

For a Society with Safe Water for All People

JICA is committed to the proper management of water resources and aiming for a society where water resources are properly managed and all people can use water sustainably for drinking and other purposes.

JICA will strengthen organizations responsible for managing water resources and establish mechanisms for democratic consensus building among stakeholders in order to resolve water-related issues in the field. JICA will create "growing water utilities" capable of self-sustaining expansion and improvement of water supply services.



What are the current challenges?

2 billion people still lack access to safe drinking water and their survival is threatened.

Water is essential for human survival and is an indispensable resource for economic activities. As of 2020, 2 billion people in the world do not have access to safe drinking water. Over 500,000 people die annually due to unsafe drinking water. Fifty percent of malnutrition is caused by water, sanitation and hygiene problems such as diarrhea. In areas where there is no piped water, women and children are forced to work long and hard hours to collect water. Water is an important development issue to protect people from threats and to realize their freedom and potential.

As of 2015, more than
2.9 billion
people are suffering
from lack of water
resources.

In 2030,
water resources will be
40% short of
water demand.

2 billion people
lack access to safe
drinking water as of 2020.



More than
500,000 people,
mostly infants, die annually
due to unsafe water.

Water shortages are becoming more serious in many areas due to economic expansion and climate change, and conflicts of interest over water are arising.

Water demand is increasing due to the growing population, expanding economic activities, and improving living standards. This has caused conflicts of interest over limited water resources. In addition, the rainfall patterns are changing and the sea level is rising with climate change. Water shortages due to drought, floods becoming more severe and more frequent, and salinization of groundwater and rivers in coastal areas have been widely reported. It is also predicted that the amount of water resources will be 40% less than the demand for water by 2030.

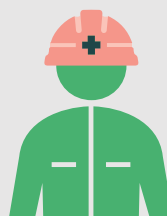
Why do Japan and JICA work on the issue?

Japan can make a solid contribution, since it has spread its high-quality water supply systems throughout the country and has much experience in cooperating with developing countries.

Japan developed water supply facilities even before modernization, such as the construction of the Tamagawa Josui Aqueduct of 1653, which brought water over 40km to Tokyo. In the Meiji era (1868-1912), the laying of modern piped water systems began, starting with Yokohama in 1887. During the period of high economic growth (about 1955 to 1972), the country faced problems such as rapidly increasing water demand, droughts, land subsidence, and water pollution, but it was able to cope with these problems by making use of scientific knowledge, developing legal systems, and establishing a system of river basin committees.

Currently, Japan has achieved a water supply coverage rate of more than 98%, and provides safe drinking water from faucets available 24x7. With its technology to build high quality water supply facilities, and its knowledge and experience in efficient water supply management that minimizes water loss such as leakage, Japan can contribute greatly to solving the water problems of developing countries.

Providing safe water to about
30 million people
in developing countries over the
past 10 years



Training
100,000 people
including water engineers

Water sector cooperation (amount of disbursement) to developing countries

2007-2017:

No.1 in the world

2018 and 2019:

No.2 in the world



Approach 1

Resolving water-related issues in the field through integrated water resources management

In order to conserve limited water resources and utilize them in a sustainable manner, JICA will develop entities responsible for the management of water resources in each region. These responsible entities will accumulate scientific data and coordinate interests of stakeholders based on scientific and technical grounds.

As in many cases, water projects' planning and implementation

are related to various entities and many stakeholders, consensus building through meaningful discussion is extremely important. Therefore, JICA will establish multi-stakeholder partnerships as a democratic consultative body to resolve water-related issues based on the consensus of all stakeholders. In this way, JICA will aim to implement practical integrated water resources management in each region and resolve each issue.

