the inflation rate. After the economic reforms, the central government endeavored to reduce the fiscal deficit, in particular the current-account deficit, and the fiscal deficit as a percentage of GDP declined from 6.6% in FY1990 to 4.2% in FY1995, but by FY2001 it had once again increased to 6.2%. These increases in the fiscal deficit are being caused by the increase in the current-account deficit arising from raises in the salaries of civil servants, increases in interest payments on government bonds, increases in subsidies and sluggish growth in tax revenues, etc., and these factors have contributed to the controlling of public and private investment.

Under such circumstances the Fiscal Responsibility and Budget Management Act was passed in FY2003 and the central government was obliged to lower the fiscal deficit in ratio to GDP by 3% and eliminate the current-account deficit by the end of FY2008. The fiscal deficit in ratio to GDP of the central government fell to 4.5% in FY2004. On the other hand, the presence of those state governments with fiscal deficits of approximately 4 to 5% in ratio to GDP cannot be ignored. At the same time, there are also urgent issues such as re-structuring of the state governmental finances, including the reduction of burden sharing for the central government, ensuring ways and means to secure adequate revenue, and reform of public power corporation of those states under deficit management. Under such severe financial circumstances, however, development of infrastructure such as irrigation, roads and electric power is extremely important for realizing poverty reduction through economic growth in India, and the Manmohan Singh administration, which was inaugurated in May 2004, places importance on attracting foreign capital and infrastructure development through direct investment in order to accelerate economic growth. In this context, looking at the state of infrastructure development, although tasks to be solved in the rural area still remain, the communications sector has achieved rapid development mainly in the urban area through the introduction of private sector vigor.. There are some problems emerging in the electric power sector, such as the absolute shortages of electricity supply and the under-development of national highways connecting major cities and ports.

#### (E) Environment

In India, environmental issues, in particular air pollution, are becoming more serious as a result of population growth, industrialization and the increase in energy consumption. The quantity of greenhouse gasses emitted as of 2002 already ranked as the fifth largest in the world, and measures against global warming have become a big issue. While the amount of water taken from major rivers for drinking and irrigation is increasing, an increasing amount of waste water generated from daily living, industry and agriculture is making water pollution more serious. At the same time, deforestation has been occurring in forest areas as a result of development and over-grazing, disafforestation for firewood, and other factors. As urbanization further increases, the importance of the issue of disposing of waste generated by cities becomes more important.

### 3. Trends in Development Strategies

#### (1) India's Development Plan

##### (A) 10<sup>th</sup> Five Year Plan

In December 2002 the Tenth Five Year Plan was endorsed by the Planning Commission of India. The plan is based on the principle of "fair and sustainable growth" and states that India's priority development issues are to i) improve social



welfare, including health and medical care, education, etc.; ii) increase labor productivity; iii) improve the socioeconomic status of scheduled castes and minority tribes; and iv) aim for compatibility between economic growth and environmental conservation, etc. It sets a target for the annual average economic growth rate of 8%, which is higher than the rate achieved to date, and plans to achieve a reduction in the poverty rate, a slowdown in the population growth rate, improvements in health and medical care, a stable supply of safe water, an increase in forest coverage, and cleaning of major polluted rivers, etc., through this economic growth. The social and economic indicators set as targets in the plan are as follows.

- (a) Reduce poverty rate by 5 % by 2007, to 19.33%.
- (b) Create employment at least sufficient to cover increases in the labor force during the period of the five-year plan.
- (c) Ensure that all children go to school by 2003; and that all children complete 5 years of compulsory education by 2007.
- (d) Reduce the rate of gender disparities in wage to 50% or less by 2007.
- (e) Reduce the rate of population growth to 1.62% per year from 2001 to 2011.
- (f) Increase literacy rates to 75% by 2007.
- (g) Reduce the infant mortality rate (IMR) to 4.5% by 2007 and to 2.8% by 2012.
- (h) Increase forest and tree cover to 25% by 2007 and 33% by 2012.
- (i) Make a stable supply of safe water possible for all villages by 2007.
- (j) Clean all major polluted rivers by 2007.

**(B) The National Common Minimum Programme of the UPA**

The UPA administration, on the basis of the urgent need to address the issues of rural areas, poverty and employment, which was revealed in the general election, advocates “economic growth which generates employment” and plans to realize an annual economic growth rate of 7 to 8% in a form which generates employment. Moreover, it aspires to realize “economic reforms with a human face,” while at the same time showing an active intention to raise the foreign capital investment ratio and to liberalize the infrastructure sector. Specifically, it has created the National Common Minimum Programme as the policy of the new administration and has established the following six principles for management of the administration.

- (a) Preserve, protect and promote social harmony
- (b) Achieve economic growth and employment creation
- (c) Enhance the welfare of farmers and workers in the unorganized sectors
- (d) Empower women
- (e) Give priority to particular castes and tribes in the provision of education and employment opportunities
- (f) Provide support for business entrepreneurs, engineers, etc.

## (2) Japan's Economic Cooperation for India: Past Achievements and Present State

(A) Since Japan provided its first ever yen loans to India in 1958, Japan has been the top donor to India, implementing assistance in economic infrastructure such as electric power, transport, industry, communications, etc., through yen loans, as well as in social sectors, agriculture and debt relief through grant aid.

