1. **Japan's Basic Position**

(Situation on water and sanitation)

Water is essential for human life and health, as well as for economic activity and the preservation of the ecosystem. The UN Millennium Development Goals (MDGs) include improved access to safe drinking water and basic sanitation as a target. This reflects that water is an extremely important element in achieving other MDGs such as eradication of poverty and hunger, health, education, gender equality, and environmental sustainability.

While the proportion of the population using safe sources of drinking water in the developing world rose from 71% in 1990 to 79% in 2002, 1.1 billion people are still using water from unimproved sources. Particularly in sub-Saharan Africa, progress is slow, and high population growth is making the situation even more difficult.¹

On the other hand, while sanitation coverage in the developing world rose from 34% in 1990 to 49% in 2002, 2.6 billion people still lack toilets and other forms of improved sanitation.¹

Water-related disasters disproportionately affect developing countries and are increasing.² Furthermore, it is predicted that the water shortage will aggravate structurally around the world due to such factors as population growth, economic development, urbanization, and climate change. As a result, there is a possibility that tensions may increase over water resources and water environment among nations and people who share water resources in rivers and aquifers.

(Japan's experience)

Japan has historically promoted countermeasures in both software and hardware aspects in water-related disaster reduction, water use coordination, and water pollution prevention in order to overcome problems including floods, droughts and water pollution aggravated by such factors as economic development, change in industrial structure and advanced urbanization.

During the time of post-WWII reconstruction when Japan achieved remarkable economic growth, Japan promoted regional water resources

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management and water supply system development, thereby realizing stable water supply and sanitary improvement in major cities. In rural areas, the improvement of the living environment, such as kitchens and toilets, and irrigation projects were promoted in an integrated manner in order to raise sanitary standards and agricultural productivity. Moreover, during the period of high economic growth, the Government responded to the rapid deterioration of the water environment in rivers and lakes, by such means as enforcing effluent regulations and improving sewer systems, and also advanced comprehensive response to the problem of land subsidence due to excessive withdrawal of groundwater, by not only limiting withdrawal volume but also promoting the effective use of water through the water quality control of industrial wastewater based on legislations related to water environment.

The methods established from Japan’s experience such as the water quality control measures based on master plans of sewer system improvement for individual river basins like the Tama River basin, the comprehensive flood control measures of the Tsurumi River basin, the integrated lake management of Lake Biwa, and groundwater regulation and management of the Nobi Plain, can be effectively applied to integrated water resources management (IWRM) in developing countries.

Making positive contributions to the improvement in the water and sanitation situation in developing countries by utilizing Japan’s experience, expertise and technology will lead to high-quality assistance based on Japan’s comparative advantage.

(Japan’s efforts in ODA)

Japan has continuously been the world’s largest donor in the water and sanitation sector since the 1990s, and has implemented $4.6 billion of ODA in the five years between 2000 and 2004, which accounts for 41% of the bilateral donors’ total. Japan provides support in both software and hardware in the water and sanitation sector related to the promotion of IWRM, safe drinking water and sanitation, water for food production and other uses, water

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3 Concept of IWRM: IWRM aims at (1) giving integrated consideration to all forms and stages of the hydrological cycle in the natural system (such as land and water, water quantity and quality, surface water and groundwater), (2) giving consideration to cross-sectoral approach among various sub-sectors related to water (river/flood control, water supply and sewage, water for food, water for industry and water for nature, etc.) that were conventionally managed separately, and (3) a participatory approach including all levels of stakeholders such as the central government, local governments, the private sector, NGOs and inhabitants. Finally, by managing water through such co-ordinated methods, it aims to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of the vital ecosystem.

4 Japan’s ODA Yen Loan projects for the improvement of water supply systems implemented since the 1980s are expected to have provided accesses to safe drinking water to over 100 million people around the world.
pollution prevention and ecosystem conservation and mitigation of damage from water-related disasters.

(Announcement of the Initiative)

The “Initiative for Japan’s ODA on Water”, which was announced on the occasion of the Third World Water Forum and Ministerial Conference held in March 2003, presented Japan’s comprehensive approach in this sector. With a view to implementing Japan’s assistance on water and sanitation more effectively, the Government of Japan announces the “Water and Sanitation Broad Partnership Initiative (WASABI)”.

2. Basic Policies

Japan will support the self-help efforts of developing countries on water and sanitation tailored to each recipient country’s development needs and technology level, based on the following policies.

In order to implement Japan’s assistance more effectively, it is important to establish broad partnerships with international organizations, other donor countries, Japan’s local governments, NGOs in Japan and abroad, the private sector, and education and research institutions, etc. Japan will seek to collaborate with NGOs in implementing the grass-roots level cooperation that directly benefits local communities and individuals. In addition, Japan will assist South-South cooperation.

(1) Pursuing the sustainability of water use

In order to use water resources effectively and efficiently into the future, it is crucial to formulate water resources management plans such as IWRM plans. For this, it is necessary first to grasp the volume of available water resources, monitor, forecast and evaluate the trends in water demand and the effects on the environment through water use, and then to take appropriate measures in both policy and project levels based on the results. However, since the distribution of water resources can potentially cause domestic or international conflicts, it is necessary to also consider the question of equitable water distribution when formulating a water resources management plan.

