ooking, laundry, shower, toilet... Tap water is indispensable for our daily life. The coverage of water supply in Japan, which was less than 50% just after the Second World War, rapidly increased during the period of high economic growth in response to the growing demand for domestic and industrial water, and is now one of the highest in the world at 97.7%. Countries around Asia are more and more in need of water due to the population and economic growth and experiencing a similar situation as that of Japan during the period of high economic growth. However, many developing countries are unable to meet this increasing demand for water. The first problem is the lack of water resources. The water level of big rivers in Southeast Asia fluctuates greatly between rainy and dry seasons, which makes the stable water supply difficult.

The construction of dams also faces many challenges, such as the coordination between states in case of an inter-state river and with farmers in countries where multiple cropping which need water all year around is prevalent. Another problem, besides the securing of water resources, is the vulnerability of water supply infrastructure. Apart from the construction or renewal of water treatment plants and other facilities, qualified personnel is necessary to maintain and manage facilities as well as collect appropriate user fee to improve the operation. Therefore, Japan has been conducting technical cooperation in addition to financial cooperation, to develop human resources that can support the water supply service in developing countries.

The main bodies of Japan's assistance over the years have been local governments. They have been teach-

ing various technology and know-how by dispatching engineer of the waterworks bureaus as experts and receiving trainees from abroad. Advantages of local governments are their overall knowledge of the water supply service, such as design, repair, water supply and water quality control, and their capability to teach from the managerial viewpoints nurtured through the selfsupporting accounting system. Understanding of local situations is crucial for cooperation in the field of water supply service. For example, while Japan uses multiple water distribution pumps, including supplementary ones for repair and inspection, to supply water constantly, it would be much suitable for developing countries to use a cheaper single pump system and stop the water supply at the time of repair.

Overseas experiences also lead to the development

Safe and Sustainable Water Supply

from the water source to the tap

of Japanese engineers. Many rivers in Asia are more turbid than Japanese rivers and necessitate different treatment and operation methods. Reviewing the technology nurtured in Japan and developing it according to the overseas needs is an opportunity to improve the current technology.

Nowadays, water business by private companies is also increasing. In Japan, private companies produce equipment, such as water pipes, bulbs and meters. Public-private cooperation which optimizes both parties' strengths, such as the creation of master plans for local governments and actual design and civil works for companies, thus becomes valuable. 'Ensure access to water and sanitation for all' – living with safe water, one of the Sustainable Development Goals (SDGs), is a wish of all people around the world.