(B) However, in response to the nuclear tests carried out by India in May 1998, Japan implemented such economic measures as suspending all new grant aid and new yen loans and adopting a careful consideration when providing financial assistance to India through multilateral development banks (MDBs). Thus Japan has provided assistance, primarily through the cooperation towards on-going yen loans projects, poverty countermeasures, technical cooperation placing the priority on human resources development, emergency and humanitarian aid, and grant aid for grassroots projects. During this period, Japan has repeatedly stated its view concerning nuclear disarmament and nonproliferation to India. As a result, India has continued its moratorium on nuclear tests and stated its intention to continue it in the future. In addition, India stated its intention to impose strict controls on the export of nuclear and missile-related materials and technology.

In October 2001 Japan praised India's efforts for nuclear disarmament and nonproliferation and decided to discontinue the economic measures after comprehensively considering various factors, including the necessity for active engagement with India, which plays a large role in fighting the "war on terror" and in stabilizing the South Asian region.

(C) Japan's ODA to India after discontinuation of the economic measures has been implemented in line with the priority sectors which were confirmed in policy dialogues: i) economic infrastructure, ii) health and medical care, iii) agriculture and rural development, and iv) environmental conservation. The characteristics of this assistance are that Japan has contributed to development of infrastructure such as electric power, transport, etc., through yen loan cooperation which accounts for more than 95% of Japan's ODA to India, and this has made a big contribution to the poverty reduction resulting from economic growth. Furthermore, support for the medical care sector and other social sectors has made a large contribution to poverty reduction.

## (3) Efforts of Major International Organizations and Other Donor Countries

India has a large national territory and enormous assistance needs, in particular in the area of poverty reduction. Most of major donors other than Japan adopt the Priority States Approach which gives preference to specific states to assist as a method of effectively utilizing limited assistance resources. However, the discussion over the effect on poverty reduction through this approach has recently come under review.

The World Bank has adopted policies to actively assist states which they have positioned as priority states due to their strong pro-reform nature, but it has begun placing more priority upon reaping the effect on poverty reduction. In the World

Bank's Country Assistance Strategy (CAS) (FY2005-FY2008), while continuing its assistance to the states with strong pro-reform natures, it also opens up possibilities for involvement with all poor states, in particular with the four states of Bihar, Jharkhand, Orissa and Uttar Pradesh, which have a particularly large population living in poverty. Together with the modification of the Priority States Approach, CAS is supposed to expand the assistance scale on i) infrastructure development to promote economic growth; ii) human development including education, health, etc.; and iii) improvement in the quality of life in regional and rural areas.

The Asian Development Bank, too, while acknowledging a certain significance in concentrating the assistance on a limited number of states, has expanded its target states of assistance in recent years from such highly pro-reform states as Gujarat and Kerala, to those with high rates of poverty such as Assam, Madhya Pradesh, Chattisgarh, Sikkim, Uttaranchal, and West Bengal and further prioritizing those by ADB's own criteria including Rajasthan, Karnataka, Jammu, Kashmir and others. Poverty reduction resulting from the effects of economic growth through assisting infrastructure development in the roads, railroads and electric power sectors is an important pillar in ADB's assistance strategy.

Japan is bilaterally top donor to India, contributing more than half of all such assistance, followed by the United Kingdom (UK), the Netherlands and Germany. Most major donor countries give priority to the sectors on health and medical care, elementary education, the environment, economic reforms support, etc. for poverty reduction, and implement assistance which primarily consists of grants, in particular technical cooperation.

#### 4. Basic Understandings concerning Implementation of Japan's ODA to India

##### (1) India's Special Characteristics

When thinking about assistance to India, the first factor that must be taken into consideration is India's characteristics. Currently India's population is in excess of one billion people, the second largest population in the world behind China. Although India's GDP measured in terms of purchasing power parity is the fourth-biggest in the world after the US, China and Japan, and in recent years India has been an Asian superpower attracting a lot of economic attention as one of the so-called BRIC countries (Brazil, Russia, India and China), per capita GDP measured in terms of the nominal exchange rate (the World Bank Atlas method) was less than \$500 in 2003, making India a low-income developing country. These two contrasting figures show India's special characteristics. Even now approximately 30% of India's population is poor, and India has the largest number of poor people in the world. Poverty reduction in India is very important for achieving the MDGs.

##### (2) India's Approach to Receiving Assistance

The feature of India's approach to receiving assistance, compared to most other developing countries, is that the concept of self-help efforts (ownership) is well established.

It is well known that Japan obtained loans from the World Bank, developed a full range of infrastructure and built the foundations for its subsequent economic growth. Japan's post-war experience is a success story that illustrates the importance of self-help efforts (ownership) and self-help efforts are incorporated as a basic assistance philosophy in Japan's ODA Charter. It is therefore quite easy for Japan, which had this kind of experience, to understand India's policy concerning the acceptance of ODA. It is necessary for Japan to respect the high degree of ownership of India and explore forms of assistance that take full advantage of the strengths of this kind of policy concerning the acceptance of ODA.

### (3) Features of India-Japan Relations and the Needs to Strengthen Economic Relations

Japan's share of India's total trade and direct investment in India is small. For example, in the 1990's trade with India accounted for less than 1% of Japan's total trade and trade with Japan accounted for less than 5% of India's total trade. In the period from 1951-1999, a mere 0.2% of Japan's direct investment went to India. Even after India began economic liberalization in 1991, these stagnating private sector-based economic relations did not improve. On the contrary, Japan's proportion of India's total trade and direct investment from abroad has continued to decline.