Japan will support the self-help efforts in the monitoring, forecasting, and evaluation of long-term trends relating to water in developing countries, and the formulation and implementation of a long-term water management plan. Regarding water resources from trans-boundary rivers and aquifers, Japan will support the establishment of a framework for promoting joint management among riparian countries.

In addition, Japan will ensure harmonization of its projects on water and
sewage improvement and irrigation improvement with the water management plan of the recipient country. After the implementation of the projects, Japan will support institutional development of recipient countries for their continuous monitoring of the impacts on the water environment as well as proper maintenance, management, and operation of the water and sewage system and other infrastructures. Furthermore, Japan will support the monitoring of improvement in health situations targeting such indices as the number of patients affected by waterborne infectious diseases including diarrhea.

(2) Emphasizing the “human security” perspective

In order to improve situations on water and sanitation, it is important to protect and empower individuals and local communities based on the perspective of “human security”, along with the implementation of government-level policies. Examples include adopting methods to encourage the capacity development and participation of inhabitants in the infrastructure development, maintenance, management, and operation of water supply and irrigation systems. Japan will also support the capacity development through such activities as organization of residents and education related to water and sanitation, taking gender perspectives into consideration. Japan will aim to promote the self-reliance of people including women and facilitate their active role as “promoters of development,” through assistance to local communities focusing on water.

Furthermore, Japan will emphasize support to the socially vulnerable including the poor who face various difficulties such as lack of access to safe water and water pollution. In addition, protecting people from risks of floods, sediment disasters, droughts, and other natural disasters, and strengthening capacities to respond to these situations are important from the “human security” perspective. For this purpose, Japan will support the development of dams, levees, check dams, etc., and drought crisis management including deep well development, as well as providing software support such as formulation of land-use plans, development of the water-related disaster early warning systems and providing disaster prevention education.

(3) Emphasizing capacity development

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5 “Human security” means focusing on individuals and building societies in which everyone can live with dignity, and protecting and empowering individuals and communities that are exposed to actual or potential threats. In concrete terms, it aims at protecting individuals from “fears,” such as conflict, terrorism, crime, human-rights violation, displacement, disease epidemics, environmental destruction, economic crises and natural disasters, and “wants” such as poverty, hunger and lack of educational and health services, and empowering people so that they can make choices and take actions for improving the quality of their lives.
Promoting the development of the organizations, policies, systems, information and data, and human resources of the governments of developing countries has an important significance in maximizing the effect of the infrastructure development and other support for water supply, sewage and basic sanitation, irrigation and flood control. Furthermore, promoting the development in technological and managerial capacities at the local level, such as local governments, is indispensable for the proper maintenance, management and operation of developed infrastructures. Therefore, Japan will implement assistance taking both capacity development and infrastructure development into consideration. For this purpose, coordinated programs among technical cooperation, grant aid, and loan aid will be promoted.

(4) Pursuing synergy through cross-sectoral measures

It is necessary to give full consideration so that support in the water and sanitation sector will effectively contribute to closely-related goals, such as health, education, disaster reduction, urban and rural development, industrial development, environmental and ecological conservation, and gender equality. To this end, in providing support in the water and sanitation sector, Japan will promote coordination with related sectors while thoroughly considering the effects and impact on these goals from the project formation phase. In addition, Japan will give full consideration to the impact of the projects after implementation.

(5) Considering local conditions and appropriate technology

Since various issues related to water and sanitation such as river management, water use coordination, and the perception on sanitation are closely related to natural conditions such as geography and weather, politics, society, climate, culture, religion, practices, and other various factors, it is necessary to give adequate consideration to the appropriate technology as well as the local conditions and characteristics of the local area when implementing assistance.

3. Concrete Measures

As the world's largest donor in the water and sanitation sector, Japan will provide the following comprehensive support by utilizing its experience, expertise and technology.

(1) Promotion of integrated water resources management (IWRM)

(a) Japan will promote the implementation of IWRM to ensure sustainable water use. To this end, Japan will support the capacity development of
developing countries based on the methods such as comprehensive flood control measures, integrated lake basin management (ILBM),\(^6\) and groundwater regulation and management, making use of its experience, expertise, and technology. Furthermore, grasping the medium- and long-term trends of water by monitoring, forecasting, and evaluating the circulation of surface and ground water on a global scale, including the effects of climate change, has an important significance from the perspective of proper water resources management. To this end, Japan will support the establishment of the systems such as the Global Earth Observation System of Systems (GEOSS).\(^7\)

(b) Focusing on regions in which aggravation of structural water shortage is predicted, Japan will support the structural development towards the international cooperation on the management of trans-boundary watercourses.

