

# Water Human Future

Safe Water for All

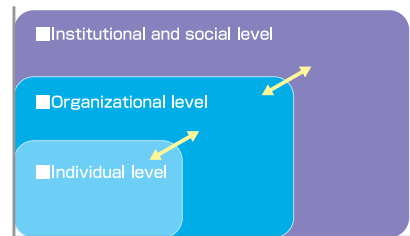


# Capacity Development in the Water Sector for the Enhancement of Human Security

Lack of access to safe water is an impediment to the progress of public health, education and poverty reduction for many people in the world. Contaminated water exposes people in developing countries to the risk of waterborne diseases. In addition, natural disasters, such as floods and droughts, have become increasingly serious threats in recent years.

Solving such water-related issues is essential for allowing people to escape the poverty trap and for enhancing “**Human Security**”. In order to develop a system to effectively manage water resources and to ensure access to stable, equitable and safe water for people, using “**the Capacity Development (CD) approach**” is an important strategy. With the CD-approach, JICA has been cooperating with partner countries and their communities to strengthen the capacity of individuals, organizations, institutions and societies.

JICA places importance on the sharing of experiences and information gained in the field. We take into account the needs on the ground of each individual country while cooperating with institutions that include government agencies and other public entities. This knowledge sharing comes not only from Japan but also from neighboring countries.



Three layers of capacity development

Source: JICA (2004) *Capacity Development Handbook for JICA staff*  
<http://www.jica.go.jp/english/publications/reports/study/capacity/200403/pdf/200403.pdf>

Given that many developing countries are situated in areas vulnerable to climate change, JICA supports the following water-related measures:

- (1) Introduce integrated water resources management in the region, reduce climate risks, and promote sustainable water resources management.
- (2) In areas with a higher risk of floods and other disasters, consider prevention measures according to local conditions.
- (3) In areas where the risk of drought is expected to increase, accelerate implementation of water supply measures.
- (4) Design projects/programs in view of climate risks and introduce measures that are expected to reduce greenhouse gas emissions and prevent or mitigate pollution.

## JICA's approach

As water resource problems are becoming more critical, JICA has established a development strategy with four objectives in taking the initiative to solve global water problems. These objectives are (1) to provide a safe and stable water supply, (2) to enhance flood control to protect lives and property, (3) to conserve the water environment and (4) to promote integrated water resources management.

Presented here are case studies of JICA's contributions to capacity development of institutional systems, organizations and individuals in relation to the four objectives of the development strategy mentioned above.



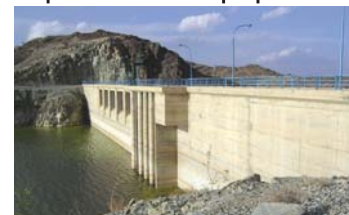
Safe and stable water supply



Enhancement of flood control to protect lives and properties



Conservation of water environment



Promotion of comprehensive water resources management

# Safe and Stable Water Supply

Supplying water through community participation (Rural water supply)



People in many villages in developing countries have been trying hard to meet their daily water needs, but without proper water supply facilities.

They are often faced with a choice of whether to carry clean water from a source far from their communities or to fetch water available near at hand which might possibly be contaminated. Residents have little knowledge about hygiene and sanitation and are frequently affected by waterborne diseases.

In addition, children lose opportunities to go to school because of water-fetching responsibilities. Water scarcity in the dry season brings a great financial burden to poor households because they have to purchase drinking water. Access to safe water is one of the most critical issues to ensure escaping from the poverty trap.

JICA provides assistance in improving the water supply and sanitation in rural areas through community participation making communities the main players in development.

JICA places great importance in conducting social surveys to grasp the real needs of communities, establishing water-user groups, building the capacity of communities to maintain water facilities and providing education on hygiene.

JICA also develops the capacity of central and local governments involved in rural water supply in preparing for serious breakdowns that communities cannot cope with, and thereby ensures the sustainability of projects.



# Safe and Stable Water Supply

## Supplying water through community participation (Rural water supply)

### Cambodia

Waterborne diseases used to be rampant in rural areas of Cambodia because of polluted water sources such as rivers, lakes, ponds and shallow wells. Water sources sometimes disappeared in the dry season, therefore safe and stable water sources were required.

The government of Cambodia constructed deep wells with hand pumps in 60 villages in Kandal Province in 2004 using grant aid from Japan. This construction was based on a water supply plan in southern Cambodia prepared by JICA in 2002.

A plan to improve the rural water supply was also prepared for Kampong Cham Province with the assistance of JICA in 2002. JICA, with the Ministry of Rural Development (MRD), considered a community-based participatory approach for this plan. Since 2007, with Japan's grant aid, MRD has completed the construction of deep wells for 115 villages and provided support to strengthen the capacity of communities to maintain the facilities.

Public ownership of the facilities has been enhanced through community participation, such as land grading and fence building around the wells at the expense of the community.

Members of the water users' group are selected through consultation by the villagers from among themselves, and they collect maintenance funds and open a bank account for such funds. They participate in the installation of hand pumps and learn how to repair them. Then, the water supply facilities are handed over to the members with tools for repairs and maintenance manuals.

The capacity of the provincial government is also strengthened to handle more complicated defects.

The officials of the MRD implement hygiene education for the communities. They use illustrations to show illiterate villagers and children the importance of keeping water containers clean and of washing hands with clean water.



### Laos

The northwestern provinces of Laos, located in a remote mountainous area bordered by Myanmar, Thailand and China, are some of the poorest areas of the country. Villagers there used to have difficulty obtaining safe drinking water.

JICA, in an effort to rectify this severe situation, conducted a study from 1999 through 2001 to improve the rural water supply and sanitation. To establish a model for a community-based participatory approach, water supply and sanitation facilities were constructed in 50 villages. The study looked at hygiene education and issues of gender and ethnic minorities in the villages.

Each local government maintained close dialogues with the villages to grasp the real needs of water and sanitation. In each village, the residents themselves decided the type and the location of water facilities (a gravity flow system with stand-pipes or a tube well with a hand pump) getting relevant technical information from the government staff.

To encourage voluntary participation, the communities were responsible for the procurement of building materials available in the villages, such as sand, wood and other materials. The construction was done during the farmers' off-season encouraging villagers to be involved in the project. Women's and youths' groups from each village also actively provided support. Women accounted for more than 40% of all the participants.

As a result, communities enhanced their ownership of the water and sanitation activities through active participation in the project.

As for hygiene education activities, Information, Education and Communication (IEC) materials were prepared, making use of visual examples from neighboring villages, that helped ethnic minorities, with different languages and life-styles, easily understand the information. The project encouraged more villagers to install sanitary toilets using their new awareness of sanitation.

The standpipes and hand pumps constructed in the project have been properly maintained by the communities, providing the villagers with access to safe and clean water. The installation of sanitary toilets is becoming increasingly widespread in the northwestern provinces. The local governments are continuing efforts, by getting the support of donors, to improve the rural water supply and sanitation based on the experience obtained in the project.