On the other hand, concerning ODA, Japan was top donor country to India until 1998 when all new yen loans and grant aid were suspended due to the economic measures taken in response to the nuclear tests. Moreover, looking back at the history of Japan's assistance to India to date, the overwhelming majority took the form of yen loans, which have accounted for almost 95% of Japan's ODA to India. Conversely, grant aid and technical cooperation account for only a small proportion of the assistance. There is no other country receiving assistance from Japan to which the proportion of yen loans is as high as it is to India.

The interest of Japanese companies in the Indian economy has been rapidly increasing in recent years due to the attraction of India's rapid economic growth, its enormous potential market and its status as an information technology (IT) superpower with a plentiful supply of software engineers being proficient in English, and it is the fact that the momentum is increasing for the private sector to make greater efforts to strengthen economic cooperation.

On the basis of Japan's own assisting experience towards East Asia, it is desirable to assist in efficiently strengthening the cause-and-effect linkages in India. Namely, this means "(i) infrastructure building through yen loans and facilitation of trade and the investment climate through human resources development supported by technical cooperation bringing about (ii) economic growth through an increase in private direct

investment, leading to (iii) economic development and improvement in the standard of living.”

#### (4) Points to Take into Consideration towards the Future Direction of Japan's ODA to India

When thinking about assistance to India, it is necessary to have the correct perception of India.

Firstly, it is necessary to correct the view of India as only a poor country. India basically considers political issues concerning poverty and income distribution issues as domestic issues and, as shown in the policy concerning the acceptance of assistance announced by the Government of India in June 2003 stating that assistance was unnecessary from the minor donors and that it would accept only from six specified donor countries (Japan, Germany, the US, the UK, the EC and Russia; subsequently modified in September 2004 to include the G8 plus the EU), India is very wary of foreign countries interfering in these domestic issues in the name of assistance.

Secondly, it is necessary to understand that India's ultimate objective is an expansion of direct investment, trade and technology transfers. Modern-day India, which has advanced economic liberalization, desires the development of private sector-based economic relations. Taking into account these expectations of India, one of the roles that should be played by Japan's ODA is to create a trend in which ODA promotes private sector economic relations, as was seen in the countries of East Asia and Southeast Asia.

At the same time, as is emphasized by the ODA Charter, it is necessary to make Japan's ODA to India more strategic, efficient and effective. When doing so, the following two points must be taken into consideration.

Firstly, there is the discernable increase in India's political and diplomatic importance in the international community as India's influence with respect to global issues such as the “war on terror” since the September 11 terrorist attacks in the US, prevention of the proliferation of weapons of mass destruction, the environment and energy, UN Security Council reform, etc., has increased, and it has become necessary to cooperate with India in tackling these issues. In this context, the most important point is to position Japan's assistance to India as one of the tools for contributing to peace, stability and prosperity in Asia and, therefore, in the world. That is to say, in order to further strengthen an India-Japan partnership suitable for the “new Asian era” with a new strategic orientation added, cooperative relations through assistance for India must be positioned as one of the most important pillars of Japan's diplomatic strategy in addition to politics and security, the economy, culture, global issues, etc.

Secondly, apart from exchange between the two countries at the governmental level, Japan has very little interest in India, and the accurate information about the country is hardly known to Japan. Without having a dramatic increase in all aspects of

human exchange, it could not promote the common understanding of India in Japan and thus will be difficult to sufficiently gain the people's support concerning Japan's ODA to India. This shows that it is necessary for Japan's ODA to India to put the emphasis on expanding and enhancing human resources development and human exchange between the two countries.

#### 5. Priority Areas of Japan's ODA to India

In the future, Japan's ODA to India, taking into account the basic perceptions described above, will have the priority areas on (1) the promotion of economic growth; (2) the improvement of poverty and environment issues; and (3) the expansion and enhancement of human resources development and exchange.

##### (1) Promotion of Economic Growth

As is mentioned in the ODA Charter, poverty reduction is a key development goal shared by the international community. There are estimated to be approximately 1.1 billion people in poverty across the world and approximately 30% of them live in India, so reducing India's population in poverty is extremely important for achieving the MDGs. Coordinating with other donors to realize poverty reduction in India is one of the important goals of Japan's assistance.

Japan's basic approach to the poverty issue takes the pursuit of "poverty reduction through economic growth." One of the biggest bottlenecks in realizing economic growth in India is the shortage and under-development of infrastructure. It is thought that in East Asia and Southeast Asia economies benefited from a virtuous cycle of "infrastructure development through yen loans and human resources development through technical cooperation→improvement in the investment climate and creation of employment→increase in direct investment and exports→realization of high economic growth→poverty reduction." In order to have this virtuous cycle function effectively in India, it is important to further facilitate the investment climate in terms of institutional system through comprehensive economic reform. While research in recent years has clearly revealed that "economic growth through infrastructure development" is effective for poverty reduction, with the Indian side sharing the same idea, needless to say, this approach must give sufficient consideration to the environment and must not undermine the poor or socially vulnerable. It is necessary to look at people not as targets of assistance, but rather as the "actors of development" and support their capacity building in order to achieve independence. For this reason, the Japan-India Joint Statement issued at the time of Prime Minister Koizumi's official visit to India in April 2005 clearly states that both infrastructure and the environment are priority sectors.

Furthermore, in order to effectively utilize the limited public funds for infrastructure development based on the needs, it is necessary to select the appropriate

projects which would be difficult to be supported by private funds or on commercial conditions. Thus, assistance for infrastructure development needs to support projects which are expected to create significant economic impact. Those projects could be models for other infrastructure development projects, as well as those that fully require Japan's excellent technology, knowledge, human resources and institutions. Assistance for those infrastructure projects would be strategically useful for Japan's assistance to India, and is largely prospected to have benefits for the promotion of investment and trade with India which could lead to the promotion of growth in the Indian economy. At the same time, those large-scale projects on infrastructure development with our prestigious technology, i.e. the feasibility study on the development of High Axle Road Freight Corridor mentioned in the Japan-India Joint Statement issued in April 2005, are expected to become symbols of Japan-India friendship.