2) Provision of safe drinking water and sanitation

The supply of safe drinking water and sanitation directly influences the improvement of the living standards of people through such effects as decrease in infant mortality rate and promotion of health through disease prevention of diarrhea, and opening up opportunities for schooling and employment by being released from water drawing labor. In order to ensure safety of water, it is necessary to take measures against both artificial chemical substances such as pesticides as well as mainly naturally derived chemical substances such as arsenic and fluorine. From this standpoint, Japan will provide support in coordination with the activities of other sectors such as the health sector.

i. Measures in rural communities

(a) Japan will attach importance to the perspective of human security and will support the development of water supply facilities tailored to local conditions such as deep wells and simple waterworks in developing water supply facilities. In addition, Japan will support the capacity development of local communities so that local residents including women can independently maintain, manage, and operate facilities. Furthermore, Japan will support the development of a system enabling

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\(^6\) A method of managing basins that include lakes and reservoirs as an entirety in an integrated manner from the perspective of environment, etc., aimed at its sustainable use.

\(^7\) A comprehensive observation system covering the entire globe founded on coordination among existing and future satellites and terrestrial observations, etc. The “10-year Implementation Plan” which includes the system building in the next 10 years was agreed during the Third Earth Observation Summit held in February 2005.
the dissemination of knowledge related to water and sanitation to raise the people's awareness towards the safety of water, etc.

(b) Japan will support the improvement of sanitation through such means as the collection and treatment of human excreta, and "ecological sanitation", which recycles human excreta as agricultural fertilizer. In addition, from the perspective of taking preventive measures against infectious diseases such as the avian influenza originating from livestock, Japan will support the improvement of sanitation while taking into consideration the collection and safe disposal of livestock excreta. Furthermore, consideration on the local conditions such as the natural conditions, society, and practices is especially important in sanitation development.

ii. Measures in urban areas
(a) Japan will promote the utilization of private funds in addition to ODA in order to respond to the large-scale financial needs required in the infrastructure development of water and sewage, etc. In addition, in situations where developing a household water and sewage system is difficult due to financial limitations, Japan will provide support for transitional measures such as collection and disposal of human waste by vacuum cars.

(b) The software support on maintenance, management, and operation of infrastructure as well as infrastructure development is essential for the sustainable operation of water and sewage systems. In this regard, while paying due attention to the poor, Japan will support the capacity development of the operational entities related to management such as response to privatization issues and cost recovery, and methodologies such as monitoring water leakage and water quality.

(3) Support regarding water use for food production and other purposes
Japan will promote multi-faceted use of water including agricultural water, electricity generation, industrial water, and water transport, with such objectives as increasing food production, regional development, and industrial development.

(a) Aiming for the effective use of agricultural water, Japan will support the development of irrigation facilities such as reservoirs and waterways, as well as the development and dissemination of water-saving agricultural technologies. In infrastructure development,
Japan will consider reflecting the needs of local people by promoting participation. Furthermore, Japan will strive toward the self-sustained maintenance, management, and operation of the infrastructure by promoting local people's participation and facility management capacities. In addition, Japan will consider the prevention of the outbreak of parasitical diseases such as malaria and schistosome caused by development of reservoirs and waterways.

(b) Aiming to promote the use of renewable energy of hydropower, Japan will support small-scale hydroelectric generation in irrigation canals, and the improvement of existing electrical power plants.

(c) Japan will support the systematic distribution of industrial water to regions where rapid industrialization is expected in the process of regional development and industrial development while taking into consideration such impacts as land subsidence and ecological damage due to excessive groundwater intake.

(d) Japan will support the development of waterways and lock gates for the expansion of water transport, which is low-cost and has little environmental impact.

(4) Water pollution prevention and ecosystem conservation

(a) As a countermeasure against water pollution from domestic wastewater and livestock excreta discharged from small-scale pollution sources such as households and livestock excreta, Japan will support the development of sanitary facilities and other efforts that provide for the appropriate technology tailored to the local condition. Furthermore, together with the development of such facilities, Japan will promote sanitary education aimed to produce sustainable effects by raising the people's awareness.

(b) As a countermeasure against industrial wastewater from factories, Japan will strive to transfer the expertise in identifying the source of pollution and establishing effluent regulations, as well as technologies for effective use of water and wastewater treatment.

(c) Japan will support efforts toward the conservation of water quantity and quality, vegetation, afforestation, and sustainable forest management, aimed at water pollution prevention, ecosystem
conservation of rivers, lakes, and marshes and anti-desertification. Furthermore, Japan will support capacity development of developing countries by promoting information sharing of policies and technologies on water environment.

(5) **Mitigation of damage from water-related disasters**

(a) Japan will support the development and improvement of the hydrologic information system concerning surface and ground water, and a transmission system for advanced warning, for the establishment of an early warning system for water-related disasters. In addition, to strengthen the disaster response capacities of individuals and local communities, Japan will support the development of hazard maps and the self-help efforts of inhabitants towards disaster reduction and crisis management such as disaster drills.

(b) With respect to measures against water-related disasters, Japan will support infrastructure development, including flood control facilities (e.g. dams, levees), erosion control facilities, sewage facilities (e.g. urban rain water drainage) and drought management facilities (e.g. dams, deep wells) that provides for the safety level derived from the magnitude of previous disasters, while taking into consideration the environment and resettlement of inhabitants.

(c) Japan will immediately support the supply of safe drinking water and sanitation in coordination with the health sector for preventing infectious diseases in the aftermath of a natural disaster.