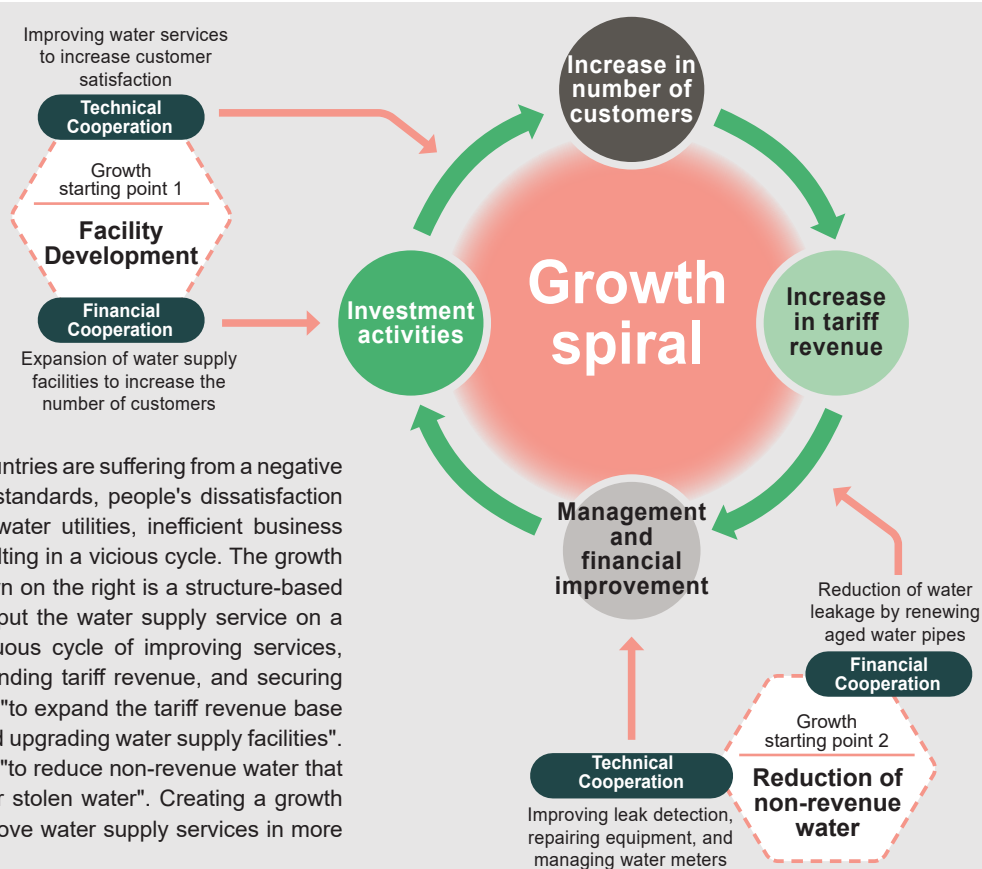


GOAL By 2030, JICA will contribute to resolving water-related issues in more than 10 regions.

Approach 2

Supporting the growth of water utilities

Water supply services in developing countries are suffering from a negative chain of factors, such as low service standards, people's dissatisfaction with the service, lack of trust in the water utilities, inefficient business operations, and insufficient funds, resulting in a vicious cycle. The growth spiral of the water supply service shown on the right is a structure-based review of this vicious cycle. JICA will put the water supply service on a growth trajectory by shifting to a virtuous cycle of improving services, increasing operational efficiency, expanding tariff revenue, and securing investment. The first point of growth is "to expand the tariff revenue base and improve services by expanding and upgrading water supply facilities". The second starting point for growth is "to reduce non-revenue water that cannot be billed for, such as leaked or stolen water". Creating a growth spiral in this way, JICA will aim to improve water supply services in more than 40 cities in the next 10 years.