Japan intends to assist infrastructure development, from medium and long term perspective, that contributes to private-investment oriented economic development through improving India's investment climate. Specifically, as shown below, Japan will place priority on the electric power and transport sectors whose services are continually in short which act as a bottleneck for economic growth.

(A) Assistance for the Electric Power Sector

Assistance for the electric power sector is important as it directly links to assistance for the reform efforts of the Government of India through implementing assistance with consideration to trends in sector reform and, in addition, a stable supply of electric power for agriculture irrigation ultimately contributes to poverty reduction through rural and regional development. On the basis of these perspectives, Japan will assist development of power resources in order to increase the electric power supply and assist the development of the power grid in order to create a stable and efficient supply of electric power. At the same time, in order to achieve the goal of improving the effect of businesses on the area of electric power sector, it should enhance its organizational reform and capacity building, including human resources development. In doing so Japan will keep in mind the priorities in India's national development plan and take into consideration the particular characteristics of each region and state, as well as look for the potential to utilize Japan's experience and outstanding technology. Also, it should be focused on the projects which are difficult to finance with private funds or on semi-commercial conditions.

(B) Assistance for the Transport Sector

In the transport sector, assuming that the implementing agencies ensure sufficient capabilities in maintenance and management after completing projects, Japan will assist the development of city transportation systems which contribute not only to the alleviation of traffic congestion, but also to air pollution control and

other environmental conservation measures, and the development of major truck roads, bridges, ports and railways which contribute to greater efficiency in distribution, yet currently a bottleneck of the trade and investment (Refer to Case Study 1).

(C) Increasing Added Value through Infrastructure Development Assistance

When implementing assistance for infrastructure development, it is more effective to implement not only “hard” aspects of assistance, such as facilities development, but also to combine it with “soft” cooperation with human resources development at its core, improving the operation and maintenance capacity and management capacity of project implementation agencies, and further policies and systems in order to increase the effect of projects. It is thought that coordination of hard and soft aspects of assistance will improve the sustainability of the projects themselves and furthermore, as a model for public projects in India, the projects could produce a variety of ripple effects for the improvement of policies and systems and for public projects in other states. Examples of an assistance project in which hard and soft aspects were coordinated effectively include assistance for building the organizational capacity of the Electricity Board in power grid development project (Refer to Case Study 2 in the Appendix) and provision of Japan’s knowledge concerning water leakages and water conservation measures for water supply development project.

(2) Improvement of the Poverty and Environment Issues

(A) Address to the Poverty Issue

Even if it is accepted that economic growth is essential to poverty reduction, it must take into consideration the socially vulnerable people. Furthermore, a few preconditions must be met in order to ensure that the economic benefits from growth reach the poor. The class-orientated character of India’s education, medical care and health systems is the major factor impeding the participation of the poor and socially vulnerable (women, the disabled, etc.) in market economy activities. For the poor and socially vulnerable, who have limited opportunities to access to education, it is also often difficult to gain access to maternal and child health or public health services, and the impact caused by preventable infectious diseases imposes a further burden on them. This vicious circle of poverty fuels the expansion of economic and social disparities against the poor and socially vulnerable and it needs to implement assistance for them with special focus to break this circle.

Moreover, the cause of India’s poverty issue is rooted in the rural areas. The poverty issue will not be resolved unless incomes of rural population are increased and rural employment is improved. Based on this understanding, it is the best course of action to consider what kinds of assistance Japan can provide with respecting India’s priority and self-help efforts (ownership).



(a) Assistance for the Health and Sanitation Sector

Cooperation in the health and sanitation sector is a center to the MDGs and assistance for India's health and sanitation sector, which faces many challenges, has significant impact. Also cooperation in the infectious diseases countermeasures sector is one of the important pillars of Japan's international cooperation.

In India, in addition to various infectious diseases such as HIV/AIDS, malaria, tuberculosis, polio, etc., there are many challenges, such as the maternal and child health sector which is in very poor condition, primary health care, and the disabled who are estimated to be 5% of the total population etc. It is necessary to carefully assess the needs of the target regions, keeping in mind the efforts of the Government of India, international organizations and other donors, and to implement cooperation that contributes to poverty reduction. Also, the level of health and sanitation conditions varies substantially among different states, so it is necessary to take into account the regional disparities.

As a method of cooperation, it is effective to first select the target regions and sectors and then not only implement assistance for the development of "hard" aspects as a core such as the health and medical care facilities, but also for the "soft" aspects such as human resources development for people involved in health and medical care services, existing referral systems, organizations and finances, reform of all systems, and operation and maintenance of infrastructure. It is essential to coordinate with NGOs and community based organizations in order to improve the measures for infectious diseases and maternal and child health, and positive results are being achieved within India. Small-scale support will also continue through this coordination.

(b) Assistance for Local Development

The role that India's rural areas should play in the medium and long-term in the process of sustainable growth is the reduction of regional disparities and poverty through creating employment, increasing incomes, etc. Given this role, it is necessary to increase incomes of residents in rural areas through the introduction of technology for improving agricultural productivity develop intensive irrigation facilities, improve roads providing access to markets and communication system in the rural areas, etc.

