Global Environment

Creating a Livable Environment for People While Pursuing Harmony between Development and the Environment



*Of the 17 Sustainable Development Goals (SDGs), strongly associated goals are shown.

Nature Conservation

Economic development enhances human society, but at the same time, it can deteriorate the natural environment in deforestation, soil degradation, and the extinction of species, among others. This highlights the essential need to promote economic development in harmony with the natural environment.

JICA pursues harmony between human activity and the natural environment in providing development cooperation in the following strategic areas, thus contributing to the Sustainable Development Goals (SDGs) 13, 14, and 15. In the process, JICA promotes cooperation with other donors and the private sector. To enhance the financial sustainability of the recipient country, the scope of such cooperation includes the promotion of access to external funds.

1. Climate Change Mitigation and Adaptation, and Sustainable Natural Resources Management

JICA's development cooperation in this strategic area includes assistance for policymaking and management capacity development for forests as well as livelihood improvement for local residents. By region, JICA extends such assistance to the Amazon region, the Congo Basin, and Southeast Asia, all of which are rich in forest resources. In the Sahel and the Horn of Africa, JICA supports local communities with the sustainable use of natural resources and livelihood improvement activities in order to enhance their resilience to climate change as part of efforts to build capacity to deal with drought and desertification.

2. Conservation of Biodiversity through Management of Protected Areas and Buffer Zones

JICA supports biodiversity conservation in protected areas and surrounding buffer zones, through such means as management planning, survey research and monitoring, environmentally friendly farming practices, and environmental education.



Viet Nam: Helping farmers participating in forest conservation activities to increase and stabilize their income by diversifying crops (weaning from the monoculture of coffee) in the Sustainable Natural Resource Management Project

Environmental Management

Many developing countries are facing serious environmental problems under urbanization. These problems often lead to

health hazards and other threats to human security. If priority is given to economic development, it often results in leaving environmental pollution control behind. In many cases, it is difficult to find a short-term solution because of the complexity and the multilayered nature of environmental problems. Taking these factors into consideration, among the SDGs, Goals 6, 11, and 12 include goals for environmental management.

JICA places special emphasis on preventing environmental problems and focuses its resources on capacity development for organizations and individuals engaging in environmental management in cooperation with local governments, privatesector entities, universities, and other development cooperation organizations. JICA also offers financial assistance to projects in this sector, such as sewerage development projects.

1. Solid Waste Management and Establishment of a Sound Material-Cycle Society

As the waste problem is closely associated with the level of economic development, JICA's cooperation accommodates different development stages, covering public health and sanitation or reducing environmental stress and establishing a sound material-cycle society. It also contributes to preventing the worsening global challenge of marine plastic waste by promoting appropriate solid waste management [→ see page 9].

2. Addressing Pollution of the Water, Air, etc.

JICA offers integrated assistance that includes the development of sewerage and sewage treatment facilities, building the capacity to operate and maintain the systems as well as water-environment management primarily in urban areas, and addressing air pollution. Through these activities, JICA assists policy, regulatory, and institutional development based on assessments of the situation on the ground, infrastructure development, and capacity building for organizations and individuals.

Water Resources

Water supports human life not only through drinking water and domestic water but also as a vital resource for food production and economic activity. The recent spread of COVID-19 underscores the importance of hand washing as an effective preventive measure. Nevertheless, it is estimated that as of 2017, over 780 million people lack access to basic water supply services.* Competition over water resources will likely intensify. To help achieve Goal 6 of the SDGs (ensure availability and sustainable management of water and sanitation for all), JICA's development cooperation covers the following areas:

^{*} UNICEF, WHO, "Progress on Household Drinking Water, Sanitation and Hygiene 2000-2017: Special Focus on Inequalities" (2019)

1. Safe Water Supply

For urban areas, JICA works with Japanese local governments—which are the water service providers in Japan—to support infrastructure development with financial assistance as well as capacity building aimed at improving the financial status and services of water supply utilities. JICA's development cooperation for rural communities is designed to contribute to (1) developing water supply facilities while securing safe water sources; (2) strengthening sustainable operation and maintenance; (3) reinforcing their resilience to droughts and other effects of climate change; and (4) improving their health and nutritional status through hygiene such as hand washing [→ see the case study below].

2. Integrated Water Resources Management

To settle conflicts over water, JICA assists in building consensus among various stakeholders, making available more scientific information on water resources, and building the capacity to formulate and implement water resources management plans. JICA also takes into consideration climate change and mainstreaming disaster risk reduction (DRR).

Disaster Risk Reduction

With population growth, urbanization, economic development, and climate change, recent years have witnessed a trend of more frequent disasters and greater economic losses. Once a large-scale disaster strikes a developing country, the outcomes of development and opportunities for sustainable growth for the country will be lost, making it difficult for the



Nepal: Collapsed buildings in the April 2015 earthquake country to untangle itself from the downward spiral of disaster and poverty. The Sendai Framework for Disaster Risk Reduction 2015–2030, which was adopted by the United Nations in 2015, reflects in its priorities for action many of the concepts Japan put forward based on its own experience, such as pre-disaster investment in disaster risk reduction (DRR) and Build Back Better. DRR is mentioned in some of the targets of the SDGs, reflecting the fact that the international community has recognized DRR as a key development challenge.

Based on Japan's expertise, JICA extends DRR assistance in line with the priorities for action of the Sendai Framework for Disaster Risk Reduction and promotes "mainstreaming of DRR" in every development project, as shown below.

1. Developing the Capacity for DRR Planning and Governance

JICA provides support for disaster risk assessment and disaster risk reduction planning based on scientific data. It also promotes public understanding about disaster risks. Additionally, JICA assists the central and local governments of partner countries in strengthening institutional capabilities and governance for DRR through capacity building of organizations and personnel responsible for DRR.

2. Achieving Disaster Prevention and Mitigation with Pre-Disaster Investment

To promote pre-disaster investment in DRR that aims to reduce current and future disaster risks, JICA assists the central and local governments of developing countries in DRR planning, thus promoting DRR investment in critical infrastructure and capital concentration centers. JICA also assists in (1) improving forecasting and early warning, and (2) developing evacuation and emergency response systems. Moreover, JICA provides seamless assistance from disaster-preparedness to post-disaster reconstruction in such aspects as the rehabilitation of infrastructure, the improvement of regulatory and institutional frameworks, and the restoration of livelihoods. Such seamless assistance is based on Build Back Better, a concept aimed at building a society that is more disaster-resilient than the pre-disaster level.

Bangladesh: The Project for Ground Water Investigation and Development of Deep Ground Water Source in Urban and Rural Areas

Safe water for displaced people from Myanmar



Supplying safe water at a camp for displaced people

The deteriorating security situation in Rakhine State in Myanmar in August 2017 caused an inflow of some 750,000 displaced people to Bangladesh, forming large-scale camps there for displaced people from Myanmar.

To meet the massive demand for water for daily use, over 20,000 shallow tube wells were constructed. The water source, however, was increasingly polluted and depleted.

In one of these camps, JICA drilled a deep tube well that was nearly 400 m deep using the drilling rig that it had provided to the Department of Public Health Engineering (DPHE) under this Grant project. The aim was to supply safe water to about 30,000 people there. Then the International Organization for Migration installed water supply facilities and started supplying water from June 2019. The supply of safe water necessary for washing hands, among other purposes, is helping to prevent the spread of COVID-19 and other infectious diseases within the camp.

DPHE is now using this drilling rig to construct deep tube wells across the country to secure the supply of safe water. ACTIVITIES and Initiatives by Issue