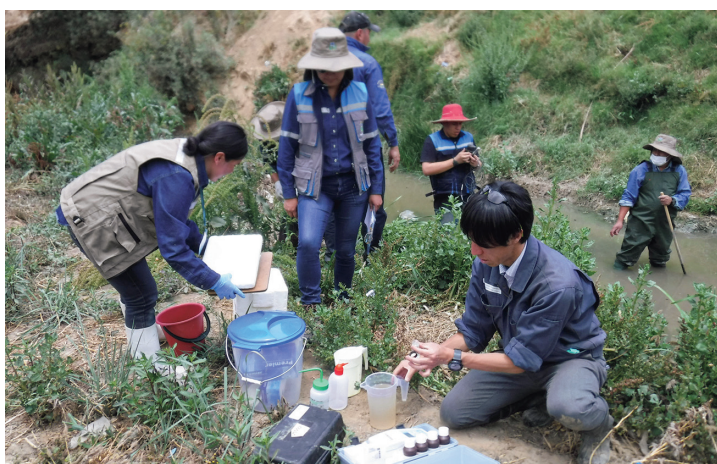
GOAL In the next 10 years, JICA will increase the number of people served in developing countries by more than 30 million and improve water supply services in more than 40 cities.

1 The "Miracle of Phnom Penh" - rebuilding a water service that had been destroyed by civil war from the ground up

In Phnom Penh, the capital city of Cambodia, the infrastructure had been destroyed for a long time due to the civil war that started in 1970 and intensified, and the water supply coverage rate was only 25% in 1993. The water quality was unsafe and not suitable for drinking. JICA drew up a basic plan for the restoration of the water supply system, worked with other development partners to build water supply facilities, and strengthened the operation and management capacity of the water service. The water supply coverage rate reached 90% in 2006, and the water service provided a 24-hour supply of safe water from the tap. This has been called the "Miracle of Phnom Penh".

Remarkable improvement of water supply service in Phnom Penh

Indicators	Year 1993	Year 2006
Water quality	Not drinkable	Drinkable
Water service coverage rate	25%	90%
Water supply hours per day	10 hours/day	24 hours/day
Non-revenue water rate (leakage, illegal connection, etc.)	72%	5.94%
Tariff collection rate	48%	99.9%



2 Cooperation in resolving the river water contamination and conflicts over water in Rocha River in Bolivia

Cochabamba City has the third largest population in Bolivia. In the Rocha River basin, which occupies the central area of the city, problems such as deteriorating water quality, water shortages, and declining groundwater levels were occurring, and conflicts between residents and government agencies were also occurring. Therefore, JICA has been supporting practical integrated water resources management since 2016. JICA supported efforts to establish and operate the "Rocha River Basin Inter-Organization Platform", a committee for discussions among stakeholders, a committee for discussion among stakeholders, and worked together with the departmental government of Cochabamba to strengthen its capacity to resolve water issues.

Collaborating with Partners

Promoting collaboration with organizations and the private sector with knowledge, and actively utilizing advanced technologies.

Collaborating with development partners and international organizations is essential to solving water challenges and expanding achievements. JICA will hold forums in Asia and Africa to share our knowledge with executives from water utilities and ministries with jurisdiction over water supply. In Japan, JICA will promote collaboration with local governments, ministries and agencies, and private companies that have accumulated experience and knowledge. JICA

is also working on scholarship programs in cooperation with universities (JICA Development Studies Program) and creating materials for knowledge sharing with developing countries to introduce Japan's development experience. In addition, the use of innovation is also important. JICA will make active use of digital transformation (DX), including remote sensing using satellite data, geographic information systems (GIS), smart meters, and artificial intelligence (AI).



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Japan International Cooperation Agency (JICA) is an international cooperation organization that is centrally responsible for the implementation of bilateral assistance among Japan's Official Development Assistance. JICA cooperates with about 150 countries and regions around the world.



https://www.jica.go.jp/english/our_work/thematic_issues/water/index.html

What is JICA Global Agenda?

JICA's cooperation strategies for global issues. JICA, with its partners, aims to show global impacts realizing the goals set under JICA Global Agenda. JICA Global Agenda and its goals will be shared among partner countries and various actors, enhancing dialogue and collaboration, therefore, maximizing the development impacts. Through these efforts, JICA will comprehensively contribute to the achievement of the SDGs by 2030 as well as realize Japan's Development Cooperation Charter which focus on "human security," "quality growth," and "addressing global challenges".

Cover Photo —Cambodian children now have access to safe water with the assistance of JICA
Photo : Kenshiro Imamura/JICA

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