(c) Efforts with a View to Disaster Prevention

The damage from floods and mudslides that occur during the monsoon season in states such as Bihar, Assam, West Bengal and the northeastern states is enormous and hindering the ability of local residents to earn a stable income and becoming a major factor behind poverty. Therefore, disaster prevention assistance utilizing Japan's experience of information communication system development in forest conservation and flood control or emergencies is also important from the perspective of poverty countermeasures.

(d) Assistance for the Development of Tourism that Contributes to Employment Creation

India's tourism sector, despite possessing diverse and abundant tourism resources, including 26 world heritage sites across the country, faces the problems that the tourism resources have not been effectively utilized due to the facts such as the deterioration of tourism resources like historical ruins, etc., poor quality of services as a result of poor infrastructure, and low awareness among local residents towards the promotion of tourism and protection of cultural assets and other tourism resources.

The total income of India's tourism sector in 2001 was 5.2% of GDP and the number of people employed in the sector was 6% of the total work force and thus, the tourism sector is an important source of obtaining foreign currency in India. Furthermore, as tourism development creates valuable employment opportunities for local residents, Japan will actively assist this sector.

In order to realize sustainable growth in the tourism sector, the development of tourism infrastructure including airports, roads, water supply and sewage systems, electric power, and communication system is vital. It is also essential to strengthen the marketing capacity to attract tourists, encourage the active participation of local communities and residents in the promotion of tourism and provide protection to valuable tourism resources such as historical ruins, cultural assets, the natural environment, etc., in tandem with infrastructure development.

(B) Address to Environmental Issues

In the South Asian region, including India, environmental pollution is becoming more serious, particularly in urban areas, due to the increase in energy consumption resulting from the population growth. The environmental issues in India which possessing diverse cultures, religions, traditions and social systems in each region, go beyond air pollution, water pollution (rivers, oceans, lakes), deforestation and soil contamination; they also include wide-ranged and diverse issues such as the deterioration of the urban environment regarding drinking water and health and sanitation, as well as the decline of biodiversity.

(a) Assistance for Water Supply and Sewage Systems

In order to prevent or reduce contamination of rivers, soil and groundwater and to improve the sanitary environment for residents, Japan will provide assistance to the water supply and sewage systems sector. When implementing this assistance, on the basis of perspectives of ensuring sufficient and safe water resources and a stable water supply, Japan will actively provide intellectual cooperation for the improvement of policies and systems, including decentralization to ensure the adequate operation and management system, organizational management capacity building and effective utilization of water resources (water conservation and water

leakage countermeasures). (Refer to Case Study 3 in the Appendix).

(b) Assistance for the Forestry Sector

It is effective to increase the quality and quantity of forests in order to prevent soil degradation and erosion and to conserve biodiversity, etc., so. Japan will provide assistance to the forestry sector. Japan will keep in mind the fact that many of the poor and socially vulnerable are dependent on the forestry sector and therefore the deterioration of forests might have a big impact on their livelihoods. Japan will consider a comprehensive approach combining the promotion of community-participation tree planting, assurance of alternative sources of income for residents living in the vicinity, support for education, health, agricultural development, etc., (Refer to Case Study 4 in the Appendix).

(c) Assistance for Renewable Energy and Energy Saving

Japan will provide assistance for renewable energy and energy saving based on such perspectives as taking measures against global warming and contributing to India's growth through sustainable development. Japan will consider implementing the CDM project which utilizes ODA effectively, while taking into consideration India's wishes and international rules.

(d) Assistance for Improvement of the Urban Environment

The negative side of India's good economic growth is that urban environment issues such as air pollution, waste, sanitation, city wastewater, etc., are becoming more serious. Under these circumstances, Japan will implement comprehensive environmental projects for major cities that include measures addressing those problems.

(e) Assistance for Environmental Conservation of Rivers and Lakes

Rivers and lakes are valuable resources of fresh water as well as useful for conserving a good natural environment and living environment and for maintaining the ecosystem. Japan will provide cooperation for their environmental conservation.

(3) Expansion of Human Resources Development and Human Exchange

One of the goals of Japan's ODA to India is the promotion of mutual understanding, and in order to achieve this, a substantial increase in human exchanges will be required. It is thought that exchange in all areas is necessary, but importance should be placed particularly on exchange in technological areas. Since achieving independence, India has consistently pursued a policy of becoming a "technology-oriented nation." Recently the committee chaired by President Abdul Kalam reaffirmed the goal of building a wealthy India by establishing a technology-orientated nation.

The Government of Japan and the private sector will work together to implement assistance to achieve this goal, starting from the three areas mentioned below. Yen loan

projects require five to ten years to be completed and if the period of subsequent operation and maintenance is included, it will promote relations between Japan and India over a long time period of several decades. Japan will reaffirm such projects as a valuable opportunity for India-Japan exchange and will promote wide-ranging exchange and coordination between the NGOs, local authorities, civil society, the academic community, etc., of both countries, through joint study and research, joint projects, seminars and workshops (Refer to Case Study 5 in the Appendix).

(A) Human Resources Development and Human Exchange

Japan will further strengthen private sector-based technical cooperation such as JICA training and the Association for Overseas Technical Scholarship (AOTS), and existing human resources training and exchange programs including those between universities, and at the same time, will also promote the Youth Invitation Program and dispatch of the Japan Overseas Cooperation Volunteers, which was agreed to resume anew.

(B) Assistance of “Soft” Aspects for the Development of an Attractive Investment Environment

Japan will hold workshops and implement joint research and training for the objective of promoting the establishment of fair and transparent market rules and promoting trade and direct investment.

(C) India-Japan Intellectual Exchange

In order to comprehensively promote intellectual exchange in the natural sciences, social sciences and humanities, Japan will utilize the facilities of the International Exchange Foundation Japan cultural centers which are due to be newly reorganized in early 2006, and strengthen their functions as a place for India-Japan intellectual exchange.

## | | |--| | 6. Assistance Efficiency and the Implementation System | |--|

(1) Strengthening Coordination among Economic Cooperation Methods

Under the financial constraints, Japan needs to increase the effectiveness of assistance by effectively using the limited resources for assistance from now on, as demonstrated in the concepts of selection and focus.

In order to make it effective and efficient, Japan has to implement its ODA to India by effectively combining the appropriate assistance methods while leveraging on the characteristic of each method. Of the different combinations of assistance methods, the combination of financial and technical cooperation in particular will be vigorously implemented, as it is thought that synergistic effects can be expected by combining the hard and soft aspects of assistance. Furthermore, in order to promote the enhancement of coordination, it is necessary to take such measures as combining a technical cooperation component at the early stages of designing the framework for financial

cooperation assistance. As to assistance for infrastructure development in India, while taking the supposed enormous demand for finance into account, it is necessary to consider the project efficiency by utilizing Japan's technology and knowledge, looking at whether to utilize the private funds, as well as at appropriate sharing of dues between the public and the civil sectors.

## (2) Coordination with Other Donor Countries

As for cooperation with other donors, the enhancement of information exchange among donor countries is important as its first step. This is because assistance cooperation among donor countries is not always conducted sufficiently due to India's rather inactive stance towards assistance cooperation. Furthermore, assistance provided by other donor countries, which conforms to the contents and direction of assistance provided by Japan, will increase the effect and impact of the assistance. Therefore, Japan should vigorously search for ways of assistance cooperation with these donor countries, by conducting close coordination at local levels. Japan should also actively work with development partners including international organizations to coordinate assistance plan.

## (3) Implementation of Effective Policy Dialogue

In order to discover and implement more effective assistance, Japan and India need to formulate favorable projects with strengthening policy consultation on the issues in the target sector of assistance, and to make joint efforts for the realization of those projects.

In India, the government has already begun to hold consultations for yen loans, discussing, not on project basis, but issues on economic policy and development in the target sector of assistance before placing requests. Japan needs to further enhance these kinds of policy consultation and aim for coordination between different schemes, such as between development study and yen loans.

## (4) Strengthening Assistance Structures

### (a) Strengthening local functions

As mentioned above, in order for Japan to shift to the policy that places more importance on holding consultations before the recipient country makes a request and to formulate projects that meet both the interests of Japan and India through conducting close opinion exchanges with the Government of India and other donor countries, it is desirable to assign experts with adequate knowledge about each sector in India to the local ODA taskforce, which is comprised of personnel from the Embassy of Japan in India, the Japan Bank for International Cooperation (JBIC), the Japan International Cooperation Agency (JICA) and Japan External Trade Organization (JETRO).

Currently, there are not necessarily an adequate number of experts at the Embassy of Japan, JBIC and JICA, and thus Japan will consider fundamentally strengthening the way of utilizing experts in each sector.

(b) Focus on policy consultation and respect for selection of locally-led projects

It is necessary to enhance the function of the local ODA taskforce for the selection of projects. More specifically, the local ODA taskforce needs to strengthen daily contact with India's counterpart ministries and agencies in order to increase practical channels to hold policy consultations, and hold constant opinion exchanges with Tokyo headquarters of the Ministry of Foreign Affairs of Japan. It will also give recommendations to Tokyo headquarters on the priority level of the potential assistance projects that have become clear through those policy consultations, and the officials in Tokyo will take on the recommendations provided for the selection of the projects to be implemented.

Furthermore, as its premise, the Embassy, JICA and JBIC, which constitute the local ODA taskforce, need to strengthen their complementary system through mutual cooperation.

The objectives of taking a locally-led approach are: (1) minimization of the time required from formulation of a project to its implementation; (2) implementation of more effective and efficient projects by utilizing local knowledge; (3) more prompt and suitable decisions responding to the changes in the environment; and (4) promotion of policy dialogues and assistance cooperation. As such, the expertise of the staff members needs to be drastically improved. Japan will make efforts to enhance and systematize education and training sessions for such purposes.

## **7. Points to Keep in Mind in Implementing Assistance**

### **(1) Measures Regarding Disarmament and Nonproliferation**

At the time of the discontinuation of economic measures in 2001, Japan clearly stated its intention to consider taking appropriate measures, including resumption of the measures in the event that the situation regarding nuclear nonproliferation worsens. Japan has been strongly urging India to advance its measures regarding arms control and nonproliferation of weapons of mass destruction (WMD) such as nuclear weapons and its means of delivery. These include the continuation of its moratorium on nuclear testing, enhancement of an export control system, joining the nuclear Non-Proliferation Treaty (NPT), and signing and ratifying the Comprehensive Nuclear-Test-Ban Treaty (CTBT). It is necessary for Japan to continue watching India's response to such efforts. In addition, Japan provides cooperation towards India's efforts for building a firmer system of export management.

Furthermore, in order to have India deepen its awareness and understanding towards Japan's ODA Charter, Japan will seize opportunities to propose to India the abovementioned requests for arms control and nonproliferation, with which Japan has been concerned. Japan will pay close attention to the trends in India, such as its military expenditure, development and manufacture of WMDs and missiles, exports and imports of arms due to maintaining and enhancing international peace and stability which aim to prevent the proliferation of terrorism and WMDs and their means of delivery.

#### (2) Making ODA Public Relations More Strategic and Active

Upon promoting more strategic ODA activities in the future, Japan needs to implement more strategic and vigorous PR activities for ODA to the people of India, particularly the opinion leaders in the Indian society, such as the politicians, bureaucrats, intellectuals and mass media-related personnel, etc. It is thought that this will contribute to the enhancement of Japan-India relations, resulting in an increase in the cost-effectiveness of the ODA provided to India.

Furthermore, from the perspective of making Japan's accountability thorough, it is important that Japan continues its effort to actively carry out easy-to-understand publicity on its views and achievements concerning the ODA to the government of India, the people of India, the people of Japan and other donors. In order to realize this, information will be put into forms that are most easy to understand by using documents translated into English and graphs and charts, and then uploaded as needed on the homepages of the Ministry of Foreign Affairs of Japan, the Embassy of Japan, JBIC and JICA. At the same time, Japan will consider further use of PR methods and tools that utilize images and sounds.

#### (3) Consideration for Environmental, Social and Gender Aspects

The environment and society could be affected by the formation and implementation of development projects such as development of economic infrastructures. Thus, close attention must be paid to the environmental and social aspects from the early stages of formulating the program in accordance with the Guidelines for Environmental and Social Considerations which is stipulated by JICA and JBIC. In addition, attention must be paid to perspectives of gender issues.

(End)

## **Case Study 1: Delhi Mass Rapid Transport System Project**

### **1. Project outline**

The purpose of this project is to improve the urban environment in Delhi, the capital city of India, and alleviate heavy traffic and reduce traffic pollution such as exhaust gas by improving the urban function of the city. This shall be attained by constructing approximately 59km of the total length of an approximately 245km mass rapid transport system of subways, elevated railways and ground level railways. The total expense for this project amounts to approximately 278 billion yen and Japan has provided a total of 162.8 billion yen in the form of yen loans in six installments since FY1996. So far, approximately 26km has been opened, and the number of passengers projected to utilize this transportation system upon completion of all lines (scheduled for March 2006) is 2.26 million persons per day (same scale as the Tokyo Metropolitan Subway in 2002 which was at 2.26 million persons per day or the Osaka Municipal Subway in 2002 at 2.37 million persons per day). It is expected that the completion of this mass transportation system will serve as a major role in contributing to the alleviation of heavy traffic and reduction of urban traffic pollution such as exhaust gas, and improving the urban function of Delhi.

### **2. As a model project in India**

In the past, the people working at construction sites in India did not have the practice of wearing safety helmets and safety shoes while on the job. However, following the recommendations given by Japanese consultants, all workers now wear safety helmets and safety shoes while on the job and the sites are now thoroughly organized. This is one reason for which this project is said to have brought into India what may be called a cultural innovation, not only in terms of the introduction of advanced technology, but also in terms of safety measures by affecting its method of implementing construction work.

Furthermore, as many migrant workers working on this project lack the knowledge on HIV (India ranks second as the country with the most HIV-positive people, amounting to over 3 million), the New Delhi office of JBIC has started conducting HIV prevention activities for migrant workers as an effort for social contribution, based on the results of the survey which was commissioned to the local non-governmental organization (NGO). These activities could be viewed as pioneering moves that could be applied in other projects in the future.

## **Case Study 2: West Bengal Transmission System Project - Assistance to Enhance the Institutional Capacity of the Implementing Agency**



Under this project, the power grid across the State of West Bengal, located in the eastern part of India, has been enhanced and expanded by yen loans, in order to increase the capacity of electricity transmission facilities and reduce the rate of electricity loss from transmission in this region. Upon implementation of this assistance, “soft” assistance was carried out together with the “hard” assistance. The details of assistance in the soft aspect are as follows.

As part of the electricity sector reform in the State of West Bengal, the West Bengal State Electricity Board is advancing an organizational reform. The Electricity Board has taken various measures to reduce the amount of electricity loss from transmission and to improve the financial standing. However, there still remain many issues that are unresolved.

Given such a situation, JBIC introduced and implemented training on the Total Quality Management (TQM) method by utilizing the JBIC Special Assistance for Project Implementation (SAPI) scheme in an effort to develop a practice for the employees at the West Bengal State Electricity Board to consider and propose improvement measures themselves. This kind of approach for the electricity sector reform differs from those taken by other assistance agencies in other states of India. It aims for an independent internal reform and enhancement of the organization by having the employees of even the lowest levels at the West Bengal State Electricity Board take part in the effort. Specifically, JBIC provided training and advice over the period of three to four months for the field-level engineers and employees to form a group at every local office, in order to have a grip on the problems of the tasks that they themselves have set (for example, measures against the loss of electricity from transmission), then gather the data, analyze the problems and make concrete proposals for the solution.

Furthermore, learning from this experience, agreement has already been reached with the Indian side for the TQM method and, in particular, for the quality control (QC) circle activities to be introduced for other electric power projects in India (the Umiam State-II Hydro Power Station Renovation and Modernization Project which was granted in FY2003 as well as the Purulia Pumped Storage Project (II)).

### **Case Study 3: Ganga Action Plan Project**

#### **1. Background of implementation**

As 380 million people, or approximately 40% of the entire population of India, are concentrated in the basin of the Ganges (Ganga) River, pollution caused by factors including wastewater from households and factories has become an extremely serious issue. As such, concerns are raised on the impacts this will have on the residents in

terms of public health and the environment. The Government of India is engaged in various countermeasures to tackle pollution, including the construction of a sewage treatment plant for river purification. Nevertheless, it is hard to say that a sufficient level of purification has been achieved considering the length and scale of the Ganges River.

Responding to the request by the Government of India, JICA has been conducting a development study with the main purposes of reviewing the existing projects, establishing new improvement projects and transferring technology necessary for the management of the target areas of the measures against pollution for the purification of the sacred Ganges River. Furthermore, yen loans by JBIC are scheduled to be implemented after this study. This development is likely to serve as a model for future ODA projects to India as a joint project of JICA and JBIC (similar coordination is also expected in the development study entitled “Augmentation of Water Supply and Sanitation for the Goa State”).

## **2. Overview of the study**

This development study is conducted with the objective of reducing the amount of pollutants in the Ganges River to a “level acceptable for bathing” by 2030. As such, a master plan on the management of the target areas of the measures against pollution in the Ganges River is to be formulated through surveying the current state of the source of pollution, with a focus on basic studies and by selecting and sorting the issues that must be tackled. In addition, a feasibility study is being conducted on specific projects for the improvement of the water quality.

Furthermore, at a ghat (bathing site) in Varanasi City, a pilot project for environmental improvement is underway. Specifically, there is a plan to repair the crematorium as well as establish a women’s changing room, street lights, safeguards, waiting room and information board at Manikarnika Ghat, which is famous as a crematorium. Furthermore, there is a plan for a Community Based Organization (CBO) to be established for maintenance and management purposes after its completion.

### **Case Study 4: Japan’s Afforestation Assistance to India**

India has as its goal to cover 33% of its total land area with forests (currently it is about 20%). Nevertheless, its forests are decreasing and deteriorating because there is greater demand than supply for lumber and wood among people living in the forest area, and because of the livestock raised in the forests and frequent occurrences of fires, among other factors. Under such circumstances, the concept of forest management with the participation of the community has been clearly stipulated in the national forest policy as “Joint Forest Management.” It has been proposed that

measures for poverty alleviation of regional residents be taken in accordance with this concept of “Joint Forest Management.” As such, measures against poverty such as securing the vested interests of the residents concerning the forest, creation of employment and establishment of village community funds are being undertaken. Japan has provided yen loans totaling to 91.8 billion yen in ten projects for forest related businesses by the end of FY2003 (approximately 10% of all forest related businesses in India). Japan has been not only engaged in projects with its objective limited to afforestation, but also those projects such as the Tamil Nadu Afforestation Project, which aims for environmental conservation and comprehensive development of the area with afforestation serving as one of the pillars. In this project, sustainable positive effects of the projects are being observed with improvements in the people’s livelihood through micro finance and locally led development through “Joint Forest Management.”

## **Case Study 5 : Provision of Japan’s Knowledge on Measures Against Water Leakage and on Water Conservation for the Bisalpur Jaipur Water Supply Project**

### **1. Project outline**

In Jaipur City, the capital of the State of Rajasthan which is located in the northeastern part of India, construction and refurbishment of facilities for the water supply and distribution are being conducted through yen loans as a measure to respond to the increase in the demand for water supply in the region due to population increases until 2011 and to avoid relying on groundwater.

### **2. Assistance in the “soft” aspects through utilization of Japan’s knowledge**

The water service businesses in the State of Rajasthan is suffering from such problems as a high rate, or roughly 40%, of non-revenue water and not thoroughly being able to collect its fees, thus resulting in collection ratio of only 30% to 40%. Reform of the sector is necessary in order to cover the maintenance and management expenses of the water service facilities. These reforms include improvement in the accounting method, review of the fee level and area of collection targets, countermeasures against non-revenue water such as measures against water leakage and measure for water conservation (demand side management). Given this situation, Japan is providing the following assistances in the “soft” aspects through utilizing its knowledge.

(1) JBIC has implemented the following by utilizing its Special Assistance for Project Implementation (SAPI) scheme:

(a) Formulation of an action plan on the reform of the sector focusing on countermeasures against non-revenue water.

(b) Review of the fee level and area of collection targets, consideration of installing

meters, methods of fee collection and checking the meters as a measure against water leakage, etc.

(c) Measures for water conservation through educating the people demanding water.

(2) Furthermore, in implementing the abovementioned items, cooperation from the following local governments and others have been attained in order to provide recommendations for more effective water leakage and water conservation measures by leveraging on the know-how possessed by local governments and NGOs of Japan.

(a) Fukuoka City: Reduced the rate of water leakage to a fourth of what it used to be through construction of the Water Distribution Control Center. Moreover, it also actively engages in water conservation measures through such means as establishment of the Water Conservation Dissemination Division inside the Waterworks Bureau while learning from its multiple experiences of droughts.

(b) Osaka City: Learning from its experience of the Great Hanshin-Awaji Earthquake, it is implementing advanced water leakage measures, such as improvement in the earthquake resistance level of pipelines and enhancement of the water distribution management system, including emergency measures.

(c) Yokohama City: Boasts rich experiences and achievements in providing international cooperation in the waterworks business. So far, it has dispatched experts on waterworks business to Vietnam, provided recommendations on the fee structure of water supply to developing countries and so on..

(d) Japan Asian Association and Asian Friendship Society: Has been implementing projects that provide drinking water in various parts of India for over 20 years. These projects are implemented in such a way that it involves local residents.

## Japan's Country Assistance Program for India

